

Llewellyn Ellardus Van Zyl
Sebastian Rothmann Sr. *Editors*

Positive Psychological Intervention Design and Protocols for Multi-Cultural Contexts

 Springer

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Editors

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Foreword

Ongoing Professionalization of Positive Psychology

Acquiring life skills has always been part of human life. We are consciously choosing animals that must learn how to find a way of life that fits us, and we are social animals who must learn how to deal with our fellow men. Such life skill learning is part of our informal daily socialization and experience in practices, but over the course of societal modernization, it became increasingly systematized and professionalized.

An early step in this development has been the emergence of professional moral advisors, typically priests and philosophers, who often used stories about exemplary saints and heroes as didactical tools. Another step has been the development of educational institutions, such as schools and military academies, in which nowadays we spend about a quarter of our lives. Contemporary modern societies provide a varied assortment of specialized professional skill trainings, such as in the business sector trainings in leadership and time management and in the private sector trainings in marital behaviour and self-understanding. Though starting from practical wisdom, these life skill courses have become increasingly driven by theoretical inspiration and empirical effect research.

Positive psychology is a latecomer in this development. The movement emerged around the year 2000, drawing on various existing theories and training practices, taken from humanistic psychology in particular. One of the promises of positive psychology was to provide a better scientific basis for these training practices. A science of positive psychology has developed since and now includes university courses, research associations, conferences and scientific journals. Yet, positive psychology is still less professionalized than clinical psychology. Evidence for the effectiveness of many positive psychology interventions is still weak and information on what works for whom often lacking.

This backlog has arisen for several reasons, one of which is financial. There is typically more money available for relieving mental misery than for testing ways to foster optimal functioning. Since healthcare systems mostly do not pay for positive

psychological interventions, there is little incentive for them to invest in research on the effect of these treatments and in the education of coaches and trainers. The profession consists largely of small business practitioners and is unable to generate much research. A substantive reason for the research backlog could be that the object of positive psychological interventions is typically less clear than most syndromes treated by clinical psychologists, anxiety and depression in particular. The reasons behind sub-optimal functioning are often less easy to identify and tailored interventions hence more difficult.

In this context, this book provides several steps to further the professionalization of positive psychology. It will not be the last book on intervention designs in positive psychology, but it is an indispensable start.

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Preface

With the rise in popularity of positive psychological interventions (PPIs) during the last two decades, a steady increase in the academic literature on the design and evaluation of such interventions is prevalent. However, most of the methods, models and approaches which underpin PPIs have been confined to clinical samples, closed systems or monocultural contexts. This in return restricts the applicability of popular PPIs to the contexts in which they were developed and raises questions regarding the extent to which they could be applied to other contexts. Further, those methods, approaches and models which are multi-culturally applicable are not readily consumed by the mass-market as a result of the restrictions regarding both distribution and copyright imposed by scientific journals. Similarly, extensive practical intervention protocols, designs and methods which usually accompany first draft intervention papers are condensed into brief paragraphs in final manuscripts or removed in its entirety. This, in turn, deludes the potential for replicability or adoption by consumers, practitioners or industry. The purpose of this volume is to present innovative and contemporary methodologies and intervention protocols for the enhancement of positive psychological attributes within multi-cultural contexts. The focus is on developing guidelines for enhancing positive psychological attributes, such as positive moods (e.g. positive affect and life satisfaction), strengths (e.g. gratitude, humour), cognition (e.g. hope, optimism) and behaviours (e.g. emotional regulation, positive relationship building) within multi-cultural contexts. Finally, the aim is to present theoretical approaches towards the development and evaluation of PPIs within multi-cultural contexts.

This volume aims to bridge the science–practitioner gap by presenting specific intervention protocols and frameworks about the development of positive psychological attributes such as humour, gratitude and flourishing within multi-cultural contexts. It provides specific guidelines on the design, dissemination and evaluation of PPIs within multi-cultural contexts. Furthermore, it provides practice-friendly approaches towards the enhancement of positive capacities through self-administered intentional activities, group-based development and individual therapeutic techniques.

Chapter “[Best-Practice Guidelines for Positive Psychological Intervention Research Design](#)” focuses on the lack of replicability and reduced effectiveness of PPIs as a result of intervention design, recruitment, and retention of participants, adoption, issues with intervention fidelity and implementation, and efficacy or effectivity evaluation. It presents best practice guidelines for PPIs, inspired by recent developments in intervention methodology. Chapter “[The Talent Development Centre as an Integrated Positive Psychological Leadership Development and Talent Analytics Framework](#)” explores the value of an integrated Talent Development Centre (TDC) approach as a dynamic, hybrid, positive psychological leadership development and talent analytics framework within organizations. Chapter “[A Cultural Lens Approach to Promoting Work as a Calling](#)” applies the cultural lens approach to assist researchers and practitioners in designing and investigating interventions intended to cultivate a sense of calling informed by relevant cultural assumptions within and across diverse contexts.

Chapter “[Psychological Capital Development in Organizations: An Integrative Review of Evidence-Based Intervention Programs](#)” reviews the psychological capital (PsyCap) intervention literature on both specific micro-interventions and broader and more extensive PsyCap development programs. It also examines cultural differences in PsyCap development literature. Chapter “[Job Crafting Interventions: Do They Work and Why?](#)” describes the design of a job crafting intervention and presents theoretical explanations regarding how the job crafting intervention leads to desired changes for both employees and organizations. Chapter “[Gratitude Interventions: Meta-analytic Support for Numerous Personal Benefits, with Caveats](#)” reviews the current state of the literature on gratitude interventions a meta-analytic design to investigate their effects in diverse contexts. Chapter “[Developing Savoring Interventions for Use in Multicultural Contexts: Bridging the East-West Divide](#)” provides a theoretical and empirical overview of savouring, describes key differences in savouring between Western and Eastern cultures and discusses the implications of east–west cultural distinctions for shaping interventions designed to enhance savouring in the two types of cultures. Chapter “[Positive Psychological Interventions Aimed at Managing Territorial Behaviours Within the Organisational Context](#)” presents the theoretical implications of territoriality and provides evidence-based intervention strategies, from a positive psychology perspective, towards managing territorial behaviours within the organizational context.

Chapter “[The Open Case as a Setting for Addressing Challenges in Small Groups: Post-graduate Computer Science Students’ Perspectives](#)” examines students’ experience of the open case setting when introduced as part of a master-level course on communication for computer science students, as well as the effect thereof on their professional and private lives. Chapter “[A Framework for Assessing and Developing Self-regulatory Positive Psychological Career Attributes for Sustained Employability](#)” positions the concept of employability as a self-regulatory positive psychological construct that helps explain the agency side (self-regulation) of

individuals in navigating their career management within specific contexts. Chapter “[Measuring Flourishing @ Work Interventions: The Development and Validation of the Flourishing-at-Work Scale](#)” validates a scale that could be used to measure the effectiveness of interventions aimed at enhancing flourishing at work. Chapter “[Developing Positive Psychological Interventions: Maximizing Efficacy for Use in Eastern Cultures](#)” explores the feasibility of using PPIs in a multi-cultural context and proposes ways to optimize the effectiveness of thereof in Eastern cultures.

Chapter “[Design for Engagement of Online Positive Psychology Interventions](#)” introduces this need for engagement with online interventions, provides insight into what engagement might be in this context and studies ways technology can be designed to influence engagement positively. Chapter “[How to Create a Flourishing Classroom? An Intervention Protocol for Enhancing Teachers’ Social and Emotional Learning](#)” investigates studies on social and emotional learning interventions on teachers. Chapter “[Exploring Flourishing in a Multicultural Work Context: Proposed Constructs for Interventions](#)” presents gratitude, contribution community, work engagement and social connectedness as crucial elements to enable flourishing among employees. Chapter “[Developing Leaders in Multicultural Organisational Contexts Within a Positive Psychology Framework: Jung’s Active Imagination Intervention](#)” introduces a PPI, which is useful and constructive in contributing to the development of leaders in terms of multi-cultural cooperation and team development, as well as conflict management within a multi-cultural organizational context. Chapter “[Inspiring Growth: A Counselling Framework for Industrial Psychology Practitioners](#)” presents a counselling framework for the industrial psychologist as workplace counsellor. Chapter “[The Virtual Gratitude Visit \(VGV\): Using Psychodrama and Role-Playing as a Positive Intervention](#)” describes the virtual gratitude visit selected for the inaugural Avant-Garde Clinical Intervention award at the 2017 International Positive Psychology Association (IPPA) conference in Montreal, Canada. Chapter “[Positive Journal Writing Across Multicultural Contexts: A Protocol for Practice](#)” offers an intervention protocol for a self-directed, evidence-based, positive journaling intervention. Finally, Chapter “[Flourishing Interventions 2.0: A practical Guide to Student Development](#)” aimed to provide practical guidelines on how to develop flourishing students.

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Best-Practice Guidelines for Positive Psychological Intervention Research Design



Llewellyn Ellardus Van Zyl, Emir Efendic, Sebastiaan Rothmann Sr.
and Rebecca Shankland

Abstract Positive psychological interventions (PPIs) have been subjected to considerable criticism in recent years. Following similar movements across other domains of psychology, attempts to replicate classic PPI studies have failed or have produced mixed results. Such failures are often justified with arguments that invoke the complexity of human nature, the influence of contextual factors (for example, hidden moderators) that may arise in different populations, poor evaluation frameworks, or humans being reactive in PPIs and, as a result, modifying their behavior when observed. However, without replicability and consistency in results over time, the validity of PPIs will remain questionable in the broader scientific community unless acted on. In this chapter, it is argued that the lack of replicability and poor effectiveness of PPIs are a function of problems occurring in five areas: (a) intervention design, (b) recruitment and retention of participants, (c) adoption, (d) issues with intervention fidelity and implementation, and (e) efficacy or effectivity evaluation. This chapter focuses on the problems associated with each of these areas and presents general (albeit brief) best-practice guidelines for PPIs, inspired by recent developments in intervention methodology.

Keywords Positive psychological interventions · Intervention design · Best practices · Intervention guidelines

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1 Introduction

In recent years, psychological science has been confronted with criticism as to the replicability of certain findings, the soundness of its methods, and the validity of its statistical practices (Carey, 2011; Ioannidis, 2005; Simmons, Nelson, & Simonsohn, 2011; Wong & Roy, 2017). For instance, the Open Science Collaboration (2015) found that, in an attempt to replicate 100 experimental and correlational studies published in three psychology journals, only 36% of the replications had significant results. When one compares that to the initial state, where 97% of the original 100 studies had significant results, it is clear that something is amiss. In a similar vein, in positive psychology specifically, seminal works such as the “Positivity-Ratio” and the “Happiness-Performance Thesis” have been questioned and even disproven (Brown, Sokal, & Friedman, 2014a, 2014b; Friedman & Brown, 2018).

The aforementioned findings, along with a general recognition that the way we do research needs to be improved, justifiably gave rise to an unprecedented level of doubt about the discipline of positive psychology. This doubt is espoused not only by researchers from other sub-disciplines of psychology, but also practitioners and the broader public (Earp & Trafimow, 2015; Pashler & Wagenmakers, 2012; Wong & Roy, 2017), transposing the “bitter debate over interpreting words and data” (Friedman & Brown, 2018, p. 242) into specific critiques of the analysis, interpretation, and replication of positive psychology studies.

Most notably, due to the applied nature of positive psychology, this weakening of confidence affects studies that have direct practical applications such as those implementing positive psychological interventions or PPIs (Friedman & Robbins, 2017). As originally defined by Seligman and Csikszentmihalyi (2000), PPIs are activities designed to promote or build positive emotions, behaviours, and psychological capacities in order to develop thriving individuals, families, and communities. Concurrently, PPIs have also been subjected to the same type of scrutiny as described in the previous paragraph, and the findings have often not been encouraging. For example, in a review of PPIs, Bolier et al. (2013) found that, although there were some randomised controlled trials that showed positive results, among those using a placebo group, or an alternative control treatment, effect sizes were small, and the majority of studies included an effect-size estimate of zero within the 95% confidence interval. Similarly, a large-scale replication of Seligman et al. (2005) by Mongrain and Anselmo-Matthews (2012) found no difference between the effect of the PPIs and their two control groups.

Thus, without replicability, the validity of PPIs remains doubtful and their generalisability to broader domains impossible to confirm (Friedman & Robbins, 2017). Furthermore, it has been argued that employing PPIs in practice may even cause harm to the population to which the interventions are applied (Wong & Roy, 2017).

Failures to replicate are often pushed aside with arguments that invoke the complexity of human nature, the influence of contextual factors (for example, hidden moderators, Klein et al., 2018), poor evaluation frameworks, or humans being reactive in PPIs and, as a result, modifying their behavior when observed (Parks & Lalous,

2015; Parks & Schueller, 2014; van Zyl & Rothmann, 2012, 2014). Although some of the arguments are relevant, they do little to distract from the challenges regarding the replication and generalisability of PPIs.

In this chapter, we argue that the criticism directed at the replicability and validity of PPIs directly points to the weakness of their methodology. Specifically, problems may arise in five areas: (a) intervention design, (b) recruitment and retention of participants, (c) adoption, (d) issues with intervention fidelity and implementation, and (e) efficacy or effectivity evaluation. Therefore, this chapter focuses on the problems associated with each of these areas and presents general (albeit brief) best-practice guidelines for experimental PPIs.

2 Best-Practice Guidelines for PPI Research

2.1 *Intervention Design*

Adequate intervention research design is crucial to the success of a PPI (Sin & Lyubomirsky, 2009). Not only can it contribute significantly to the effectiveness of the intervention, but it can also aid in its replicability and validity (La Vaque et al., 2002). The term “design” refers to the methodological decisions researchers make in preparation for testing their PPIs on the populations of interest. Many of the critiques directed at positive psychology, and PPIs in particular, focus on design issues. For instance, confounding factors such as control variables are inadequately justified and make use of only an approximate measure of the underlying variable (Brown, 2017; Schisterman, Cole, & Platt, 2009).

Similarly, the implementation of PPIs can depend on the development of simple and non-validated measures of complex phenomena; that is, the assessments rarely tend to follow the test-construction procedure (Wong, Reker, & Peacock, 2006). In designing PPIs, researchers must be aware of a multitude of challenges where biases can negatively impact their conclusions. These biases can be related to the technical aspects of the PPI, such as the treatment plan, or of the intervention design, such as the analytical protocol, but they can also stem from the researchers themselves.

Furthermore, PPI content is sometimes questionable, as only some of the practices are theory-driven or evidence-based. Another methodological issue is that of moderators. Indeed, although many PPI research studies have been carried out in the field of positive psychology, in the latest meta-analysis (Bolier et al., 2013), the authors show that they mainly reach small effect sizes. This may be due to the fact that intervention efficacy depends on individual differences (see Cronbach, 1957), as it has also been shown in cognitive behavior therapy (for example, Loerinc et al., 2015). Moderation analysis should, thus, be included in research designs in order to foster comprehension and efficacy in this field (Antoine et al., 2018).

2.1.1 Challenges Associated with the PPI Design

This section highlights some of the challenges plaguing PPI design and how these can be acted on. Recent advances in the field are elaborated on, with summaries of the main guidelines in Table 1. (This will be the narrative strategy for all the other sections in this chapter.) The focus is, firstly, on the PPI designer. Richard Feynman (1974) famously said: “The first principle is that you must not fool yourself and you are the easiest person to fool.” To combat researcher bias, the suggestion is to implement *pre-registration*, which is increasingly gaining traction, in particular in social psychology (van’t Veer & Giner-Sorolla, 2016). Pre-registration is a process by which researchers describe, ahead of time, their hypotheses and expectations, as well as which data analysis pathways will be implemented. Indeed, this model has been applied in medical science and clinical trials since the 1960s (Dickerson & Rennie, 2003). The main benefits for the general scientific community include a significant curtailment of publication bias, a focus on theory and method, a distinction of confirmatory from exploratory research, and a reduction of reporting bias. For recommendations and instructions on preparing pre-registrations, see van’t Veer and Giner-Sorolla (2016) and Wagenmakers, Wetzels, Borsboom, Van der Maas, and Kievit (2012).

Another important challenge is determining the sample size and paying attention to statistical power. Statistical power is the probability that the null hypothesis (that is, no difference) will be rejected if there is indeed a true effect of the specified size in the population. Statistical power is limited by various factors such as sample size, measurement error, and the homogeneity of participants, so Cohen (1988) suggested that a power of 80% to detect a true effect of the specified size in the population should be a convention followed by study designers. Higher values of power have been suggested in other disciplines (Lenth, 2001), and researchers should be aware that, if their PPI holds practical value, more power should always be the goal.

The observed p value (alpha level), the standardised effect size, and the sample size are mathematically related (Rosenthal, 1991). If any two are known, the third can be computed. Thus, if researchers aim to detect a small effect (say, Cohen’s $d = 0.20$) and set their alpha level at 0.05, it is possible to calculate the sample size they would need to have 80% power to detect such an effect. Many (free) tools have been developed in order to calculate the necessary sample size, such as G*Power (Faul, Erdfelder, Buchner, & Lang, 2009) or MBESS (Kelley, 2007), and researchers are encouraged to use them. Crucially, power analyses and sample size determinations should be calculated before the PPI is conducted. (Various guides exist; cf. Asendorpf et al., 2013.) In research involving work with inherently limited populations, it is recognised that obtaining an adequate sample for enough power is difficult. However, other strategies exist that can increase power without simply increasing sample size (Lazic, 2018).

Another important issue is the necessary and adequate implementation of a control group. Of the various types of control conditions, the one where no alternative treatment is provided (that is, the no-treatment control or wait list control) often produces the largest effect sizes (Mohr et al., 2009). However, it will most likely have the least

Table 1 Guidelines for PPI intervention design

Guideline	Explanation
1. Establish an appropriate research team, and reduce researcher bias	A research team needs to be selected based on the core nature of the outcome variables to be addressed, the context in which the PPI is to take place, and the nature of the participants. Appropriate individuals with the necessary skills, abilities, levels of expertise, and functional experience must be put together. (For example, an organisational psychologist would not be an appropriate team member when an intervention targets the post-traumatic growth of preschool children.) Team members need to describe and commit to several aspects of the PPI ahead of time, including the hypotheses, analysis plan, and exclusion criteria. The pre-registration should be posted online, with a timestamp, using a service such as OSF or AsPredicted. It is suggested that the intervention protocol also be published or pre-registered before implementation
2. Determine the main research question	Clearly formulate the research question, making it suitable for the type of analysis (for example, formulate a falsifiable hypothesis) that will be implemented in the PPI. The research question should be chosen while being aware of previous replication attempts, should be critical in evaluating the effectiveness of previous PPIs, and should be realistic on the feasibility of the intervention, as well as the issue it tackles
2a. The outcome condition (or condition of interest) needs to be clearly identified, operationalised, and defined	The condition or outcome variable that researchers want to improve needs to be clearly articulated and the diagnostic criteria/underlying paradigm clarified. For example, if researchers want to develop a PPI to enhance happiness, it needs to be decided whether the hedonic, eudemonic, or integrated approach will be employed. The appropriate diagnostic criteria have to be identified

(continued)

Table 1 (continued)

Guideline	Explanation
3. Determine an appropriate theoretical/empirical model on which the PPI is to be based	<p>Develop PPI content around validated empirical (path) or established theoretical models. In theoretical models, ensure that the intervention content is structured to address the antecedents or mediating/moderating mechanisms that relate to the outcome variable in the model, for example, enhancing personal resources to buffer against the impact job demands have on well-being in the JDR model of Bakker and Demerouti (2017). The same applies to empirical models. However, one needs to test competing structural models against one another in order to ensure that the best route is established to enhance the hypothesised outcome variables. In other words, if supervisor support and peer support are tested as antecedents of work engagement, but peer support has a stronger relationship with, and declares more variance in, work engagement (than supervisor support), intervention content should be structured around the developing peer-support (instead of supervisor support) in order to enhance the effectiveness of the PPI</p>
4. Perform adequate statistical power and sample size justifications	<p>Conduct a priori power analysis in order to determine the appropriate sample size needed. Focus on detecting small effect sizes, as most effects in psychology are small. Aim for a minimum of 80% power to detect such effects. Conduct the power analysis with your study design and analysis plan in mind. The following can also be employed to increase power without increasing the sample size: (a) employ fewer factor levels of continuous predictors; (b) use a focused, specific hypothesis; (c) do not bin, mean, or dichotomise variables; (d) cross rather than nest factors; (e) employ more reliable measuring instruments; (f) control for confounding variables; (g) employ more repeated measures; and (h) enhance the quality of your respondents (Lazic 2018)</p>
5. Determine the study design and intervention content suitable to the main research question	<p>Sample possible designs from a wide variety of types. Implement those designs that are best suited to the type of intervention. Sample size composition and sample characteristics should be justified and aligned with the purpose of the PPI. Intervention content needs to be aligned with the purpose of the intervention</p>

(continued)

Table 1 (continued)

Guideline	Explanation
5a. PPIs should clearly target the enhancement of positive emotions, cognitions, behaviours, or functioning	PPIs should employ techniques (self-administered intentional activities, group-based development, strengths-based coaching, etc.) that specifically aim to aid participants to feel good, function well, and fit in, as opposed to reducing negative symptoms or managing pathologies. These interventions should be grounded in the positive psychological discipline and draw from its underlying theories
5b. Ensure appropriate randomisation	Make sure that participants have an equal chance of being assigned to each condition in the intervention to reduce the chance that groups differ on some pre-existing attribute
5c. Determine the control group and placebo group	Endeavour to always include a randomised control condition, which should be carefully selected to maximise one’s chances of drawing strong conclusions from the intervention (for example, having an active-treatment) control group. Use the control group to guard against regression to the mean effects Similarly, include a placebo control group to guard against the placebo effect or other factors (for example, Hawthorn effects)
5d. Ensure participant and experimenter blinding	Both the participants and the experimenters should ideally be blind to the conditions and goals of the intervention in order to minimise personal biases that might impact the results
5e. Incorporate evidence-based PPI practices, content, or protocols	Include PPI content, practices, or protocols that have been peer-reviewed, that have documented evidence of their effectiveness, or that have been appropriately informed by scientific research
5f. Employ interventions or psychometric assessments with manuals	Selecting interventions or psychometric assessments with published manuals (with practice guidelines) ensures that interventions are designed, implemented, and evaluated in a standardised manner. This enhances the potential impact of such on-treatment outcomes

(continued)

Table 1 (continued)

Guideline	Explanation
5g. Develop and implement age-appropriate interventions	PPI content and evaluation methods need to be tailored to the age of the participants. Sophisticated self-rating instruments cannot be used on children who do not understand the nature or content of the intervention or assessment method
5h. Ensure appropriate duration of the intervention	Ensure that the PPI lasts long enough for the intervention content to lead to sustainable effects. Although the duration of interventions is dependent on the nature of the outcome variable being treated, the type of intervention employed, and the characteristics of the participants (and their environment), both researchers and practitioners need to justify treatment duration before implementation
6. Ensure valid data collection measures. (Also see Sects. 2.5.1 and 2.5.2.)	The choice of measure must be guided by relevant theories and models, the current literature, the research question, and the target population. Special consideration should be given to focusing on the reliability (for example, test-retest, inter-rater, parallel forms, and internal consistency) and validity (face, content, concurrent, predictive, discriminative, and ecological) of the measure
7. Implement an intention-to-treat strategy	Regardless of deviations (for example, protocol violations, follow-up losses, etc.), include all randomly assigned participants in the analysis. This has many benefits, including the guarding of statistical power and limiting of ad hoc analyses. Note, however, that in a pre-registration, researchers can still state and justify why and how certain responses or participants will be excluded, as long as these have clear arguments and justifications
8. If possible, pilot-test the content and design of the PPI before full implementation	In order to ensure that the PPI content and design are appropriate and that they produce the desired effect, it is suggested that they be implemented on a small scale in order to calibrate the content, design, and evaluation methods. Refine the intervention based on what is learnt from both a provider (researcher) and participant perspective

impact. An active control group (for example, attention or placebo control, relative efficacy control, additive/constructive comparison groups, and component control groups) is considered more impactful, and researchers are encouraged to implement such a group in their PPIs (cf. Freedland et al., 2011; Whitehead, 2004¹).

In PPIs, the sample selection also requires careful consideration and planning, as it impacts both the conduct of the intervention and its outcomes. It is important to define the target population, identify its characteristics, specify the sampling frame (where participants are likely to be located), and determine the sampling method (cf. Jimenez & Czaja, 2016). In designing PPI studies, investigators should not shy away from mixed methods, that is, combining both quantitative and qualitative approaches. Mixed methods can bridge the gap between evidence generated from “ideal” intervention conditions and the adoption (see Sect. 2.3) of evidence-based practices for diverse populations in real-life settings (Becker & Newsom, 2003). Types of designs that include mixed methods are referred to as exploratory and explanatory sequential designs, or concurrent designs (see Creswell, Klassen, Plano Clark, & Smith, 2011; Curry & Nunez-Smith, 2014 for more information). Although mixed methods are recommended, the quantitative part of the design must remain scientifically sound in order to enable comparability and replicability. This implies that researchers use validated tools, and if these are not accessible in their own language, they should follow appropriate transcultural validation processes (for example, Vallerand, 1989). However, PPI research among young children lacks validated tools. In this area, the conception and validation of new, simple measures are needed. Therefore, researchers may want to validate tools prior to carrying out their PPI research.

As PPIs have shown small to moderate effect sizes in the most recent and methodologically sound meta-analysis of PPIs (Bolier et al., 2013), more effort should be put into the study of theoretically based moderating variables. Indeed, as underlined by Cronbach more than 50 years ago (1957), psychological interventions need to be adapted to individual profiles. Cronbach and Snow (1977) argue that individual differences in response to interventions are linked to both strengths and impairments. For example, high levels of negative affect or the use of inefficient emotion regulation strategies such as rumination may lead to greater PPI efficacy, as participants experience new ways of regulating their positive and negative emotions, which leads to sustainable changes in well-being. However, other researchers have shown that psychological interventions are more efficient for individuals with higher levels of positive affect or more effective emotion regulation strategies, as positive emotions facilitate openness to experience and engage towards meaningful goals (for example, Taylor et al., 2017). Hence, such moderators need to be assessed prior to PPI implementation in order to determine who benefits most from such interventions.

More recently, in the field of positive psychology, this has been referred to as the “person-activity fit” model (Schueller, 2014; Sin, Della Porta, & Lyubomirsky, 2011). It underlines the importance of considering the extent to which the practices proposed are coherent with the participant’s values, appear natural to him/her, are enjoyable,

¹Consult Table 8.2 in Rebok (2016, p. 144) for a comprehensive list of pros and cons associated with various control group types.

and generate an intrinsic motivation to engage in the activity. When there is a good person-activity fit, the PPI has more chances to become effective, as the participant will be more prone to practice. This underlines a potential drawback in randomised controlled efficacy trials, which are considered the gold-standard methodology to ensure the efficacy of a programme. While this may be the case, according to the person-activity fit model, all practices are not adapted to all participants. Hence, in randomised controlled trials, mean statistical analyses based on the whole sample of each type of PPI may misleadingly show no effect of the intervention, while it may have a positive effect on certain profiles, no effects on others, and even negative effects on some.

Another promising avenue of research in PPIs is that of experience sampling methods, which aim at following more precisely, through extensive data collected throughout the intervention (for example, two to five times per day), how different profiles of participants respond to the treatment. Attention should also be given to the use of practice diaries in order to be able to quantify how much participants have practised and how much is needed to obtain a significant effect on the target dependent variables. In the field of mindfulness-based interventions, classical programmes, such as the mindfulness-based stress reduction programme (Kabat-Zinn, 1982), for instance, suggest practising 45 min per day, six days per week. However, more recent studies have shown that effectiveness on certain target variables can be reached with 20 min of practice per day. This enables giving indications that are more precise to participants according to what is aimed at and whom the programme is tailored for. (For a review on home practice time, see Lloyd, White, Eames, & Crane, 2018.)

There is also a great need for long-term or longitudinal designs, as some PPIs might be questionable in terms of sustainable effects or even boomerang effects. Indeed, PPIs that direct participants' attention to cultivating and maintaining positive emotions (for example, Weytens, Luminet, Verhofstadt, & Mikolajczak, 2014) can lead to positive effects post-intervention. It has, however, also been argued that PPIs focusing too much on positive emotions may generate side effects such as experiential avoidance when facing negative emotions (Ivtzan, Lomas, Hefferon, & Worth, 2015). Such potential side effects are highlighted in studies on the pursuit of happiness: when individuals are encouraged to look for positive experiences and to rate their current state of happiness, it can lead to reduced subjective well-being (for example, Mauss, Tamir, Anderson, & Savino, 2011; Schooler, Ariely, & Loewenstein, 2003). Researchers should, therefore, think of how they announce and present the PPI in order not to focus solely on positive emotions and experiences, but rather on a more functional aim, which has become the focus of the second wave of positive psychology (Ivtzan et al., 2015), namely, experiential acceptance. Second-wave positive psychology authors suggest that first-wave positive psychology focused participants' attention too much on positives traits, thoughts, emotions, and experiences, while everyday life is—and will always be—made up of a variety of emotions (emodiversity), which can all be considered useful, as they can help one remain aware of internal or external cues to adapt to situations. The main goal of PPIs should be to help participants adapt to different situations, while being able to access their potential. This implies the development of what has been named psychological flexibility

in acceptance and commitment therapy (Hayes, Strosahl, & Wilson, 2012), defined as the ability to choose appropriate behaviours according to internal and external contexts. According to Fredrickson's (2004) broaden and build model, positive emotions may help us develop more creative responses and, thus, enhance psychological flexibility. However, PPIs should not encourage participants incidentally to avoid other emotions, as it would lead to more psychological rigidity (Hayes et al., 2012).

Finally, the content of the PPI itself should be thoughtfully selected. The practices selected should be grounded, validated, and linked to the researcher's hypotheses in terms of target mechanisms of action. In order to foster efficacy and replicability, PPIs should be theory-driven, age-appropriate, long enough to create sustainable change, manualised, and comprised of sufficient training to be implemented correctly.

2.1.2 Guidelines for PPI Design

In Table 1, we identify seven aspects relating to design of which PPI researchers should be aware and, if possible, implement in their methodological decision-making process.

2.2 Recruitment and Retention

Although a large body of literature is focused on the effective design of interventions, limited emphasis is placed on the *recruitment and retention of participants* (Wong & Roy, 2017). Recruitment refers to the process through which participants are enticed to participate in the PPI, whereas retention refers to the process associated with keeping participants engaged in the PPI from beginning to end. Gelinias et al. (2017) and Eglmeier (2015) have reported that up to 86% of clinical trials in all types of interventions (spanning both medical and psychological sciences) do not meet pre-established recruitment and retention goals. Furthermore, initiatives aimed at recruiting participants from "hidden" or "hard-to-reach" population groups show even lower response, retention, and participation rates (Gelinias et al., 2017). Various factors have been associated with poor participation rates, such as advanced age, low education levels, employees being unskilled, cognitive impairment, loss of drive, laziness, suspiciousness of the studies, anxiety about being "admitted to a mental institution", protective relatives, and extraordinary circumstances (Begun, Berger, & Otto-Salaj, 2018; Huntington et al., 2017; Karras-Jean Gilles, Astuto, Gjicali, & Allen, 2017).

These factors and the resulting impact on participation rates contribute to a PPI's reduced statistical power, premature closure, lack of generalisability, and low replicability (De Salis, Tomlin, Toerien, & Donovan, 2008). They also threaten the external validity of interventions (Bradley, 1997; Zweben, Fucito, & O'Malley, 2009). Strategies to effectively recruit and retain participants for PPI studies can be limited and costly (De Salis et al., 2008; Eglmeier, 2015; Prescott et al., 1999). Furthermore, it

has been shown that researchers do not sufficiently address low participation rates, but rather find creative ways to work around large attrition rates (Ramo & Prochaska, 2012). Therefore, recruiting and retaining participants are of crucial importance in PPI designs, and researchers should perform due diligence on them in more structured and systematic ways.

2.2.1 Challenges Associated with Recruiting Participants

Challenges to recruitment include a lack of planning or knowledge on the part of the research team, factors related to study design, and resources allocated to recruitment, as well as the characteristics of the population. A common mistake is a lack of planning, which tends to lead to overestimation of the pool of individuals who conform to study inclusion criteria and is also sometimes referred to as the “funnel effect” (Spilker & Cramer, 1992). Some common efforts to mitigate this include relaxing inclusion criteria, enhancing the catchment area, or increasing canvassing efforts.

Another important issue with recruitment is the general mistrust of research and research processes by participants (George, Duran, & Norris, 2014). There might also be stigma related to the study or topic of interest, which can negatively impact recruitment (Conner et al., 2010). Finally, lack of strategies for effectively communicating with potential participants, such as not tailoring the recruitment materials to the characteristics of the target population, can be an important impediment to recruitment (Giarelli et al., 2011).

2.2.2 Challenges Associated with Retaining Participants

Recruiting participants is difficult in itself, but ensuring that they remain in the study also comes with considerable and unique challenges. Some common ones that tend to be outside experimenter control include participant death, changes in location, illness, and so on. However, participants may also lose interest in the project or become disillusioned or dissatisfied with how it is progressing. Enhancing retention is inextricably connected with enhancing recruitment, so we present the guidelines for these two methodological aspects together in the next section. A recent meta-analysis of various retention strategies by Brueton et al. (2014) provides a good overview of the success and impact of various small-scale retention strategies, and researchers are encouraged to consult it before deciding which strategy to implement.

2.2.3 Guidelines for PPI Recruitment and Retention of Participants

Improving recruitment and retention rates of participants in PPIs remains a challenge in both clinical trials and applied intervention research (De Salis et al., 2008; Wong & Roy, 2017). The large dropout rate reported by Bolier et al. (2013) significantly impacts the findings of the studies, as it decreases power and, in some

cases, overinflates the results. Participant retention is, therefore, extremely important to ensure the integrity and scientific credibility of the intervention. Research shows that participant retention is largely influenced by the recruitment practices employed (Caldwell, Hamilton, Tan, & Craig, 2010). Therefore, to enhance recruitment and retention, complementary strategies must be followed. In Table 2, a number of guidelines are presented to aid in managing recruitment and enhancing participant retention.

2.3 Adoption

A gap has been documented between well-controlled interventions and their consistent adoption in applied settings (Murillo, Reece, Snyderman, & Sung, 2006). For instance, Planas (2008) suggests that an important stage of the research process deals with enhancing the adoption of evidence-based recommendations in everyday practice. Glasgow, Lichtenstein, and Marcus (2003) state that a number of factors (such as the complexity of the intervention, the intensity/frequency of treatment, and the extent of standardisation) influence the extent to which “clinical” or academic interventions are adopted in functional practice domains. They argue that the practitioners find it difficult to replicate the exact conditions under which the academic interventions were developed and implemented and, as such, need to significantly adapt these in order to have broader appeal to clients.

There is a need, therefore, for PPI research to pay attention to increasing the chances that interventions are adoptable (Tunis, Stryer, & Clancy, 2003). Examples of issues related to adoption can be found in many areas that work with PPI style research. For instance, in clinical trials, participants are often highly motivated individuals with unique problems that the trials tackle, and participants are usually screened to ensure that they meet the exact conditions necessary for the intervention to have an effect. While this contributes to the internal validity of the findings, the external validity of these trials is severely weakened, given that the results are not representative when applied to people in actual practice settings (Glasgow et al., 2003; Cook, Campbell, & Shadish, 2002). Various barriers in practice settings, such as time constraints, competing priorities, anxiety about intervention content, stigma, and perceptions of the usefulness of the intervention, impede active adoption of intervention content (Wainberg & Cournos, 2000). Similarly, in psychotherapeutic research, there is a distinction between efficacy and effectiveness (Moras, 1998), with the latter referring to a test of whether a “program does more good than harm when delivered under real-world conditions” (Flay, 1986, p. 451). In the following section, some of the challenges that PPIs face when it comes to their adoption will be described, and several best-practice guidelines will be suggested.

Table 2 Guidelines for enhancing participant recruitment and retention

Guideline	Explanation
1. Identify the appropriate target population, sample size, and sample type required	Determine the appropriate target population through screening methods (for example, if the intervention targets depressed individuals, measuring depression using validated instruments and making clear exclusion and inclusion criteria). In sample size considerations, possible participant attrition rates should be considered and planned for accordingly, for example, by increasing the planned sample size
2. Establish a recruitment timeline	Set a realistic recruitment timeline and plan before the actual date of the data collection. Research team members could be employed with the same personal characteristics (for example, race/ethnicity) as the target population in order to streamline the process
3. Emphasise confidentiality, and provide clear consent forms explaining participants' rights	Minimise participants' suspicion of the research process by providing adequate consent and intervention information. Ensure and demonstrate that adequate data handling and anonymisation will be implemented
4. Minimise the inconvenience of study participation	Prepare creative solutions to time and transportation obstacles. Offer in-home assessments (if possible) to participants who are unable to leave their homes
5. Prepare incentive strategies for participant retention	Out of a number of incentive trials (for example, vouchers, cash, charity donation, entry into a prize draw, or certificates), focus on aligning the incentives with the needs of the target population
6. Prepare behavioural strategies for retention	When applicable, give information about goal setting and time management to participants to facilitate successful intervention completion
7. Pilot-test recruitment materials and methods	Select a smaller sample of the target population, and test the materials and strategies for recruitment and retention to decrease later issues with participant attrition
8. Set the recruitment protocol, and train a project team or "peers" to serve as recruiters	Be consistent in recruitment strategies among project team members. Standardised recruitment protocols need to be established in order to ensure that a consistent and clear message is communicated by the project team to all potential participants. Once the recruitment protocol has been established, all recruiters must be trained in it

(continued)

Table 2 (continued)

Guideline	Explanation
9. Establish multiple ways of maintaining contact with participants	Plan multiple ways through which to maintain contact with participants. Obtain more than two forms of contact information (for example, home and work telephone number, email addresses, and postal addresses)
10. Implement PPIs at times and in locations that are convenient for study participants	Plan the implementation phase of the PPI around the availability of participants. Select times and locations that are convenient for participants
11. Send easy-to-read reminders	Establish the frequency of reminder notifications, which should be communicated in a clear and concise manner. Designate how reminders will be managed as well as through which channels these will be disseminated. Communicate this clearly to participants at the outset of the project

2.3.1 Challenges Associated with the Adoption of PPIs

One specific challenge, relevant to PPIs and highly aligned with adoption, is the concept of clinical significance. Clinical significance is related to the PPI's impact and refers to the importance of an intervention's effect and whether it makes a difference in the lives of individuals (Kazdin, 1992). An important goal, therefore, is developing PPIs that are not only statistically, but also clinically significant. A PPI is more likely to achieve clinical significance and is more likely to be adopted if it is aligned with the beliefs, attitudes, values, and needs of the target population (that is, person-activity fit). It is advised that a needs assessment of the target populations be developed using focus groups or questionnaires (Kazdin, 1992). This information should then be integrated in the intervention's design and ought to be reflected in the methodological decisions researchers make.

The reach of an intervention extends beyond the participants who are taking part. In PPIs, in particular, one also needs to consider other key individuals who can influence adoption, such as supervisors, administrators, or managers. These individuals are important stakeholders in a PPI. If an intervention is being conducted in an organisational setting, for instance, an important stakeholder is the executive board in charge of the organisational structuring. Furthermore, it is vital to invite the various stakeholders to "participate" in the research programme. This would entail cultivating relationships with the stakeholders and consulting them in the planning of an intervention to generate support (Feifer et al., 2004).

Beyond stakeholders, if interventions include other collaborating parties such as personnel in an organisation, for instance, they should be briefed on the intervention protocol and should agree with the sections that would require their involvement. It has, for instance, been shown that interventions that do not interfere with established

practices and routines are more likely to be adopted (Glasgow, McKay, & Piette, 2001; Love et al., 2006).

Finally, researchers should take note of the importance of addressing the representativeness of the settings in which the intervention is implemented. Interventions that require speciality training or that rely on resources that can only be delivered by a minority of experts are unlikely to be adopted outside of that specific research framework (Glasgow, Magid, Beck, Ritzwoller, & Estabrooks, 2005).

2.3.2 Guidelines for Enhancing PPI Adoption Rates

In Table 3, we identify several guidelines that could improve the chances of PPI adoption.

2.4 Intervention Fidelity During Implementation

2.4.1 Challenges Associated with PPI Implementation/Fidelity

Implementation refers to the extent to which the PPI is delivered and implemented as originally intended. Planas (2008) argues that the implementation of an intervention is the function of fidelity, which encompasses two factors: (a) integrity (that is, the extent to which the intervention is delivered as intended) and (b) differentiation (that is, the extent to which participant exposure differs from the original intent). The fidelity of a PPI is an imperative function for ensuring the internal validity of the intervention because if an intervention yields significant results, but the fidelity was not ensured, the inference as to the effectiveness of the intervention is weakened. Similarly, if non-significant results are found, and fidelity is not reported, it will be difficult to infer whether the failure is due to an ineffective intervention or some other factors.

Planas (2008), furthermore, argues that implementation and fidelity of an intervention are the responsibility of the provider or project team. Interventions implemented by numerous practitioners/researchers, at various sites, or to numerous groups, present various challenges associated with the integrity of the intervention. For instance, significant differences in the dissemination of the PPI may occur (for example, alternative instructions being provided or different measurement moments occurring in diary-type studies, etc.). All of this might lead to increases in the occurrence of Type III errors—that is, getting the right answer to the wrong research question/hypothesis (Onwuegbuzie & Daniel, 2003).

Table 3 Guidelines for better PPI adoption rates

Guideline	Explanation
1. Determine the primary adopter(s) of an intervention	The adopter(s) is/are the relevant stakeholder(s) (individual, organisation, or collective group of organisations) that has/have the responsibility for deciding whether to implement the PPI and whose perspective is used to evaluate costs. Correctly identifying the right stakeholders increases the PPI's chances of adoption
2. Assess the needs of the target populations	Prior to the PPI's construction, information on the needs, beliefs, and values of the target populations should be gathered and assessed. It might be best to collect such information through qualitative means (for example, focus groups, etc.), weaving this knowledge into the design of the intervention
3. Assess willingness to participate.	It is important to assess how and whether the stakeholders are willing to adopt and adapt the programme of an intervention from multiple settings. These insights can then be used in structuring the design of the intervention
4. Stakeholders ought to be encouraged to "participate" in the research programme	Relevant stakeholders ought to be consulted about the research process and design in order to gather input on feasibility and, later, applicability of its procedures. Stakeholders hold valuable insight on the inner workings of organisations, populations, etc., and these insights can result in more adoptable intervention designs
5. Ensure compatibility with existing practices	PPIs should bring about an advantage over previous practices, but ought to, nevertheless, be compatible with, and aware of, previous norms and values in order to ensure higher understanding and feasibility of implementation
6. Rely on measures of clinical significance, relevant to intervention-related goals	A criterion should be established to determine what constitutes clinical significance of an intervention. The researcher can focus on measures such as social impact or quality of life. This criterion should be set up front
7. Implement a "science of larger units" (Biglan, Glasgow, & Singer, 1990)	Researchers should consider and analyse the social context(s) in which experiments and interventions are conducted. It implies that there is a need to consider not only individual participants, but also the settings in which they reside and receive treatment

(continued)

Table 3 (continued)

Guideline	Explanation
8. Design interventions in accordance with the “person-activity fit” model	Interventions need to be designed in order to ensure congruence between the participant’s preferences, personality characteristics (or strengths), current environment, and the type of intervention being implemented. The focus should be on aligning intervention content with individual preferences in order to ensure that the psychological processes that it targets works effectively to increase well-being

2.4.2 Guidelines for Enhancing PPI Fidelity During Implementation

Managing Type III errors by enhancing the integrity and dealing with the differentiation of PPIs is an important consideration to account for, especially if multiple groups, practitioners, and dissemination sites are part of the intervention design. It is imperative to plan the intervention fidelity procedure before the start of the intervention (Bolier et al., 2013). Table 4 provides an overview of guidelines to be implemented to enhance intervention fidelity.

2.5 Evaluation

The set of guidelines closes by focusing on the evaluation aspect of PPIs. Indeed, one could argue that the crux of determining the effectiveness of an intervention lies in how it is evaluated. More broadly, however, the evaluation of a PPI can be regarded as a function of the interplay among the (a) effectiveness of the intervention, (b) the analytical methods used to evaluate it, and (c) the calculation of its return on investment. While PPIs can be effective, it is always important to evaluate and identify the factors that might impact their effectiveness. For instance, in a meta-analysis of 51 PPIs on alleviating depressive symptoms, Sin and Lyubomirsky (2009) found that several factors impacted the effectiveness of the interventions, including depression status, self-selection, participant age, and the format and duration of the intervention.

2.5.1 Challenges Associated with Evaluating PPIs

We start with what could be considered the most important and challenging aspect of intervention research: the selection of measures. A common source of misleading results in intervention trials, in general, stems from inadequate attention to the choice of measures, that is, a mismatch between the intent of the intervention and the measurement strategy (Gitlin & Czaja, 2015). There are a wide variety of mea-

Table 4 Guidelines for enhancing PPI fidelity (integrity and differentiation) during implementation

Guideline	Explanation
1. Recruit and select multiple (competent) trainers	<p>Recruit more trainers than initially needed. This will ensure that there are enough trainers in the talent pool to select from should a trainer fall out at some point during the process</p> <p>Establish clear guidelines for the core competencies, skills, and basic abilities (or “capabilities”) of an “effective trainer” for the specific PPI. Recruit and select trainers for these capabilities</p>
2. Train the trainers, and develop a standardised intervention manual	<p>Structure the intervention dissemination protocol, method, and design in the form of a standardised intervention manual. Train trainers appropriately in line with the content of the manual in order to ensure standardisation of its application. This will ensure that the practitioner possesses the foundational knowledge of the intervention and the critical assessment skills to set priorities, to make sound decisions regarding the implementation of the intervention, and to manage problems that may occur during the implementation in accordance with set guidelines. In the manualisation process, special attention has to be given to the intervention protocol and content in order to ensure that a standardised exposure of the PPI is presented and that the experience is shared across all participants</p> <p>Provide multiple, periodic “booster” training sessions throughout the intervention to manage decay in the skills of the trainers</p>
3. Host frequent “trainer” colloquiums to discuss challenges and difficult cases	<p>During medium- to long-term interventions, trainers should meet regularly in order to discuss challenges, difficult cases, and problems arising during the implementation process. Frequent contact ensures that there is standardisation in the management of these problems across participant groups and intervention sites, as well as among trainers</p>

(continued)

Table 4 (continued)

Guideline	Explanation
4. Employ multiple trainers per intervention group	<p>Ensure that there are at least two trainers available during each intervention session. This helps not only with efficient standardisation between intervention groups, but also in managing potential problems that may occur during the implementation process. For example, if the intervention triggers severe emotional reactions from an individual in a group-based intervention, one trainer could address these in a different venue, while the original training can continue with the first trainer</p>
5. Actively monitor PPI fidelity	<p>Intervention fidelity must be actively tracked to ensure standardised delivery. Specific tracking mechanisms need to be developed in order to monitor the following:</p> <ul style="list-style-type: none"> (a) The extent of the implementation process (b) Changes in PPI implementation that occurred during the process (c) Consistency of PPI delivery among all trainers and at all sites (d) Dissemination of intervention activities in the control or placebo groups (e) Monitoring of trainer engagement <p>The aforementioned can be done practically as follows:</p> <ul style="list-style-type: none"> (a) Random content and intervention experience-related evaluations of the intervention sessions can be done by the core research team (b) Checklists can be developed, highlighting the main areas of the intervention dissemination, and can be completed by trainers at the end of each session/intervention (c) Selected components of the intervention can be sampled and reviewed for protocol adherence (for example, checking whether all activities were completed by participants)
6. Actively monitor dropout rates	<p>Actively monitor dropout rates, determine causality (for example, are all the dropouts occurring from one specific trainer), and address these appropriately</p>

(continued)

Table 4 (continued)

Guideline	Explanation
7. Ensure that control and placebo groups are isolated from accidental exposure to the treatment group	Strategies need to be developed to ensure that participants in the control or placebo groups do not get exposure to the treatment of the experimental group. Exit interviews with participants in the control or placebo groups can be held to determine the extent of exposure, if any
8. Report intervention fidelity in the manuscript	<p>Based on the work of Borrelli et al. (2005), the following fidelity information has to be reported in the manuscript:</p> <p>(a) Treatment design</p> <p>(i) Provide information about treatment in the intervention condition (number of contact sessions, length of each session, content of treatment, and duration of contact over time)</p> <p>(ii) Provide information about treatment in the control or placebo condition (number of contact sessions, length of each session, content of treatment, and duration of contact over time)</p> <p>(iii) Mention provider/trainer credentials</p> <p>(iv) Mention theoretical framework or clinical guidelines on which the intervention is based</p> <p>(b) Training of providers</p> <p>(i) Describe how providers were trained</p> <p>(ii) Mention the standardisation of the training protocol</p> <p>(iii) Describe measures employed to assess provider skill acquisition post-training and post-intervention</p> <p>(iv) Describe how provider skills were maintained over time</p> <p>(c) Delivery of the PPI</p> <p>(i) Describe methods to ensure that the content of the PPI was delivered as specified</p> <p>(ii) Describe measures employed to ensure that providers adhered to intervention guidelines</p> <p>(iii) Mention non-treatment effects that were assessed</p> <p>(d) Receipt of the PPI</p> <p>(i) Assess participant comprehension of the intervention during the intervention period</p> <p>(ii) Mention strategies employed to improve participant comprehension</p> <p>(iii) Assess participants' ability to perform intervention skills during the intervention</p> <p>(iv) Mention what strategy was followed to improve participants' performance during the intervention</p>

asures available to choose from, and researchers should choose those that provide insight on issues of clinical significance (see Table 3 in the adoption section), the cost-effectiveness of the intervention, and the feasibility of the intervention. Choices should be made regarding what constitutes primary compared to secondary measures (Gitlin & Czaja, 2015), and researchers should carefully design and include other supplementary measure types, highlighted in Table 5. The main focus is usually on “outcome” measures, and it is suggested that they should be based on theoretical constructs, the hypothesis, the psychological properties of the measure, the assurance that change in a measure is meaningful in relation to the target population, and previous literature. Most importantly, the large number of possible measures may give rise to Type I errors, so it is important that the selection be justified and pre-registered, with clear predictions (Keppel & Wickens, 2004).

Another challenge that continues to grow in importance is focused on the economic evaluations of interventions. No matter what the type of intervention is, it requires resources, and these resources can be measured in terms of their cost. Therefore, we suggest that researchers perform an economic evaluation that can serve as an approach for comparing competing interventions. From these comparisons, researchers can make decisions concerning how resources should be distributed. Pizzi, Jutkowitz, and Nyman (2016) highlight six steps for completing an economic evaluation at which the interested reader can take a look. Some steps, such as a *cost study*, can provide information on return on investment and budget impact. While economic evaluations are important, there are multiple difficulties from which they suffer. For instance, the time horizon of the analysis represents how far into the future costs and benefits should be evaluated. However, the appropriate time horizon of an intervention depends on the underlying issue being tackled, which, in turn, can be in contrast to an economic evaluation that might require it to be longer (Drummond, Sculpher, Claxton, Stoddart, & Torrance, 2015).

In evaluating intervention effects, researchers can often rely on the same analytic strategies. However, many advancements (too wide-ranging to cover at once) can be implemented, and some can lead to large improvements. Only some are highlighted here. Firstly, most psychological research has focused on demonstrating that a hypothesised effect can exist, but it is often unclear whether the observed effects actually play a role in everyday behavior—and as we have seen, a lot of them do not replicate (Open Science Collaboration, 2015). Concurrently, other effects can be heavily dependent on specific stimuli (Westfall, Judd, & Kenny, 2015). It is, therefore, recommended that researchers expand their analytic strategy to include linear mixed-effect models that can consider the random fluctuations associated with participants, targets, stimuli, intervention settings, and so on (Brauer & Curtin, 2017). These types of analytic strategies can produce more generalisable results. Secondly, researchers should test specific, theory-driven predictions that rely on planned contrasts and likelihood ratios, as these tests have more power to detect hypothesised effects (Richter, 2016). In the third place, different approaches such as Bayesian hypothesis testing can supplant and even replace frequentist approaches, in particular when it comes to providing more insight on null findings and ways to incorporate

Table 5 Guidelines for better evaluation strategies for PPIs

Guideline	Explanation
1. Ensure appropriate selection of psychometric or assessment measures	The psychometric instruments or assessment measures included in PPI research will determine how it is evaluated. Measures should be decided on beforehand and structured around measuring the components of the theoretical or empirical model on which the intervention is based. Researchers should pay close attention to the type and number of measures they include in an intervention. All measures should be reported, the choice discussed, and the validity/reliability defended. Furthermore, researchers should consider incorporating observational and qualitative assessments to support the quantitative instruments in intervention evaluation practices
1a. Outcome measures	Outcome measures provide the strength of evidence in support of an intervention’s impact. Their choice depends on the stakeholder, the research question, the target population, and the designated use of the evidence
1b. Screening measures	These are measures that help screen and select the appropriate sample. They are used to codify exclusion and inclusion criteria and should be stringently and uniformly applied
1c. Moderators	These measures can provide information on the external validity of an intervention and can focus on individual characteristics of the population (for example, gender or age), but also on more wide-ranging factors (for example, country, culture, etc.)
1d. Mediators	These measures can help focus on how or why an intervention’s results work. While valuable and insightful, they should not be misused or misinterpreted (see Fiedler, Harris, & Schott, 2018)
2. Consider the clinical or practical significance of the intervention	Similar to the adoption guidelines, PPI evaluations should pay close attention to and evaluate not only the statistical, but also the clinical or practical significance of an intervention
3. Perform an economic evaluation.	Various intervention options can be compared to determine how resources should be distributed. Among the important steps of an economic evaluation, cost-effectiveness analyses and cost-benefit analysis should be performed

(continued)

Table 5 (continued)

Guideline	Explanation
4. Explore and implement new and emerging analytic strategies when evaluating intervention effects	Strive for analytic rigor. For a more representative analysis that considers various random effects and more generalisable findings, mixed-effect modelling should be implemented. Other, more powerful analyses such as planned contrasts should be used. Bayesian testing, equivalence testing, and likelihood ratios can supplement research findings and provide more nuance to the strength of an effect
5. Iatrogenic complications of the intervention have to be reported	The negative, iatrogenic complications arising from the implementation of a PPI have to be reported and appropriately managed. Unforeseen negative consequences for the physical, emotional, or psychological health of a participant that arise from participation in the intervention need to be addressed immediately and reported in the eventual manuscript. For example, an intervention on finding meaning in life may lead to an individual feeling that there is no meaning in life, and suicide ideation might occur
6. Consider experience sampling, multiple sampling instances, and long-term follow-up assessments	In order to effectively evaluate the immediate and long-term effects of an intervention, it is suggested that researchers implement multiple measurements for the duration of the intervention. These could include daily or weekly measures, with shortened versions of the original scales on mediators/antecedents being targeted by the intervention. Furthermore, researchers should consider long-term follow-up assessments
7. Measure participant satisfaction before, during, and after the intervention	Customer or participant satisfaction is an important factor to consider when evaluating the effectiveness of a PPI. Not only can it act as an important factor to control for, but it also provides a non-psychological assessment of the impact, happiness, and participant-perceived efficiency of the intervention. It is suggested that the one-item Net-Promoter Score (NPS: Leisen-Pollack & Alexandrov, 2013) be used. The NPS is a single-item customer satisfaction, advocacy, and loyalty measure that asks about the likelihood that one would recommend a certain product or service

(continued)

Table 5 (continued)

Guideline	Explanation
8. Be aware of, and guard against, questionable research practices	Multiple lists (for example, John et al., 2012) exist that tabulate possible research practices and their impact on the (in)validity of findings. Researchers ought to curtail reliance on such practices and strive for more rigorous ways of evaluating PPIs

prior beliefs about certain effects (see Wagenmakers et al., 2018 for a more detailed description).

Finally, an enormous challenge in psychological research, in general, pertains to reducing questionable research practices. These practices, such as excluding data points on the basis of post hoc criteria, dropping non-significant measures, or hypothesising after the results are known (HARK-ing), can spuriously increase the likelihood of finding (non-existent) evidence in support of a hypothesis (Simmons et al., 2011). Indeed, John, Loewenstein, and Prelec (2012) found that the prevalence of these practices among psychologists was surprisingly high. We encourage researchers to further educate themselves on possible questionable research practices and reflect on them when evaluating the effectiveness and success of PPIs (cf. Simmons et al., 2011; Loewenstein & Prelec, 2012; Bakker, Dijk, & Wicherts, 2012; Agnoli, Wicherts, Veldkamp, Albiero, & Cubelli, 2017).

2.5.2 Guidelines for the Evaluation of PPIs

In Table 5, we summarise the basic guidelines that can lead to better evaluations of PPIs.

3 Conclusion

Positive psychology has been touted as more scientific than its predecessors, humanistic psychology and existential psychology (van Zyl, Motschnig-Pitrik, & Stander, 2016). However, recent criticisms of fundamental theories, bouts of unsuccessful replications in empirical and applied research, and questions pertaining to the general effectiveness of positive psychology techniques (Friedman & Brown, 2018) have led to concerns about their validity as well as their replicability (Bolier et al., 2013; Mongrain & Anselmo-Matthews, 2012). In this chapter, the focus was on positive psychology interventions (PPIs), and it was argued that some of these critiques and concerns might be a function of problems occurring in (a) intervention design, (b) recruitment and retention of participants, (c) adoption, (d) issues with intervention fidelity and implementation, and (e) efficacy or effectivity evaluation of PPIs. As

such, this chapter presented an overview of some of the major problems associated with each of these areas and presented general (albeit brief) best-practice guidelines for PPI designs, inspired by recent developments in the field. It is suggested that researchers follow the best-practice guidelines presented in this chapter to not only enhance the effectiveness of their PPIs, but to also ensure that these interventions are well planned, clearly structured, and replicable.

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The Talent Development Centre as an Integrated Positive Psychological Leadership Development and Talent Analytics Framework



Frederick Wilhelm Stander and Llewellyn Ellardus Van Zyl

Abstract The purpose of this chapter is to explore the value of an integrated Talent Development Centre (TDC) approach as a dynamic, hybrid, positive psychological leadership development and talent analytics framework within organizations. Specifically, the chapter aims to explore the modern idea of the TDC, its theoretical underpinnings and its practical and procedural application to meet the development demands of inter-connected-, dynamic- and digital organisations. The chapter is structured through three core components: Firstly, an overview is provided on the evolution of the TDC as a hybrid assessment and development centre. The purpose-, function-, and differentiation between assessment—and development centres are presented. Secondly, an argument is made for the adoption of a developmental and learning orientation towards TDC's—supporting a positive organisational intervention approach while expanding on the theoretical premise of competency-based learning and assessment design. Thirdly, key principles for the successful implementation of a contemporary TDC is put forward; responsive to the demands of a dynamic and expansive work context driven by a number of emerging trends. Recommendations are provided pertaining to the role of TDC's in integrated succession planning, leader readiness, talent calibration and intervention mapping on both individual—and group level.

Keywords Training and development · Talent development · Talent development centre · Leadership development

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1 Introduction

The Assessment Centre (AC) is a widely recognised, integrated and process-driven assessment methodology utilised to evaluate the aptitude, competence and potential of people (Reynolds, McCauley, & Tsacoumis, 2018). It is a multi-tiered assessment methodology which refers to a “structured process whereby a group of participants are exposed to multiple assessment methods, that are observed by a team of trained assessors, who evaluate participants against a predetermined job-related competence profile, whereby decisions are made by pooling shared data” (Ballantyne & Povah, 2017, p. 7). In contrast to traditional assessment techniques, it utilizes various data-points to evaluate behaviours in order to accurately predict future work performance and potential (Hay, 2017; Thornton, Mueller-Hanson, & Rupp, 2017).

These data-points are obtained through a multitude of methods ranging from simulations, sociograms, exercises, case studies, 360-degree evaluations, psychometric assessments and behavioural interviewing (Ballantyne & Povah, 2017; Volante, Valenzuela, Diaz, Fernandez, & Mladinic, 2018). Assessment Centres are administered by specialized professionals, most often Organisational Psychologists or Human Resource Professionals, who are trained in mapping behaviours, work-preferences, personality and orientation to particular capability frameworks (Iles, 1992). This integrative approach is experienced by participants as being fairer, more objective and generally better received than traditional assessment methods (Bell & Arthur, 2008); even by non-selected candidates (Lawson, 2018). As such, the AC is seen as the premium for recruitment, selection and promotion practice as it is both a rigorous and multi-dimensional assessment method (Volante et al., 2018) and positively experienced by participants (Boudrias, Bernaud, & Plunier, 2014; Lawson, 2018).

It is therefore not surprising that the application of ACs has expanded into developmental interventions to assist with the professional growth of people capability within organizations. (Turner & Nichol, 2016). Drawing from the original AC methodology proposed by Howard and Bray (1988), the Development Centre (DC) emerged as a collection of workplace simulations and other assessment metrics that provide individuals with practice, feedback and coaching on a set of predefined developable behavioural competences or positive capacities that are crucial for professional success (Rupp, Snyder, Mitchell-Gibbons, & Thornton, 2006). Behavioural competences or positive capacities are selected based on their importance for success, that it is amenable to change and believed by senior management to be improvable (Rupp et al., 2006). Where ACs solely focus on the assessment or diagnoses of capability, or person-job fit, the DC emphasizes experiential learning, self-reflection, and professional development based on the diagnostic or assessment results (Hermelin, Lievens & Robertson, 2007). In effect, the DC serves a dual function as both an assessment and development tool (Kudisch, Ladd, & Dobbins, 1997). Kurdish et al. (1997) differentiate many developmental applications of DCs, such as identifying employees’ training needs, customizing fit for purpose developmental plans and giving immediate on-site feedback for leadership development. The DC, as developmen-

tal instrument, stresses phenomenon-based learning through real-time competency or capacity-based assessment, and active feedback aimed at professional/personal development and career growth (Lawson, 2018). Specifically, the DC provides clear, accurate feedback on the assessment process and facilitates the direct involvement of management in the planning and development process but highlights the importance of self-development and professional growth. Unlike ACs, DCs ensure that the competencies or capacities being assessed are transparent and great care is taken to ensure a psychologically safe learning environment, where experimentation and exploration are encouraged (Thornton et al., 2017).

Considering this gradual expansion of ACs' scope into DC's, the rigorous process of application and the (frequently) high associated costs thereof, one would argue that greater documentation of the approach as a developmental option to large organizations would exist (Thornton & Rupp, 2005; Thornton, Rupp, & Hoffman, 2014). However, quite the opposite is true, with limited research, best-practice guidelines and frameworks available to practitioners (Ballantyne & Povah, 2017; Lawson, 2018; Thornton & Rupp, 2005). Moreover, no research material is available in addressing how either ACs or DCs can support the development of people in the future world of work, where clear patterns have emerged as relevant to Human Capital Development, including the increasing importance of employee experiences, the need for hyper-connectivity, real-time feedback, the workplace eco-system, and technology (Deloitte, 2018). In this chapter we explore the modern idea of the Talent Development Centre, its theoretical underpinnings and its practical and procedural application to ensure it meets the demands of an inter-connected, dynamic and digital workplace.

2 The Definition of a Talent Development Centre (TDC)

A Talent Development Centre is a hybrid positive psychological leadership assessment and development intervention which aims to identify and develop leader-readiness, talent and leader capability, bench strength for key positions, person-organisation fit, potential and capacity for upward mobility into more complex roles. Specifically, its purpose is to (a) assess and develop leader capability, (b) provide real-time people analytics aligned to the organisational strategy and (c) aid talent mapping, career pathing and succession planning.

Its hybrid application is focused predominantly on two domains. Firstly, it is geared towards unlocking validated, applicable talent analytics that inform the succession planning efforts of organizations by making data-driven talent review conversations possible. Through its integration of data from various sources, the TDC offers a robust overview of the capability of an individual against several cognitive-, personality-, behavioural-, and competency dimensions. In this regard, the TDC answers to an increasing demand from global organizations to apply more sophisticated people analytics frameworks for the purpose of steering business continuity and supporting growth through a data-driven HR and Talent Management strategy (Boudreau & Cascio, 2017; Fecheyr-Lippens, Schaninger & Tanner, 2015).

Secondly, the TDC is a positive psychological leadership development intervention. Sosik and Jung (2018) argue that contemporary leadership development in organizations requires an entire new approach; focusing on real time challenges and setting leaders up for success within the highly complex and ambiguous contexts they function in.

The leadership development function has continued to evolve, becoming increasingly methodical and fit-for-purpose, integrating multi-source feedback to address real developmental needs and shifting away from a classical Training—towards a process—driven approach where continuous feedback cycles lead positive behavioural change (McCleskey, 2014). This is aptly summarized by Day et al. (2014, p. 64): “Training typically involves providing proven approaches to solve known problems but the challenges facing contemporary leaders tend to be too complex and ill-defined to be addressed successfully through such relatively short-term interventions”.

A TDC seeks to address this challenge by introducing phenomenon-based learning in a simulated, real-world environment, leveraging technology whilst continuously challenging the leader to engage, problem-solve and solution challenges typically faced at the next level of complexity. In this manner it becomes a stretch learning intervention, aimed at developing readiness and the capability of talent pools within organizations. Guenole, Chernyshenko, Stark and Drasgow (2015) comment that ACs/DCs can effectively provide the opportunity for situational judgement and contextual leadership development. In this regard, the TDC aims to do just that, making use of a diverse range of simulated exercises, structured and non-structured interviewing, case-studies, 360° assessment, carefully selected psychometric instruments and technological developmental actions.

Although it may seem as though there is a considerable overlap in the techniques employed in ACs/DCs (Lawson, 2018; Thornton et al., 2014) and the TDC, each approach fundamentally differs in respect of a number of parameters ranging from its purpose, the use, the role of the participant, the focus of the activity, the visibility of the content being assessed, the extent towards which feedback is provided to the amount of feedback provided, the length of the assessments and the amount of assessment methods (see Table 1 for a side by side comparison). The TDC capitalises on the strengths of both ACs and DCs in order to provide a dynamic process through which positive leadership capacities can be assessed, developed and mapped.

3 Theoretical Framework of the TDC

A TDC is positioned as a positive organizational intervention, based on its departure point of leveraging the unique strengths, potentialities and virtues of a leader towards developing a distinctive leadership brand or identity. Positive organisational interventions have its origin within the Positive Organizational Scholarship and are geared towards supporting, enhancing and further maturing the positive or strengths-based capabilities of individuals, with the view of supporting these individuals to more

Table 1 Functional comparison between ACs, DCs and TDCs

Function	Assessment centre	Development centre	Talent development centre
Purpose	Assessment for personnel selection	Assessment, development and transfer of learning	Leadership capability and capacity development
Experience	Diagnostic	Experiential learning, self-reflection	Phenomenon-based learning
Role of participant	Assessee	Active participant	Active participant
Focus	Overall performance or person-job fit	Competency improvement	Competency and capacity development, talent mapping, accelerated development
Visibility of assessment domains	Non-transparent	Extremely transparent	Specified for the HR function/individual participant
Exercises	Few and generic	Many and Job Related	Multiple fit-for-purpose—highly specific to context
Developmental strategy	None	Guided by company	Guided by individual, supported by company
Feedback	Pass/Fail and provided upon completion	Extensive feedback at multiple points during the DC	Extensive feedback before, during and continuously after the TDC
Assessors/observers	Fewer assessors, more participants	1 assessor/observer per candidate	Multiple assessors/observers per candidate
Candidates	External (potential candidates)	Internal (all interested)	Internal (high potential leaders)
Target position	Vacant position	Current/future position	Future position (promotional)
Length	Once-off (1–1.5 days)	Once-off (1.5–2 days)	Continuous structured process (up to 12 months)

Adapted from Rupp et al. (2006), Thornton et al. (2014)

readily attain work goals and meet performance targets (Martin, Karanika-Murray, Biron, & Sanderson, 2016; Winslow et al., 2017).

Positive organizational interventions have increasingly been utilized by large corporations to support talent, through methods including but not limited to job crafting (Van Den Heuvel, Demerouti, & Peeters, 2015), strengths-based development initiatives (Salanova, Llorens, Acosta, & Torrente, 2013), strengths-based coaching (van Zyl, Motschnig-Pitrik, & Stander, 2016; van Zyl & Stander, 2013), self-directed learning (Hezlett, 2016), career mapping (Hirschi, 2011), meaning-making (van Zyl, Hulshof, & Dickens, in press) and situational development of leaders through leveraging of psychological capitals (Day et al., 2014; McCleskey, 2014). A TDC is very purposefully presented as a positive organizational intervention as one of its core purposes is to highlight key leader strengths, virtues and potentialities; which the leader can leverage for the full expression of individual leadership potential, in turn benefitting the organization.

As such, the TDC draws from the positive organisational practice framework suggested by Salanova et al. (2013, p. 110) as it is “a systematic, planned and proactive effort to improve employee processes” through a positively framed heuristic framework which (a) sources data from multiple sources, (b) employs both quantitative and qualitative positive capability assessment methodologies, (c) data is processed/analysed at both the individual and collective level and follows a multi-levelled assessment process, (d) it integrates theories from positive organisational psychology, (e) both subjective and objective individual indicators are utilised and finally (f) a customised, personal leadership development trajectory is developed, implemented and tracked. Here, the focus is primarily on the assessment of leader capability and development thereof from a strengths-based capacity crafting and resource optimisation perspective (Bakker & Demerouti, 2017). This strengths-based developmental focus disperses much of the anxiety and antagonism leaders usually experience when being subjected to forms of assessment (Cameron, 2012; van Zyl & Rothmann, 2014, 2012) and results to increased commitment to both the process and the organisation (Olckers, van Zyl, & Van Der Vaart, 2017).

A second prominent theoretical element of a TDC is its alignment with competency-based development. Gangani, McLean, & Braden (2006) comment that the development of an agile human resource and leadership force can only be facilitated by articulating a clear organizational success profile. By bringing a well-defined framework of key capabilities, attributes and skill sets required to the fore, organizational strategic drivers can be supported through individual, team and organizational efforts, herewith making greater performance possible (Müller & Turner, 2010; Naquin & Holton, 2003; Northouse, 2018). When planning a TDC, great time and effort is spent in understanding an organization’s particular strategy, growth goals, macro-contextual environment as well as the current business challenges it faces. This aid in understanding the type of leader necessary to not only successfully navigate these elements but who will thrive in these conditions (Elkington, Steege, Glick-Smith, & Breen, 2017). This leads to the construction of fit-for-purpose defined capability matrix; a competence model describing key attributes, orientations, values, abilities and experiences needed to lead within an

organization (de Heer & Porskamp, 2018). When the competence model is clear, the selection of methods to gather data and measure a candidate against that model becomes possible (Ballantyne & Povah, 2017).

4 Seven Core Principles for the Delivery of a Successful TDC

In order to deliver a comprehensive TDC, seven key principles must be adhered to. This will support the delivery of a TDC as a hybrid leadership development and mapping intervention whilst providing a compelling learning opportunity to leaders.

Principle 1: Ensure contextual development

For a TDC to be successfully implemented, deep thought into the contextual realities and the associative challenges which the organization face is required. Leadership does not occur in a vacuum, but instead reflects responsiveness of shared value creation within the macro eco-system in which the organization functions. Shamir and Howell (2018) argue that an organizational context is deeply related to the expression of leadership behaviours and that situational factors, growth strategy, culture and market drivers inform directly the type of leadership required within a particular organization. A human resource development approach, and by extension the design of a TDC, can never be contemplated without firm understanding of the organization's growth goals, imperatives, key performance indicators, strategy and ecological systems (Canals, 2014; Garavan, Watson, Carberry, & O'Brien, 2016; Vohra, 2014). Canals (2014) established that leadership development must focus on the specific (global) functions leaders in large organizations must fulfil, and that there should be alignment between an organization's purpose and its leadership development approach.

As such, the TDC should be developed alongside senior executive management, to ensure that the content, direction and initiatives are fit-for-purpose, relevant and contextually crafted (Marshall, Coleman, & Reason, 2017). Further, through active involvement in the design process, executive management buy-in is obtained which is crucial success factor for any strategic human resource development initiative (Mendenhall et al., 2017). A participatory action research approach, which focuses on a process of co-constructionism, should be employed to contextually explore the current organisational environment with the senior executives. This type of action research should involve (a) An orientation through which the context of the TDC is discussed and contextual information obtained, (b) formal contracting through the mutual clarification of expectations, (c) developing recognisance to deeply explore the nature of the business, its context and challenges, (d) co-construct a broad understanding of the leadership capabilities required for formative functioning at each organisational level, and (e) ensuring that the TDC is clearly aligned to the overall business strategy (James, Milenkiewicz, & Bucknam, 2008; Marshall, Coleman, &

Reason, 2017). This iterative process ensures that the TDC is a customized solution, which is aligned to the strategic drivers of the organisation.

When designing a TDC, this must be kept top of mind. The selection of psychometric batteries, the development of simulations, the assortment of exercises/case studies, the line and structuring of interviews and the contemplation of post TDC developmental activities must be done along the guidance of the specific leadership attributes required to drive an organization forward; and must be directly reflective of the strategic and operating environment of the organization. Only then can mapping be done against a clearly defined profile and can the TDC deliver on its dualistic mandate of developing leaders whilst generating comparative data that can meaningfully contribute to succession planning efforts.

Principle 2: Work from a clearly defined capability matrix

Closely related to the first principle, it is important to be clear on the totality of leadership attributes required within an organization when a TDC process is undertaken. This seemingly simple endeavour is made complex through two elements in particular. Firstly, there is the continuing strife for understanding what leadership talent and potential entails. There is much dispute in the literature over the definition of leadership potential and talent. Clinton (2018) describe leadership potential as a dynamic combination of self-mastery, authenticity, awareness, ability to inspire, creation of purpose, demonstrating of agility, creating synergistic relationships and developing others through energy and presence. Silzer and Church (2009) delineate potential as knowledge, values, demonstrated performance, motivation and aspiration, adaptability, learning orientation, personality and cognitive ability. Northouse (2018) argues that the definitions of leadership capability (i.e. the combination of talent and potential) are wide and non-specific. Clients may use blanket terms for concepts and capabilities, which may imply various elements. For example, “good communication skills” is often identified by senior management as an important competency (Hopkins, O’Neil, & Stoller, 2015). However, “good communication” may refer to emotional intelligence, interpersonal skills through to effective conflict management or effective teamwork (Rider & Keefer, 2006). For an organization to successfully deliver a TDC process, it must be very clear on its definition of leadership potential and seek to identify, map and develop leaders according to a clearly defined model.

A second challenge relates to identification of sub components of leadership dimensions. It is well established that leadership contains a multitude of behaviours, traits, values and approaches, and within these elements there are widely defined sub dimensions (Church & Silzer, 2014; Marshall-Mies et al., 2000; Mueller, Goncalo, & Kamdar, 2011). When conducting a TDC, one must be very clear on these sub elements, and work from a model that is broad enough to render multi-method assessment possible, but at the same time well-defined to provide for constructive, focused developmental feedback to the participant. In our exposures, leadership capability and predictive potential resides broadly in competence, ability, experience and values, with a wide variety of sub elements tied into these domains.

<p>COMPETENCE</p> <p>(Example Sub-dimensions)</p> <p>Strategic visioning</p> <p>Developing talent</p> <p>Results driven</p> <p>Managing change</p>	<p>EXPERIENCE</p> <p>(Example Sub-dimensions)</p> <p>Leader Accomplishments</p> <p>Relating to others</p> <p>Career progress</p> <p>Crises Leadership</p>
<p>ABILITY</p> <p>(Example Sub-dimensions)</p> <p>Verbal reasoning</p> <p>Numerical reasoning</p> <p>Abstract orientation</p> <p>Problem solving</p>	<p>VALUES</p> <p>(Example Sub-dimensions)</p> <p>Care</p> <p>Ownership</p> <p>Innovation</p> <p>Drive for excellence</p>

Fig. 1 Simplistic example of a capability matrix

This architecture provides a framework only, with the leadership model of the organization, the key experiences and upward mobility transitions required for a role of higher complexity within that organization, the ability to navigate and manage complexity and ambiguity and the organizational values as a charter to which various sub elements can be attributed to. At the onset of a TDC, great time is spent with an organization to understand its leadership approach and in turn populate a meaningful capability matrix against which mapping can be undertaken, both at the individual and group (comparative analytics) level. Figure 1 presents an example of a simplistic capability matrix centred around the assessment of leader competence, -experience, -ability and -values.

Principle 3: Deploy various methods of data gathering

Once the capability matrix is in place, appropriate assessment methods need to be selected or developed in order to accurately measure the sought behaviour. In application, a TDC requires the deployment of a multi-method approach in assimilating information on a candidate. This includes psychometrics, simulations, interviewing and post TDC developmental activities. These are briefly explored below.

Psychometrics

In selecting a psychometric battery for a TDC, the first principles of the process must be well-considered. There are a great deal of psychometric distributors (often referred to as test providers) operating globally, with products varying in scientific rigor, applicability, assessment domains and administration methods. Kline (2014) remarks that there is a real need for contemporary psychometrics to move beyond the social sciences towards a positioning within the empirical sciences, ensuring herewith that reliable decisions can be made based on the data these tools render. In this regard, significant progress has been made, with mathematical and statistical techniques applied to the leading instruments, enhancing cognitive, behavioural and emotive predictive insights (Cipresso & Immekus, 2017). In selecting a psychometric battery for a TDC, a number of key considerations are at play. Firstly, it must be clear what the instrument seeks to measure, and one must be able to directly relate this to the capability matrix against which the candidate is measured. For example, it is not sufficient to assess generic personality in a TDC, as the question relates to leadership. A balanced battery of leadership style, work-role orientation, potential leadership risks (often referred to as “derailers”) and strengths-based capability is therefore needed. When assessing for cognitive capacity, the domains of critical reasoning required of the leader must be considered. Secondly, the battery must be appropriate to the specific organizational level. Ensure that established norm groups are in place pertaining to regional application, job level and demographics. Thirdly, ensure the method of application is user-friendly, can be administered fairly and consistently and safeguards the dignity of the candidate. Curtis (2017) comments that psychometrics provides a meaningful tool for coaching, career counselling and leadership program preparation. To enable this, psychometric batteries must be administered in a method that promotes the leader’s experience of the overall process.

Simulations

A great deal of effort goes into the design and roll out of fit for purpose simulations in a TDC. The word “simulations” is used here to reflect the real-life application of the various case studies, exercises and immersive experiences produced (Herd, Alagaraja, & Cumberland, 2016). Where often traditional assessment centres have made use of generic exercises to map behaviours, successful contemporary TDC’s seek to establish true and reflective leadership experiences that prospective candidates will likely encounter at the next level of leadership complexity (Guenole et al., 2015; Volz-Peacock, Carson, & Marquardt, 2016). Simulations should be developed against the core challenges as mentioned in Principle 1, and the effect validated on a smaller scale before large scale deployment (Denscombe, 2014; van Zyl, Efenic, Rothmann, & Shankland, in press). For fairness in application, simulations are generally conducted on three levels: The individual level, which provides one-on-one interactions, problem solving, presentation and conversations; small group level, where a group of leaders are divided into sub units within which they must work together to attain a particular performance outcome, and large group level, where leaders must negotiate and collaborate toward outcomes in a larger team, applying

influence and persuasion. This modality ensures different leader personalities have opportunity to express their strengths in different settings.

For enhanced accuracy, reliability and validity, a multi-rater system is used, where experienced and trained professionals in Organizational Behaviour (for example Work and Organizational Psychologists) have the opportunity to map outcomes and demonstrated behaviours as well as debate each other based on clearly defined criterion, evidence and a well-defined capability matrix (Thornton et al., 2017). This also provides rich and multi-perspective feedback to the participants on a TDC, with reflection and input from various professional angles. With the availability of technology, simulations and the experience associated with it can greatly be enhanced, driving real time leader engagements, leveraging virtual teams and supporting global reach.

Interviewing

A comprehensive TDC provides a candidate with an opportunity to demonstrate key experiences in an individual setting. In succession planning within organizations, the health of a leadership pipeline is defined by readiness and capacity within talent pools to move into roles of higher complexity (Hess, Barss, & Stoller, 2014; Sharma & Sengupta, 2018). To this end, a structured career interview based on a well-defined pipeline methodology is a greatly useful tool. During interviewing, the emphasis is not on technical proficiency, or actual quantity of experience in number of years, but rather on demonstrable evidence on the part of the individual that he/she was able to successfully negotiate leadership challenges at different transitional career periods. The principles of competency- or behaviour-based interviewing must be adhered to here, to ensure the solicited information is credible and evidence driven (Peregrin, 2014; Potgieter & Van der Merwe, 2002). This includes a thorough analysis of the dimensional elements required for transition to a role of higher complexity, clear behavioural classification and segmentation, rating scale consistency and mitigating for potential rater bias. The interview must also be conducted with a clear reference to the organization involved, to inform key experiences required from leaders at particular levels.

Principle 4: Construct a process and not an event

Deloitte (2018) delineate the movement towards career experiences as a key part of the transformative learning journey in the new world of work. Day et al. (2014) confirm this, explaining that leadership development in a dynamic, changing and fast paced working environment must be proactively positioned, anticipatory of future challenges and solution-orientated. A TDC is designed to be a comprehensive learning experience, narrating leadership challenges from various perspectives and providing the individual participant with an opportunity to contemplate deeply about core learning themes; which are then reflected upon during different stages of the learning journey. To achieve this, a comprehensive process flow is required, with include a proper pre-TDC orientation, socialization and positioning effort (both on behalf of the organization and the partner delivering the TDC); an integrated TDC experience

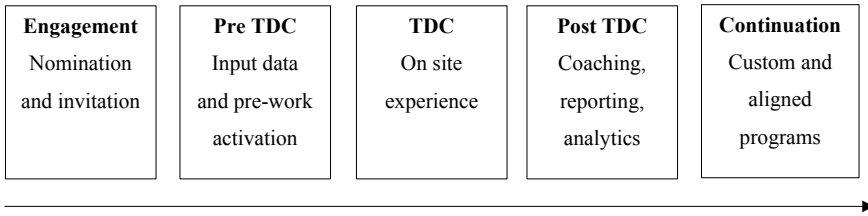


Fig. 2 An example of a TDC process

supported by on-site learning, technology support and activation of learning activity; as well as an interactive post-TDC process, re-emphasising learning themes and driving individualized developmental needs, through such interventions as coaching, fit-for-purpose learning assignments, training interventions and real-time feedback (see Fig. 2). Built on the pillar of thorough reporting, a blueprint is constructed, based on individualized needs and considering the future aspirations of the leader. This matures the traditional assessment centre, which is largely driven as a single source event with a purpose of gathering data, to an integrated, comprehensive and immersive leadership development experience.

Coupled with a process orientated view of implementing a TDC, a clear and transparent communication and reporting strategy needs to be developed, negotiated with all stakeholders and implemented. Clarifying expectations around the delegate relationship between confidentiality, conflict of interest and benevolence needs to occur at the onset of the process. Each stakeholder needs to be made aware of what information will be shared, to whom and for which purpose. A TDC process’ reporting strategy needs to embrace the principles of clarity and transparency and positive ethics in order to effectively navigate the dynamic relationship between the stakeholders.

In its design, the TDC comprises two layers of data: an Individual- and Group layer (see Fig. 3.). Data obtained on the individual level is used to assess leader capability and to construct a specified Leader Map and tailored personal development plan. All the data obtained during the course of the intervention is shared with the leader. All individual level data is aggregated to group level in order to map overall organisational leadership capability and to aid in succession management practices. Group level data is used for benchmarking, understanding and predicting talent trends and to ensure that the organisation is able to respond to dynamic cross-functional talent related needs. Raw data should *never* be shared with any party outside of the intervention team.

Principle 5: Lead a data driven approach

The significant maturation of strategic Talent Management in particularly large, global organizations has rendered a data-driven people analytics approach as a key pre-requisite in the Succession Planning function (Newhall, 2015; Rothwell, Jackson, Ressler, Jones, & Brower, 2015). With this view in mind, TDC’s are developed

TDC Data	Group level	Overall capability mapping	Readiness	Dimensional reporting	Talent GRID positioning	Group Comparative data
	Individual level	Individual dashboards	Psychometric Reporting	Leader Mapping	Individual Development Plans	Action Item Tracker

Fig. 3 An example of a TDC reporting process

and constructed specifically for the purpose of Talent Review Communities in organizations. These communities are succession planning projects conducted with the view of identifying and mapping talent for key positions, supporting business continuity in deploying, rotating and promoting talent into core positions and strategic roles, allocating investment into the right candidates and the right developmental interventions (both at individual level and group wide) and countering talent attrition by methodically managing the business’s talent pools and pipelines (Morrison, 2015; Schepker, Nyberg, Ulrich, & Wright, 2018).

The robust data generated through a TDC enables several outcomes:

- It provides procedural intent in the talent review conversations led at executive and senior managerial level in the business.
- It provides a data-driven approach to identify future leaders, earmark candidates for critical roles, assign special assignments and conduct talent requirements for key business functions.
- It provides a validated audit of the organization’s leadership pools at different levels, identifying key areas of focus for attraction, retention and promotion of talent.
- It supports business continuity by actively maturing an agile and responsive leadership force within the organization through tailored and data-informed developmental intervention.
- It accelerates the readiness of high potential talent through allocating developmental investment in the right areas, individuals and communities.
- It reduces business disruption and counters vulnerability in the market by promoting individuals who are ably equipped to negotiate challenges at the next level of leadership complexity.
- It aids in understanding current talent trends within the organisation and aids in predicting potential danger-zones, and highlights blind-spots.

Whereas talent analytics have increasingly become prevalent in the succession planning efforts of large organizations, few assessment centre providers have or are willing to evaluate their assessment methodologies to ensure that it is structurally valid, and reliable as well as predictively fair within the given context. As both an assessment methodology and a development framework, a TDC needs to comply

with the same scientifically sound standards as any psychometric assessment tool.¹ First, the *factorial validity* of the assessment components of the TDC needs to be established. This could be done through employing a confirmatory factor analytic approach, coupled with a competing measurement modelling strategy (c.f. Gefen, Straub, & Boudreau, 2000). *Second*, the internal consistency and temporal stability of the instrument needs to be established at both the lower- and upper bound limit (Cronbach alphas, as well as rho, phi or composite reliabilities) (c.f. Straub, Boudreau, & Gefen, 2004). *Third*, *measurement invariance* should be investigated to ensure that the instrument measures the leadership capability components fairly across groups (c.f. Van de Schoot, Lugtig, & Hox, 2012). If invariance is established, latent mean differences need to be systematically compared. *Fourth*, *concurrent validity* of the TDC need to be methodically evaluated (c.f. Raykov & Marcoulides, 2011). The predictive capability of the various competencies, experience domains, ability factors and value orientations being measured needs to be associated with objective performance related organisational data. The TDC's assessment framework and effectiveness needs to be actively monitored throughout the process.

Consistent with the data driven approach of a TDC, effort is required in leading accurate and aligned competency-based assessment amongst raters/facilitators in a TDC. Behavioural observation and -ratings are core functions of the TDC process. Multiple skilled observers are required to ensure that competency-based assessments are credible, transferable and reliable. Suffice to say, the success of a TDC rests strongly on the competence and professional experience of its facilitators. Although there is a high correlation between the professional experience/training and the accuracy of ratings, research shows that discrepancies in behavioural observation assessments may occur even between the most seasoned professionals (Ahmed, Miskovic, Darzi, Athanasiou, & Hanna, 2011); through such factors as differences in interpretation, misalignment in contextual understanding of competencies, and different interpretations to the extent of which certain exercises reflect observable behaviour required in the defined capability matrix. As such, concerted efforts and structured attempts need to be made in order to improve the accuracy of individual ratings (inter-rater reliability²) and between rater consistency (inter-rater agreement³) through the standardization of assessment measures, procedures, rater training, and comprehensive on-boarding.

Several evidence-based practices adapted from Gwet (2014) can be implemented to enhance IRR and IRA:

1. Clarify expectations with facilitators beforehand. Provide a through overview of the process, what it entails, the theoretical models on which the TDC is built and what is expected of facilitators.

¹A full comprehensive discussion of each metric is beyond the scope of this article. Practice friendly guidelines will be referenced and should be consulted.

²IRR is defined as the extent towards which a single rater can consistently distinguish different items on an assessment scale.

³IRA measures the extent to which the same value for each observed assessment item is being reported by different raters.

2. Provide thorough training on all assessment metrics, simulation activities, and competency frameworks.
3. Validate and standardise assessment tools in order to ensure that the theoretical behaviours, competencies, values or attitudes that are associated with such, are indeed solicited.
4. Ensure that all raters share the same definition of each competency being assessed and that behavioural indicators are clearly defined.
5. Facilitators need to understand the connection of each metric to the overall leadership capability matrix.
6. Implement “dry-runs” and evaluate rater capability.
7. Set standard operation procedures for each activity.
8. Build in rater evaluation and tracking metrics to review at different intervals of the TDC process.
9. Provide meaningful feedback to raters and facilitate open discussions about the process.
10. Perform agreement testing with the Kappa Index and Inter Class Correlations (c.f. Shweta, Bajpai, & Chaturvedi, 2015)
11. Provide resources to support the implementation of the TDC and ensure that enough time is scheduled for (in between) assessment activities
12. Simplify assessment forms or rating tools and ensure that such is used consistently, in the same manner, by all raters.
13. Host debriefing sessions after each TDC to discuss the learnings from the process and to address any questions which may occur.
14. Consider rater fatigue when scheduling TDCs

Principle 6: Follow a developmental, strength-based approach

An indispensable component of a well-constructed TDC is its developmental, strength-based orientation. It is this approach that positions the TDC as a positive organisational intervention and which leverages its attributes as a meaningful, endearing and exponential learning experience on the part of the leader. Too often, historic assessment practices have been punitive in its nature; with several non-best-practices leading to participants being left with a high sense of dissatisfaction, discomfort and even animosity for the process. This includes, but is not limited to such practices as participants receiving little or no orientation as to the reason for the assessment being conducted, feedback not taking place, the results of the process not being shared with participants, results not being properly managed, safeguarded and dispersed to the appropriate audience, non-contextual decisions being made that hold far-reaching consequences for participants’ career development (often with results that are utilised for purposes it was not intended for), and assessors not being ably qualified to work with the complex instruments of assessment they have at their disposal.

For an assessment exercise to be successful, the participant must be viewed and valued as the primary stakeholder whose interests must be protected and promoted through the process (Kaufman, 2018; Lefkowitz, 2017; Smith et al., 2016). A TDC

is positioned for what it is intended for; a robust and deeply individualized learning experience for the leader.

To enhance the developmental orientation of the process, a few practical guidelines exist:

- *Orientate the process clearly*: Participants must know exactly what the purpose is of the TDC, the intended outcomes thereof and how the information outcomes will be managed within the organisation.
- *Acknowledge the leader's progress*: A TDC, by design, is a succession planning tool. When a participant is therefore invited to partake in the process, it serves as a clear indication that the organisation acknowledges the intent of understanding more fundamentally the strengths and development areas of that individual. It indicates that the organisation is invested in the individual and considers the possibility of upward mobility, even if it does not commit to such immediately. By recognising that a leader is nominated to a TDC, one allows for such acknowledgement and much of the negative early trepidations of the leader can be mitigated.
- *Build a comprehensive developmental plan*: This does not only refer to one of the actual end results of a TDC, which often is an Integrated Report as well as Individualised Plan, but to a systematic inclusion of key developmental action at various stages of the TDC process.
- *Clear links between developmental tasks and assessed competencies* needs to be established. The leader should be able to see a clear link between developmental tasks and the enhancement of an associated capability.
- *Build a positive relationship with the leader*: Personal development is a process and is dependent a positive relationship between all stakeholders. Its important to establish rapport with the leader and to ensure that a positive relationship develops where he/she is encouraged, empowered and supported throughout the process.

Mackie (2014) comments that leadership development is a “full range” process. This has very focused application in the broad life cycle of a TDC. Firstly, during the pre-TDC process, the participant must be briefed thoroughly on the intent of the intervention. A coherent and positive message must be positioned—both from the side of the organisation and on the part of the partner organisation coordinating the TDC. Ensure that the psychometric suite selected allows for sufficient developmental instruments to be deployed and ensure accessibility of the information gathered during this process. Through leveraging technology, the candidate can also be supported in the on-boarding effort of the TDC; for example through engaging in developmental activities on a mobile enabled platform, relaying key information on career experiences, preferences and planning and being able to raise questions and enquiries on the TDC process.

Secondly, during the TDC process itself, ensure that simulations, case studies and exercises allow for developmental reflection, constructive debate and peer-learning. In contemporary leadership development, real-time feedback is critical and peers can relate their experiences to facilitate powerful conversations (Houghton & DeLiello, 2010). A TDC must therefore deliberately allow for feedback, key learning must be consolidated and the conclusion of exercises must be met with a summary of critical

learning and leadership lessons. Further, the applicability of these lessons for roles of higher complexity must be explored to further support the accelerated readiness development approach of a TDC. Through applying simulations in individual, small group and larger group contexts, learning and feedback can be clustered and a holistic learning experience ensured.

Thirdly, the post-TDC process must be delivered with continuity in development. Several practical considerations arise. Coaching (in individual and/or group context) after the TDC process provides a powerful opportunity to unpack the reporting that is generated from the TDC, and allows the leader opportunity to give input and finalise a clear developmental action plan. Structured developmental interventions, informed directly by the analytics of the TDC, ensure focused learning investment which will produce greater returns. For example, through group trend analytics, the TDC may identify Change Leadership as a priority developmental area for a specific cohort of candidates. Interventions based on formal learning (courses), practical assignments (exposure) and critical experiences can now be selected from the appropriate sources, tailored and applied from a well-informed, needs-driven and data supported perspective. Technology can also greatly support post TDC developmental activities, availing self-insight surveys, gamified learning activities, learning knowledge resources and a wide variety of content that can be pushed to the participant in real-time on a needs basis.

A second and compelling part of the developmental nature of a TDC is its strength-based approach. Welch, Groissant, Reid and Walker (2014) narrate that a strength-based leadership developmental model exponentially develops leader capacities as it leverages existing capitals within the leader. This view is shared by Stander, Mostert, & de Beer (2014); who established strength based developmental approaches in organisations to support engagement and productivity. In a TDC, a strength-based approach is utilised to assist the leader in accelerating his/her potential and capability to effectively negotiate challenges; by enhancing and supporting individualised strength areas. Much support exists in the literature of the advantages of a strength-based approach in leadership development. Whilst the strength-based approach does not dispute the need to focus on key developmental areas in a balanced framework, research has proven that the leveraging of strengths can greatly support closing of gaps in a shorter turnaround time through accentuating a leader's potentialities (Bakker & Demerouti, 2017; van Zyl, Van Der Vaart, & Stemmet, 2017). In a TDC, a great deal of effort is undertaken to understand the strength areas of the individual leader, from a practical perspective as learned from observable behaviours, through the insights from psychometrics pertaining to such elements as leadership drivers, preferences and orientations, to signature strengths that differentiates a leader from peers. By emphasising the strength areas of the leader, a unique leadership brand and value proposition can also be clarified—allowing the leader self-expression and meaningful development that is to the benefit of the organisation and rewarding to the individual (van Zyl & Stander, 2013).

Principle 7: Leverage the reach of technology

Technology in a TDC has two broad applications: In the enhancement, integration and consolidation of the experience; and in data reporting, storing and analytics. Within an expansive and rapidly evolving global work context, technology has put to the fore opportunity for express learning accessibility, real-time feedback, entrée to globalised knowledge, virtual community and hyper interconnectivity (Lanvin & Evins, 2016; Mayfield, Mayfield, & Wheeler, 2016). A TDC seeks to utilise technology as a central supporting mechanism for the process. In terms of experience integration, a platform is deployed in a full TDC process, operating in a smartphone enabled mobile application (“app”). This platform serves as a communication, scheduling and logistics tool, reporting library, information dashboard, activity hub, resource storage instrument and virtual communication platform. By deploying several technologies, such activities as virtual coaching, feedback sessions and capability building modules (for example through webinar format) can be made available through the platform. By introducing this, the TDC continuity is greatly enhanced and the TDC is further entrenched as a process driven intervention designed for the principles of blended learning; which in modern Leadership Development makes use of integrated and focused technologies (Hilliard, 2015).

Relating the second use of technology within TDC is the integration of data and talent analytics flowing from the process. Consistent with the narrative of Schepker et al. (2018), methodical and data driven approaches are increasingly becoming apparent in Succession Planning and Talent Management, to position for Strategic Human Resource and Leadership Development. This is perhaps best summarised by Rasmussen and Ulrich (2015; p. 236): “A shift towards an “outside-in” approach with a focus on actionable, high-impact analytics is needed. This development is accelerated by technology, which is rapidly consolidating the analytics landscape. This shift enables HR analytics to be taken out of HR and become part of existing end-to-end business analytics, where human resources is just one element in the value chains analysed.”

For a TDC to present optimum data analytics for key strategic decision making, customised Talent Analytics software and technologies must be used, the design of which reflect the organisation’s unique leadership model, key imperatives, roles and positions, and most importantly, serves as platform to lead robust conversations in supporting business continuity and meeting performance objectives. It is realised that customisation can also not occur in isolation, and that data platform software must be assimilated to the organisation’s existing HRIS frameworks, performance management systems and general HR technologies. This enables the transition from technology being used as a transactional reporting interface towards being a data-driven decision-making mechanism (Marler & Boudreau, 2017).

5 Conclusion

The TDC is, by the nature of its design, a process of many moving parts. A high level of expertise, analysis, design, technology integration and project management is required to successfully deliver a TDC. This should however not detract practitioners to make use of the instrument within organisations. When executed along the principles outlined above, the TDC provides a compelling positive organisational and leadership development intervention, in the process delivering vast, integrative data for the purpose of succession planning and herewith enabling strategic decision making for the purpose of business continuity.

From a research perspective, much can still be done to understand how a TDC must be implemented within a broader Business Planning function, how the approach can integrate different components and how the selection and application of such components must be conducted. Closer collaboration between scholars and practitioners will be required here—a TDC, although supported and entrenched in a clear scientific, data-driven approach, remains a practical Leadership Development and Analytics intervention. The results it produces must thus be workable, integrated and practically presented in a manner that supports the mandate of the organisational leadership; which is to drive their business forward and reach performance goals. The organisation remains the key stakeholder, and the scientific approach of a TDC cannot be divorced from the organisation's strategic objectives. Rather, synergies must be created.

Into the future, TDC's can play a truly significant part as a total growth engine for organisational talent and leadership, accelerating growth whilst supporting data-driven decision making, analysis and succession planning. With the advancement of technology, the rapid expansion of learning tools, the interconnectivity in the global economy and the rapid acceleration of best practice in both tools and expertise, a TDC is well positioned as a Positive Organisational Intervention for sustainable successful application. With research and practice further developing the approach, it can continue and enhance its responsiveness to the major drivers in the new world of work.

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A Cultural Lens Approach to Promoting Work as a Calling



Bryan J. Dik, Brian A. Canning and Dylan R. Marsh

Abstract Within the last decade, research on work as a calling—usually defined as an internal or external summons toward purposeful work that contributes to the common good—has exponentially increased. In recent years, it also has become a global phenomenon, with scholars from more than 20 countries now represented in the literature. Research has demonstrated that a sense of calling is associated with meaning and satisfaction in one’s career, work and life, and that individuals who feel they are living a calling are often among the happiest, most committed, and most engaged employees within their organizations. While efforts have been made to articulate practice recommendations, those recommendations currently extend far beyond the empirical base. Indeed, research on interventions intended to foster a sense of calling, especially research that is sensitive to diverse cultural influences, remains a substantial need. The Cultural Lens Approach (Hardin, Robitschek, Flores, Navarro & Ashton, in *American Psychologist* 69(7):656–668, 2014) offers a systematic strategy for evaluating the ways that culture influences the interpretation, operationalization, and application of calling in assisting individuals (via counseling, coaching, or managing) who desire greater meaning from their work. This chapter applies the Cultural Lens Approach to assist researchers and practitioners in designing and investigating interventions intended to cultivate a sense of calling informed by relevant cultural assumptions within and across diverse contexts.

Keywords Calling · Cultural lens approach · Career development · Career interventions

1 Introduction

Research on work as a calling—frequently regarded as a transcendent summons toward purposeful work that contributes to the common good—is among the fastest growing new areas of inquiry within positive psychology, expanding from dozens

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to hundreds of published papers in less than a decade (Duffy, Dik, Douglass, England, & Velez, 2018). As the body of research on calling has grown, it has also become increasingly international in scope, with scholars from more than 20 countries now represented in the literature. As we review below, this research has shown that a sense of calling is associated with numerous well-being benefits, both career-related and global, for most people (e.g., Dik, Shimizu, Reed, Marsh & Morse, in press). However, research on interventions intended to foster or promote a sense of calling remains a substantial need, and practice recommendations published to date have not yet articulated more than surface-level suggestions for how practitioners might address diverse cultural influences within these interventions. In response, this chapter initiates exploration of how cultural differences may impact the manner in which calling is understood and experienced and how these cultural differences might influence calling interventions. We propose the use of the systematic strategy articulated in the Cultural Lens Approach (CLA; Hardin, Robitschek, Flores, Navarro, & Ashton, 2014) toward this endeavor. More specifically, we use CLA to inform recommendations for how researchers and practitioners might design and test interventions to promote a sense of calling across diverse cultural contexts, with particular emphasis on the populations of China and India.

2 Research on Work as a Calling

The literature on work as a calling is now voluminous. The following summary focuses on quantitative (mainly correlational) research that builds on conceptual treatments of the construct, culminating in an overview of the newly-proposed Work as Calling Theory (WCT).

Prevalence and Definitions. Although efforts to investigate calling empirically are relatively recent, the notion that any honest area of work can be pursued as a calling has deep historical roots (see Hardy, 1990). In the current milieu, a sense of calling is perhaps surprisingly prevalent. For example, 43% of working adults in a stratified, national US sample indicated that the statement “I have a calling to a particular kind of work” was mostly (21%) or totally (22%) true of them (White, 2018). Prevalence rates have not been established in other national contexts, but extant evidence reveals that across cultures, the similarities in how calling is conceptualized and functions are more striking than the differences—although subtle differences do emerge, as we review below (e.g., Autin, Allan, Palaniappan, & Duffy, 2017; Dik, Eldridge, Steger, & Duffy, 2012; Domene, 2012; Dumulescu, Opre, & Ramona, 2015; Hagmaier & Abele, 2012; Kim, Praskova, & Lee, 2017; Praskova, Creed, & Hood, 2015; Zhang, Dik, Wei, & Zhang, 2015).

Even so, a consensus definition of the construct remains elusive among scholars. Dik and Shimizu (2019) reviewed the most frequently cited definitions of calling in the literature, placing them along a spectrum ranging from *Neoclassical* to *Modern*. Typically, definitions near the Modern end of this continuum frame calling as an orientation toward work driven by personal fulfillment, passion, and meaning-

fulness. A notable example is Dobrow and Tosti-Kharas' (2011) definition, which presents calling as "a consuming, meaningful passion people experience toward a domain" (p. 1005). At the spectrum's other end, Neoclassical understandings of calling also incorporate elements of purposeful and meaningful work, but maintain key Western historical connotations of calling, such as the motivation to serve others or contribute to the common good, and the notion that a "transcendent summons" serves as a source of one's calling. Dik and Duffy's (2009) characterization of calling (which we examine through a Cultural Lens Approach in this chapter) contains these components, describing the construct as "a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation" (p. 427). Other definitions take a middle-of-the-road approach, with purposeful work representing the most frequently shared element. Despite these differences, research has demonstrated that these diverse expressions of a sense of calling differ as a matter of degree rather than kind (Shimizu, Dik, & Conner, in press).

Correlational Research. Research using various measures of perceiving a calling, reflecting the distinct but overlapping conceptualizations described above, consistently finds that calling is linked to a variety of positive work and well-being outcomes (e.g., Duffy & Dik, 2013). For example, research in North America has found a sense of calling to correlate positively with vocational self-clarity and career decidedness (e.g., Duffy & Sedlacek, 2007), as well as occupational self-efficacy (people's beliefs that they can handle job-related tasks; e.g., Domene, 2012). Within German samples, calling has been connected to a variety of career development criterion variables as well, including career engagement, vocational identity, career commitment, and vocational self-efficacy (e.g., Hagmaier & Abele, 2012; Hirschi & Herrmann, 2013). Among an Australian sample of emerging adults, Praskova Creed, and Hood (2015) found a negative correlation between presence of calling and career indecision. Calling's positive relationship with career decidedness has also been found in studies of Chinese college students (Zhang, Herrmann, Hirschi, Wei, & Zhang, 2015).

Calling's positive relationships with work meaningfulness, work engagement, and job satisfaction have been demonstrated across the cultures studied to date, as well. In US samples, calling is consistently linked with both work meaningfulness (e.g., Steger, Dik, & Duffy, 2012) and work engagement (e.g., Dobrow & Tosti-Kharas, 2011). These results have been corroborated by similar findings in German (Hirschi, 2012) and Nigerian (Ugwu & Onyishi, 2018) samples. US samples have also demonstrated significant relationships between calling and job satisfaction in numerous studies (e.g., Duffy, Allan, & Dik, 2011; Duffy, Bott, Allan, Torrey, & Dik, 2012; Duffy, Dik, & Steger, 2011; Neubert & Halbesleben, 2015; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). The calling-job satisfaction link has also been found in German (Hagmaier & Abele, 2012) and Korean (Lee, 2016) samples.

Two components of global well-being that are consistently correlated with calling are life meaning and life satisfaction. Significant positive relationships have been found between calling and life meaning across a variety of populations, including

samples from the US (e.g., Dik et al., 2012; Steger, Pickering, Shin, & Dik, 2010), China (Zhang, Herrmann, et al., 2015), Nigeria (Ugwu & Onyishi, 2018), and India (Douglass, Duffy, & Autin, 2016). Similarly, the relationship between calling and life satisfaction has been found in US (e.g., Dik et al., 2012; Steger et al., 2010), Korean (Kim et al., 2017), Australian (Praskova et al., 2015), and Indian (Douglass et al., 2016) samples. While these relationships have been found across a diverse array of cultures, unique cultural factors may contribute to subtle differences in the strength or nature of these relationships. For example, in their comparison of Indian and US samples, Douglass et al. (2016) found that although individuals within an Indian population endorsed calling at higher rates than their US counterparts, the effect that calling had on both life meaning and life satisfaction was weaker, though still significant.

The evidence linking having and living a calling to positive outcomes has been remarkably consistent in nearly every sample studied thus far. Yet it is important to note that in some circumstances a sense of calling may also be related to negative outcomes, such as workaholism (Berkelaar & Buzzanell, 2014; Clinton, Conway & Sturges, 2017; Dik & Duffy, 2012; Duffy, Douglass & Autin, 2015; Keller, Spurk, Baumeler & Hirshi, 2016) or burnout (Cardador & Caza, 2012; Duffy et al., 2015; Hagmaier, Volmer, & Spurk, 2013). Indeed, the same qualities that make work meaningful—its significance and prosocial impact—can theoretically form a basis for rationalizing unhealthy over-investment in the work. Another potentially negative consequence is exploitation on the part of unscrupulous employers (Bunderson & Thompson, 2009; Berkelaar & Buzzanell 2014; Dik & Duffy, 2012; Schabram & Maitlis, 2016). This may occur when highly intrinsically motivated employees (such as those with callings) are passed over for pay raises that instead go to co-workers with more extrinsic motives, or when employees with callings are assigned unpleasant tasks because of their tendency to do the work without complaint. The dynamics that govern when a generally positive approach to work can become detrimental are not well-understood and remain an important area of inquiry for future research (Duffy & Dik, 2013).

Mechanisms. Early studies established positive correlations between a sense of calling and both career-related and general well-being variables. More recent research has examined mechanisms that help explain those relationships. For example, Domene (2012) found that perceiving a calling's relationship to career outcome expectations (i.e., the extent to which one anticipates positive outcomes in one's career path) was mediated by vocational self-efficacy. Several studies have also examined links in the chain from calling to job satisfaction. Duffy, Dik et al. (2011) found career commitment to mediate the relationship between perceiving a calling and job satisfaction. Another study replicated the mediating role of career commitment, while also revealing that work meaning also mediates the relation between having a calling and job satisfaction (Duffy, Allan, & Bott, 2012). Relatedly, Cardador, Dane, and Pratt (2011) identified the mediating role of organizational instrumentality (i.e., the extent to which individuals perceive their organization as playing an important role in helping them reach their professional goals) in linking perceiving a calling and organizational attachment (i.e., the degree to which individuals personally

identify with and intend to remain committed to their present organization). Among undergraduate students in the US, Duffy, Allan et al. (2011) demonstrated that, taken together, work hope and career decision self-efficacy fully mediated the relationship between perceiving a calling and academic satisfaction.

Mediating variables have also been identified when life satisfaction is the criterion variable. For example, in an undergraduate sample, life meaning and academic satisfaction fully mediated the association between perceiving a calling and life satisfaction (Duffy, Allan, et al., 2012). Meaning in life has also been found to mediate this relation (Steger et al., 2010). Similarly, using a sample of German employed adults, Hagmaier and Abele (2015) found that calling was associated with life satisfaction through self-congruence and engagement orientation. Yet arguably the most important mediating variable between perceiving a calling and various criterion variables is *living a calling*, or the extent to which people are currently enacting their sense of calling within their career (Duffy & Autin, 2013). Numerous studies have demonstrated full mediation for living a calling, such that the extent to which individuals perceive a calling is only related to relevant outcomes when that calling is actualized in one's life currently (e.g., Duffy, Allan, Autin, & Bott, 2013; Duffy & Autin, 2013; Duffy, Allan, et al., 2012).

Recently, longitudinal studies have investigated causal mechanisms connecting calling to other constructs. For example, using German samples, Hirschi and Herrmann (2012, 2013) have found presence of calling to significantly predict several career development outcomes up to a year later. Similarly, Dobrow and Tosti-Kharas (2011) found calling to predict vocational self-efficacy, domain satisfaction, and vocational identity clarity both 3.5 and 7 years later among a sample of musicians in the United States. Other longitudinal studies have illuminated the potential for mutual causation between calling and the work and well-being outcomes associated with it. Using a US sample, Duffy et al.'s (2014) findings suggest that living a calling may be better positioned as an outcome of previous ratings of career commitment, job satisfaction, work meaningfulness. Findings such as these demonstrate the importance of longitudinal research to establish causal pathways related to calling.

Interventions. Given the growing literature linking calling to a variety of work-related and general well-being outcomes, an obvious question is how practitioners can help people foster a sense of calling and experience relevant well-being outcomes. Much of the extant literature on interventions consists of recommendations that have not yet been tested in research. Many of these articles (e.g., Adams, 2012; Dik & Duffy, 2015) have urged incorporating calling as a compliment to existing career intervention strategies, rather than as the basis of a competing strategy. A few studies have tested calling-infused interventions with modest success (e.g., Dik & Steger, 2008; Dik, Scholijegedes, Ahn, & Shim, 2015; Harzer & Ruch, 2016), but this remains an area that has been sparsely investigated.

Theory. Social science research on calling has followed an inductive rather than deductive trajectory, beginning with conceptual papers and scale development (e.g., Dik et al., 2012; Dobrow & Tosti-Kharas, 2011; Hagmaier & Abele, 2012; Praskova et al., 2015) and proceeding with mainly correlational studies that examined a how a sense of calling links to other variables, without an overarching theory to guide

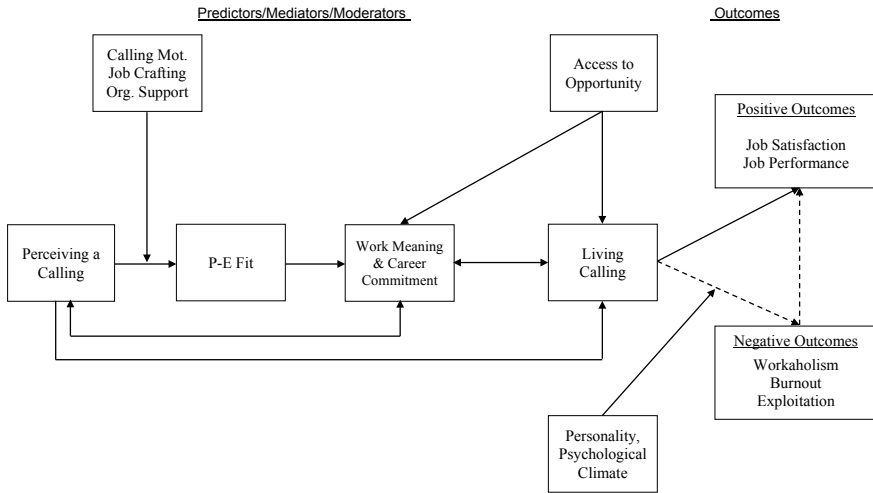


Fig. 1 Work as a calling theory (WCT). *Note* dashed lines indicate proposed negative associations for select individuals. Originally presented in Duffy et al. (2018)

this research. In response, Duffy et al. (2018) developed the Work as a Calling Theory (WCT; see Fig. 1) to bring an organizational structure to extant research while proposing additional relationships to test.

Work as a Calling Theory frames perceiving a calling as the predictor variable and proposes that its relations to positive outcomes (job satisfaction and job performance) are mediated by living a calling. This association between perceiving and living a calling is itself mediated by meaningful work and career commitment, which are predicted directly by perceiving a calling and indirectly through person-environment fit. The link between perceiving a calling and person-environment fit is hypothesized to be moderated by motivation to express a calling, job crafting behaviors, and support provided by one’s organization. Also, work meaning, career commitment, and living a calling are all proposed to be influenced by access to opportunity. WCT proposes that living a calling predicts positive outcomes directly, but also that in some circumstances people may experience negative outcomes (e.g., workaholism, burnout, exploitation), the so-called dark side of calling (e.g., Berkelaar & Buzzanell, 2014; Bunderson & Thompson, 2009; Cardador & Caza, 2012; Dik & Duffy, 2012). The possible tipping point in which a sense of calling leads to negative rather than positive effects is poorly understood and represents an important avenue for future research to pursue (Duffy et al., 2018).

The WCT is the first formal theory to explain how perceiving a calling and living a calling link to outcomes, and offers numerous additional testable hypotheses. However, the theory does not address how a calling is discerned by people who experience one; furthermore, cultural and other contextual factors are only indirectly incorporated in WCT. Therefore, clarifying the role of such influences is needed, and is a focus of the following section.

3 Cultural Lens Approach

Western voices, particularly from the US, are overwhelmingly represented in psychological research literature; one study found that over half of PsycLIT database entries had US authors (Adair, Coêlho, & Luna, 2002). Western psychological ideas (e.g. personality constructs; Barrett, Petrides, Eysenck, & Eysenck, 1998) have often been exported to non-Western cultures, with the presumption that the ideas represent universals. Critics are quick to note the shortcomings of such approaches, given cross-culture variability (Cheung, van de Vijver, & Leong, 2011). In recent years, researchers have come under increasing scrutiny for empirical research that primarily samples from western, educated, industrialized, rich and democratic (WEIRD) populations, which poorly represent the broader global population (Henrich, Heine, & Norenzayan, 2010). Even within these WEIRD populations there is often truncated diversity, with common reliance on convenience samples of students at research universities (Sears, 1986). This points to the importance of testing the assumption of universality in many areas of psychology. We readily acknowledge that most research on calling, including our own research, has primarily investigated these populations and must therefore be interpreted carefully through a lens that maintains awareness of the cultural biases of these populations.

The Cultural Lens Approach (CLA) offers a structured process that allows researchers to examine the cultural biases and assumptions underlying a theory (Hardin, Robitschek, Flores, Navarro, & Ashton, 2014). In processing these underlying factors, one can determine how well a theory can apply to a cultural group that isn't the researcher's own, and what needs to be changed in order to produce a more effective fit, perhaps by employing approaches that build from indigenous theory. The stepwise fashion of the CLA is, by design, incremental, which inhibits large conceptual leaps and hence hinders any unintended incursion of bias. CLA offers a clear, simple, and easily replicable method that can be applied to virtually any psychological theory (Hardin et al., 2014). Of course, because it systematically analyzes post-positivist social science theory, the CLA itself arguably builds on cultural values prevalent in WEIRD populations. This is an important and provocative point. Nevertheless, these rules of discourse make positive psychology possible as a discipline; therefore, we embrace them in this chapter even while recognizing their cultural embeddedness.

Since its introduction, CLA has been applied to two theories in vocational psychology: Super's Life Span Life Space Theory (Robitschek & Hardin, 2017) and Holland's Person/Environment Fit theory (Hardin et al., 2014). The method also has been applied to cognitive dissonance theory, personal growth initiative theory (Hardin et al., 2014), Bowen family systems theory (Erdem & Safi, 2018), and cognitive constructs (Robitschek, Sirls, & Hardin, 2014). Several researchers, including those involved in calling research (Duffy et al., 2018), have called for more widespread implementation of CLA, recognizing its importance in moving theory forward in a multicultural context (Lomas & Ivztan, 2016). In the wake of recent international

interest in the calling construct, we provide a CLA treatment of the calling construct in a way that we hope promotes cross-cultural calling research.

4 CLA and Work as a Calling

CLA unfolds in a series of five steps, as follows (all quotes from Hardin et al., 2014; see also Table 1).

Step One: “Articulate how central constructs have been defined (implicitly or explicitly) and thus operationalized in past research.”

In this first step, conceptual definitions and operationalizations of key parts of the theory are stated and explored. These represent the fundamentals of the theory in question and the ways in which hypothesized constructs can be meaningfully measured. It is imperative that the theory of interest must be atomized, and its constituent parts explicitly described, to drive the analysis in proceeding steps of the CLA. The primary component of this theory is the construct of calling which, as previously described, consists of three dimensions: transcendent summons/guiding force, purposeful work and prosocial orientation. Furthermore, while acknowledging that people can experience a sense of calling within diverse life roles, WCT specifically examines callings expressed within paid employment (Duffy et al., 2018).

Step Two: “Identify the groups (a) from which these definitions have been derived and (b) to which the constructs have either not been applied or with which surprising results have been found.”

This second step sets clear demarcations between the cultural group of interest and the group from which the theory was originally derived. This step addresses basic questions regarding who developed the theory and with what populations it has been validated. WCT was developed by researchers operating in a North American context. Also in this step, novel results with international samples are catalogued, and gaps in international representation are acknowledged. To illustrate this iteration of the CLA, we focus on one geographical region, Asia—more specifically China and India—for which several interesting results have been found, but for whom many unanswered questions persist.

The Chinese Calling Scale (CCS) provides scores on dimensions that are surprisingly similar to those postulated by WCT and employed in the Calling and Vocation Questionnaire (CVQ; Dik et al., 2012). Specifically, the best-fitting measurement model identified three dimensions for the CCS: guiding force, meaning and purpose, altruism (Zhang, Herrmann, et al., 2015). Yet despite the cross-cultural similarities in factor structure, some important differences also emerge, particularly in the guiding force dimension. In the CCS, guiding force is characterized by a sense of duty, social demands and some elements of destiny and fate, which differs from the more individualistic and religious themes often found in US samples.

Table 1 Summary of cultural lens approach steps applied to work as a calling theory

Step 1: Articulate definitions and operationalizations	
What is the central construct?	Calling.
How has it been operationalized?	Transcendent summons/guiding force, purposeful work & prosocial orientation.
Step 2: Identify relevant populations	
With what groups were these definitions developed?	North American and European samples.
What groups has the construct not been applied to, or have generated interesting results?	Non-western cultures. Interesting results have been found in India and China.
Step 3: Identify relevant cultural dimensions	
What cultural dimensions could impact the calling construct within Chinese and Indian samples?	Differences in self-construal (collectivism vs. individualism), differences in religious beliefs, difference in economic opportunity and stratification of society (e.g. caste system).
Step 4: Evaluate definitions/operationalizations of central constructs in broader cultural context	
What do we know about calling in the context of:	
Transcendent summons/Guiding force:	Differences in dominant religious systems (India) and the salience of religious world views (China).
Purposeful work	Will to meaning is likely universal, but source of meaning varies.
Prosocial orientation	Significant overlap in importance of prosocial behavior. Unpaid work may be a greater source of calling in collectivist cultures.
Step 5: Generate research questions	
R ₁	Would an indigenous Indian measure of calling predict different patterns of results than studies using the CVQ?
R ₂	Do people perceive greater restrictions on their career options in Indian versus U.S. populations?
R ₃	Do unpaid work or non-work roles offer a more significant pathway for expressing a calling in collectivist cultures than in individualist ones?
R ₄	Is calling as effective a predictor of well-being outcomes in collectivist cultures as it is in individualist cultures? If not, what are the outcomes more associated with calling in these cultures?
R ₅	What intervention strategies are effective in promoting a sense of calling, and assisting people in living a calling and experiencing related positive outcomes?

When administered to a sample in India, participants had higher CVQ scores relative to their US counterparts, and calling was overall more prevalent among Indians than is the case in US samples. Interestingly, calling's association with job satisfaction and well-being outcomes were weaker among Indians than among US samples (Douglass et al., 2016). Given that part of the utility of WCT is in predicting well-being outcomes, these results hold particular importance in the context of interventions. An assessment of the metric equivalence of the CVQ between Indian and US samples found mixed results, leading the authors to caution against using the measure to study group differences in calling (Autin, Allen, Palaniappan & Duffy, 2017). Specifically, evidence supported partial measurement equivalence of the presence dimension of the CVQ, but the search dimension of the CVQ and other measures of calling (e.g. the Brief Calling Scale), did not fare as well. These results give promise to the relevance of calling in India, but suggest that more research is needed to understand its nuances in this cultural context.

Step Three: “Identify relevant dimensions underlying cultural variability: What do we know about the cultural context of Groups A and B?”

This step is intended to help isolate sources of cultural variability without yet making conceptual connections to the theory. This purposefully methodical processes should help prevent researchers from attaching too quickly to simple intuitive explanations grounded in biases (Hardin et al., 2014). As remarked by Hardin et al. (2014), differences in self-construal can create significant differences in applicability of psychological theory. Asian cultures are known to be more collectivistic and cooperative while North American culture is known to be individualistic. Individualism places a greater emphasis on self-determination, self-enhancement, and individualized meaning, while collectivism values harmony, cooperation, and interdependence (Kagitçibasi, 1997).

There are significant differences in the structure of predominant religious traditions in China, India and the United States. Although the US has a strong representation of the world's religions, it has been predominantly Judeo-Christian since its founding, and today 78.3% of the country identifies as Christian. In China, the Cultural Revolution systematically dismantled religion, enforcing a policy of state atheism, which is reflected today in the 52.2% Chinese who are religiously unaffiliated; Buddhism and folk religion are the next most frequently endorsed affiliations. In India, 78.5% of the population identifies as Hindu (Hackett & Grim, 2012).

There are also important differences in economic opportunity, education and upward mobility between these three countries. India has a long and well-known history of a caste system, which has privileged those higher on the hierarchy with more opportunities and jobs with higher statuses. While the Indian constitution banned discrimination based on caste membership officially, discrimination still persists, and the caste system has been likened by some in the international community as equal to racial discrimination (as seen in the US) in its effects (Pinto, 2001). China also has a clearly defined system that stratifies access to resources and opportunity. Known as Hukou, or “household registration,” this system identifies one's household as being urban or rural (agricultural) and determines one's access to important

services and opportunities, regardless of where one actually lives. This effectively limits vertical social mobility within Chinese society for those registered as rural households (Chan, 2009).

The US has long held a popular doctrine of meritocracy, with treasured “rags to riches” stories exemplified in popular culture (e.g., Horatio Alger’s novels). The reality of opportunity in the US is more complex, with income inequality and educational disparities entrenched and growing, and sharp divisions often noted along racial and ethnic lines (Kochhar & Fry, 2014). It is important to recognize how individualism in the US dovetails with this cultural ideal of self-enhancement, creating the popular myth of upward mobility even when real structural barriers exist. It is unclear to us at present how the structural barriers noted in China and India intersect with cultural ideals, but this is a matter that warrants further investigation.

Step Four: “Evaluate the definitions/operationalizations of the central constructs (from step 1) in the context of broader cultural knowledge about those groups (from step 3): What do we know about Construct X within the cultural context of Group B?”

This step entails a synthesis of the previous steps, to connect how differences might translate to differences in how WCT can be applied to Asian cultures.

Transcendent Summons: Differences in this dimension likely stem from different predominant religious beliefs. The dimensions of calling, and in particular, the summons dimension come from a Neoclassical definition inherited from Judeo-Christian thinking (Dik & Duffy, 2009; Duffy et al., 2018). Although Dik and Duffy’s (2009) conceptualization doesn’t require a divine source for one’s calling, their definition was nevertheless influenced by the historic (religious) use of the term. In China, greater emphasis is placed on responsibility and duty towards one’s community and culture. This difference is clearly reflected in this dimension of the Chinese Calling Scale (Zhang, Herrmann, et al., 2015).

In Hindu religion there is a belief that one is born to one’s form (human or not) by the accumulation of one’s karma, cause and effect from one’s good or bad deeds. Hinduism specifies certain rules of conduct relative to one’s place in the world and karmic inheritance (Chakkarath, 2005). This, as in China, likely places more emphasis on responsibility to one’s community and to maintenance of social order than is the case in a US context.

Purposeful Work: Victor Frankl claimed that the will to create and seek meaning is a universal human enterprise (Frankl, 1959). While this may be true, it is important to consider that sources of meaning and purpose may differ between cultures. Considering differences in self-construal, the way in which morality is codified, and religious beliefs, the variance of sources of meaning both within and between groups is hard to overstate. Western conceptions of calling are seldom explicit in where one can find meaning, but do claim its importance to the construct (Dik et al., 2012).

Prosocial Orientation: There is considerable overlap in the cultural importance of prosocial behavior between the US, China and India. Hinduism, Confucianism and Christianity all have codified moral ideals which focus on the importance of

doing good for others and one's community. Dik and Duffy (2009) suggest that the prosocial aspects of calling may be more salient than the other dimensions for those in collectivist cultures due to the relative greater importance placed on community well-being over personal well-being.

While WCT mainly focuses on paid work as a source of calling, callings can also be expressed in unpaid work (e.g., caregiving; Duffy, Blustein, Diemer, & Autin, 2016) and other life roles (e.g., parenting; Coulson, Oades & Stoyles, 2012). It is worth considering that cultural factors including the importance of filial piety in many collectivist cultures may make such unpaid forms of work more important sources of calling than in individualist cultures.

Step Five: "Derive research questions and specific hypotheses based on the questions and answers from step 4."

This final step seeks to develop directions for new research based on the insights gained from the CLA process. While not exhaustive, the following represent important areas for extending calling research in China, India and other Asian Countries. Our purpose here is to demonstrate the kinds of questions that can arise from applying CLA to the calling construct. We limit our application of this step to research questions and invite readers to form their own directional hypotheses when carrying out research testing these questions.

- A. *Would an indigenous Indian measure of calling predict different patterns of results than studies using the CVQ?* Differences in data between US and Indian samples are hard to account for unless we know that the calling construct has meaningful equivalence in the Indian population. Research has shown mixed support for the measurement equivalence of the CVQ in Indian and US samples, suggesting a need for more research, and possibly more culturally salient measures (Autin et al., 2017). The CCS gives a promising example of how an indigenous measure of calling can be developed; results can then be compared to those derived using the CVQ or similar measure of the construct.
- B. *When reflecting on the relevance of the calling construct, do people perceive greater restrictions on their career options in Indian versus US populations?* As we explored above, inequality exists in all of the countries being investigated, but India has something that the others lack: an explicitly codified, many-layered and complex stratification of its society. It seems likely that Indians, particularly those in lower castes, are more likely to perceive limitations on their career opportunities which may prove a challenge in discerning and living one's calling. It is unclear how important self-determination and autonomy is to the construct of calling, and this question provides a way to investigate that cross-culturally. This question could also be adapted with Chinese populations to investigate the effect of the Hukuo system.
- C. *Do unpaid work or non-work roles offer a more significant pathway for expressing a calling in collectivist cultures than in individualist ones?* A significant allure of the calling construct comes from its ability to predict well-being outcomes from one's experience at work. Research on calling in Asian cultures

should investigate the most culturally significant expressions of calling, which may not always be within one's work.

- D. *Is calling as effective a predictor of well-being outcomes in collectivist cultures as it is in individualist cultures? If not, what are the outcomes more associated with calling in these cultures?* As noted before in one study, calling was a weaker predictor of job satisfaction in India than in US samples (Douglass et al., 2016). Although methodological factors may have influenced this result, it raises important questions about the directions that future research on calling should take in Asian cultures. Perhaps there are moderators between job satisfaction and calling that have been masked in studies conducted to date. This is important to consider when constructing career intervention strategies.
- E. *What intervention strategies are effective in promoting a sense of calling, and assisting people in living a calling and experiencing related positive outcomes?* The question of intervention is not yet well-understood within the literature on calling, but as research on calling accumulates, rigorous intervention research that examines cultural influences is essential. This requires using diverse methods, including randomized controlled trials, to examine intervention strategies tailored to the concerns of people operating within distinct cultural contexts. We explore such ways to adapt the frequently recommended intervention approaches next.

5 Implications for Culturally Competent Practice

As reviewed above, calling has been associated with numerous positive work and well-being outcomes. Many suggested intervention strategies have been recommended to facilitate such positive outcomes on institutional and individual levels. Although much research has focused on Western samples, evidence has emerged suggesting that these positive outcomes could occur in other cultures. More research is needed to both fully evaluate calling in non-Western cultures as well as to develop culturally appropriate interventions that foster positive work and well-being outcomes. In the following section we outline current intervention strategies and assess their relevance for Chinese and Indian cultures, leveraging insights from our CLA analysis as well as extant literature. The aim of this section is twofold: (1) to provide ideas for practitioners working within these cultures about potential tools and to spark discussion in the career counseling profession about the appropriateness and utility of such tools in their own culture, and (2) to promote targeted research aimed at investigating the appropriateness and efficacy of these interventions in non-Western contexts.

6 Discerning a Calling

Promote Active Discernment. Dik and Duffy (2009; Dik et al., 2012) have noted the presence of transcendent summons as the component that distinguishes a calling from a vocation. Some clients, especially those with religious commitments, may adopt a “pray and wait” approach in which they passively await a divine revelation (Dik, Duffy, & Eldridge, 2009). Calling is typically associated with proactive career behaviors (Hirschi, 2011; Shimizu et al., 2018), but to the extent that one’s approach to discerning a transcendent summons is passive, it may hinder one’s career development (Marsh, Dik, & Shimizu, 2019). More effective interventions with clients who engage in passive discernment might encourage a more active strategy that highlights an individual’s ownership of the process of discerning a calling.

In India, the passivity of the “pray-and-wait” strategy may express itself in a different manner, in light of the teaching of karma. Karma, simply explained, states that the conditions of one’s life result from the merits of one’s actions, including those in preceding lives (Stern, 2007). Karma explains why undesirable things happen to people, and since the reasons for this are often buried in an unknowable past life, a profound sense of fatalism is invoked. Reflecting this, one study found that Christians frequently invoke their deity to explain events in their life, whereas Hindus equally attributed events to deity influence and destiny (Young, Morris, Burrus, Krishnan, & Regmi, 2011). The fatalism associated with karma may have a similar stifling function as a passive “pray-and-wait” strategy, or it may point to key differences in the calling construct. Perhaps one’s calling is akin to one’s fate in India. In instances where one’s fate is not very desirable, one may be resigned to it, yet not pleased about it. This may account for some of the differences in calling’s ability to predict positive outcomes in India (Douglass et al., 2016). Practitioners working within this culture may need to interact with narratives around fate to illuminate possible outcomes within a client’s understanding of their karmic inheritance.

In China, “pray-and-wait” may be a less frequently encountered concern, given the lower rates of religious affiliation in the country. Yet other factors may prompt passivity, such as the “Unified Labor Allocation,” a planned economy policy that, until recently, involved the state assigning people to their career paths. With the introduction of a market economy, more autonomy has been given to job seekers in recent years, and adjustment to this newfound freedom has sparked a greater need for counseling services (Zhang, Hu, & Pope, 2002). It is reasonable to expect that passivity in career decision-making may be a remnant of this historic reliance on guidance or direction from authorities. Whatever its cause, helping clients move from passive to active discernment strategies will likely produce better career development outcomes.

Provide Culturally-Relevant Role Models. Social Cognitive Career Theory (SCCT) posits that role models help people develop adaptive levels of self-efficacy and outcome expectations, both important components in clarifying one’s interests and in making career choices (Lent, Brown, & Hackett, 2002). Research demonstrates the important function that role models with similar demographic identities

can play in matters of career choice (e.g., Quimby & Santis, 2006). It may be difficult for individuals to believe themselves capable of living a calling in a field that lacks many people bearing similar identities to themselves. Given that numerous studies have linked calling to vocational self-efficacy (Dobrow & Tosti-Kharas, 2011; Domene, 2012; Hirschi, 2012; Shimizu et al., 2018), the lack of relevant role models may serve as a barrier to entry. Calling interventions may consider incorporating exposure to culturally-relevant role models. Indirect evidence supports this strategy; for example, one study in India reflected that in communities with greater representations of women in leadership positions, the education attainment of young women also increased (Beaman, Duflo, Pande, & Topalova, 2012).

It is important to note that role models can be positive or negative, in the sense that they can influence both what people should do and what they should not do. SCCT tends to focus on the importance of positive role models, but some research suggests that negative role models (i.e., “cautionary tales”) may be more salient and effective for those from Asian cultures given the prevention focus that is often associated with collectivist cultures (as opposed to the promotion focus associated with individualistic cultures; Lockwood, Marshall, & Sadler, 2005). Within collectivist cultures it may be prudent to both cultivate the development of positive role models while making efforts to manage the effects of negative ones.

Evaluating Fit. Scholars within vocational psychology have long expounded the importance of person-environment fit (P-E-Fit), the alignment of an individual’s attributes, skills, and characteristics with the requirements and reinforcers of particular work settings (e.g., Dawis & Lofquist, 1984; Holland, 1997). Interventions that leverage P-E fit may help individuals refine their own perception of their work personalities through instruments designed to measure work values (e.g., Super, 1970), interests (e.g., Campbell, 1987), personality (e.g., Costa & McCrae, 1992), and strengths (e.g., Peterson & Seligman, 2004). While greater self-clarity alone is linked to sense of calling (Duffy & Sedlacek, 2007), identifying environments that align with one’s attributes can provide meaningful pathways for living a calling (Dik & Duffy, 2012).

Limited research in India has established initial support for the relevance of P-E fit, finding positive relationships between person-job fit and job satisfaction, and person-organization fit and organizational commitment (Mulky, 2011). Some support has been found for the use of vocational interest measurement in evaluating person-occupation fit as well (Leong, Austin, Sekaran, & Komarraju, 1998). However, more research is needed to better evaluate P-E fit models in the Indian population and to develop tools needed for intervention. One recent development established by the Indian government is the National Career Service (NCS), an online platform designed to match individuals with employment opportunities, skill development and career counseling services (Chadha, Gambhir, & Mahavidyalya, 2017).

While P-E fit may be a conceptually tenable concept in China, the drivers of good fit may differ significantly. Consistent with expectations of collectivist self-construal in China, research has suggested that key drivers of P-E fit in China are interpersonal relationships and harmony (Chuang, Hsu, Wang, & Judge, 2015). Congruence with career interests have been found to only have a very small relationship with career

choice (e.g., Tang, 2001). In light of this research and the results of our CLA analysis, a reconceptualization of P-E fit may better align with Chinese perspectives on the dimensions of calling that highlight community needs (external summons) and serving the good of the community (altruism; Zhang, Dik, et al., 2015).

7 Living a Calling

As WCT highlights, perceiving a calling predicts positive outcomes only among those who are currently living a calling (e.g., Duffy et al., 2018). Unfortunately, not everyone who perceives a calling feels they are living it (Duffy & Autin, 2013). Evidence suggests that while the proportion of people who perceive a calling does not vary across socioeconomic status, living a calling does; those with greater privilege are more likely to express that they are living a calling (Duffy et al., 2013; Duffy & Autin, 2013; Duffy, Bott, Allan, & Autin, 2015). Furthermore, those who perceive a calling but are not living it out often suffer (e.g., Gazica & Spector, 2015). Several intervention strategies have been described to help people find ways to express their sense of calling, whether or not opportunities to do so are readily available.

Job crafting. Job crafting offers a means to increase work meaningfulness through proactive alteration of key aspects of one's working life. It takes three forms: task crafting, relational crafting, and cognitive crafting (Berg, Dutton, & Wrzesniewski, 2013; Wrzesniewski & Dutton, 2001). Task crafting involves modifying the ways in which tasks are done or changing the number of tasks performed. Relational crafting involves augmenting one's social experience in the workplace. Finally, cognitive crafting involves revising the ways in which work is conceptualized by the working individual. The Job Crafting Exercise™ (see Berg et al., 2013) is a formal intervention designed to promote job crafting. In this exercise, individuals are asked to list their typical job duties, identifying the amount of time/attention/energy currently dedicated to each task. Individuals then rearrange these tasks to determine an ideal yet feasible version of their job. Finally, they create an "Action Plan" consisting of specific goals for implementing these alterations. The procedure is intended to help people identify the flexibility that exists within the context of their work circumstance and prepare to optimize their present job.

An assumption that seems to underlie job crafting is that increased autonomy in one's work will allow workers to derive more ownership and meaning from it. This seems especially relevant within an individualistic culture where creativity and independence is valued, but may not translate well to collectivist cultures, where obedience and socially sanctioned behavior is more valued (Triandis, 1989). Initial research, however, found that in one sample of high tech employees in China, those who scored high in work engagement used physical and relational job crafting to enhance their person-job fit (Lu, Wang, Lu, Du & Bakker, 2014). Similarly, a study of service employees within the banking industry in India found that job crafting attitudes were positively associated with customer service outcomes, relationships that were mediated by work engagement (Siddiqi, 2015). One might assume cultures that

place less of an emphasis on autonomy may yield less job crafting behavior. However, given other evidence that workers in more structured work environments may find job crafting easier (e.g., one can “color outside the lines” more easily when lines are clearly drawn; Berg et al., 2013), de-emphasizing autonomy may paradoxically prompt more job-crafting. This is a matter for future research to address.

Connecting Work to Beneficence. A key component of Neoclassical definitions of calling is the motivation to benefit others through one’s work. Prosocial values in work are embodied in the concept of *social fit*, or the alignment of one’s abilities with the requirements of a particular social need (Muirhead, 2004). The relevance of this construct has been shown through qualitative studies continually demonstrating that prosocial elements play a key role in colloquial understandings of calling across cultures (Hagmaier & Abele, 2012; Hunter, Dik, & Banning, 2010; Zhang, Dik, et al., 2015). Research suggests that prosocial attitudes are related to greater well-being (Martela & Ryan, 2016; Martela, Ryan, & Steger, 2018). Interventions seeking to increase perceptions of living a calling and greater well-being could seek to help workers identify the ways their jobs may be viewed through a prosocial lens. If possible, forging a stronger connection between workers with the beneficiaries of their work (Grant, 2012) may cultivate a stronger sense of calling.

As represented earlier in the Chinese Calling Scale (Zhang, Herrmann, et al., 2015) and implementations of the Calling and Vocation Questionnaire with Indian samples, prosocial elements are central to calling in these cultures. However, differences in self-construal may mean that Chinese and Indian people are less inclined to emphasize their personal impact than Westerners are. This is the simple difference from recognizing the good that “I” am doing versus what “we” are doing. Also, due to the focus on maintaining order and harmony, prosocial impacts on individuals may seem less important than those that benefit the community on a whole (Stevenson, 1991). It may still be relevant to help workers within Asian countries identify the prosocial impact of their work, but the most important outcomes may differ in character, and may need to be communicated differently than in a Western context.

8 Summary and Conclusion

As research on calling continues to proliferate, and takes on a more international focus, careful attention to cultural differences in how calling is conceptualized, discerned, and lived out is critical. To date, research across cultures finds many similarities in how calling is defined and functions within people’s work and lives, but subtle differences corresponding to diverse cultural values are evident. After a review of research and theory exploring how perceiving and living a calling are linked to outcomes, we presented the Cultural Lens Approach (Hardin et al., 2014) as a structured process for examining cultural biases and assumptions in scholarship on calling.

CLA unfolds in six steps, beginning with an examination of how the construct has been defined and operationalized. Next, groups from which the definitions have been derived (e.g., Western researchers), and others to which the constructs have

not yet been thoroughly applied (e.g., Chinese and Indian populations) are identified. The third step involves specifying dimensions that underlie cultural variability by reviewing the cultural context of the groups in question, dimensions such as individualism and collectivism, or differences in predominant religious worldviews, economic systems, and opportunity structures. The fourth requires carefully evaluating how the central construct (calling, in this case) may differ across the cultural groups in question, and research questions are articulated in the fifth and final step. Future cross-cultural research on calling comparing US, India, and China would benefit from examining the salience of calling as a function of the perceived range of accessible career options; developing an indigenous Indian measure of calling to compare to the CVQ or CCS; examining the relevance of calling within unpaid or non-work roles in collectivist versus individualist cultures; examining the strength and magnitude of calling as a predictor of outcome variables in collectivist cultures; and testing intervention strategies adapted for distinct cultural contexts.

The remainder of the chapter discussed potential strategies for assisting clients in the process of discerning and living a calling. For example, we described how increasing an active decision-making approach may be universally helpful, but different religious worldviews may prompt different ways of effectively encouraging movement from a passive to an active approach. Culturally-relevant role models may assist clients in fostering a calling in fields for which workers who align with their identities may be hard to find. The notion of person-environment fit also offers a way to help people identify pathways that leverage their interests and values, even while more research is needed to evaluate the concept of fit across diverse cultures. Finally, job crafting and connecting one's work to a broader, prosocial purpose were discussed as key strategies for living a calling. These strategies, too, may differ in a Western context compared to Asian countries, where workers may emphasize the positive impact of the community rather than the individual. Effective, evidence-based practice requires an evidence base; our hope is that readers interested in both contributing to and applying this area of research will find this chapter a useful jumping off point for pursuing this important work.

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Psychological Capital Development in Organizations: An Integrative Review of Evidence-Based Intervention Programs



Marisa Salanova and Alberto Ortega-Maldonado

Abstract Psychological Capital (PsyCap) is a recognized and well-investigated set of psychological resources comprised of self-efficacy, optimism, hope, and resilience, and it has been empirically shown to be a good predictor of many important positive attitudes and behaviours, such as psychological well-being, job performance, and goal achievement. PsyCap is an emerging, relevant, and applied topic related to scholarly and professional organizational management activity around the world in the workplace because it can be developed through interventions among employees and leaders. However, there is a lack of comprehensive reviews and updates of the research on PsyCap interventions in workplaces, which might be very useful for both researchers and practitioners developing, implementing or validating Positive Organizational Interventions. This chapter reviews and synthesizes the PsyCap intervention literature on both specific micro-interventions and broader and more extensive PsyCap development programs. Moreover, cultural differences have been found to be important in Positive Psychology Interventions (PPI), and so we particularly examine and summarize cultural differences in the PsyCap development literature. To provide a comprehensive and integrative perspective on this emerging issue, we base our analysis on a recent integrative review in which we systematically searched different types of publications, both research and professional literature, including journal articles, doctoral dissertations, books, chapters, and conference papers. Our conclusions shed light on PsyCap intervention research and practice, and they may help Human Resource Development (HRD) professionals to make evidence-based decisions when implementing PsyCap development programs.

Keywords Psychological capital · PsyCap development · PsyCap cultural-differences · Evidence-based interventions

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List of Abbreviations

HRD	Human Resource Development
OCB	Organizational Citizenship Behaviours
PCI	Psychological Capital Intervention
POB	Positive Organizational Behaviour
PPI	Positive Psychology Interventions
PsyCap	Psychological Capital

1 Introduction

Since the beginning of the twenty-first century, we have been living in an increasingly dynamic, global, and uncertain business world. The information and telecommunications revolution emerged about twenty years ago, and globalization has become a reality. Furthermore, a global economic and financial crisis began ten years ago, seriously affecting consumers, workers, and organizations worldwide. In this new socioeconomic era, contemporary organizations will not be the same (Luthans, Youssef-Morgan, & Avolio, 2015). Organizations have to face dynamic and changing environments, and they need sustainable resources with distinct advantages and a competitive edge (Kraaijenbrink, Spender, & Groen, 2010; Le Blanc & Oerlemans, 2016). In this scenario, according to the resource-based theory (see Newman, Ucbasaran, Zhu, & Hirst, 2014), accumulating traditional material resources (i.e., financial and technological capital) and recruiting experts with many years of experience (i.e., human and social capital) may be insufficient strategies for organizational success (Luthans et al., 2015), and a sustainable and developable workforce could be of vital importance for viability and a competitive advantage (Le Blanc & Oerlemans, 2016).

Thus, at the beginning of the new century, Positive Organizational Behaviour (POB) emerged as a new evidence-based management and practice approach, stressing the role of Human Resource Development (HRD) as a strategic resource (valuable, rare, and imperfectly imitable) to obtain a competitive edge (Luthans, Youssef, & Avolio, 2007; Newman et al., 2014). The main focus of POB is on developing employees' psychological resources in order to enhance their psychological well-being and performance levels, through positive interventions, as a valuable tool to increase workforce sustainability (Le Blanc & Oerlemans, 2016; Luthans, Avey, Avolio, Norman, & Combs, 2006).

A recognized and well-investigated set of psychological resources that is highly involved in task performance and goal achievement is known as psychological capital or simply PsyCap (Luthans, Youssef, et al., 2007). It is defined as "an individual's positive psychological state of development that is characterized by (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the

future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success” (Luthans et al., 2015, p. 2). The four psychological resources of PsyCap have empirically been found to make up a higher-order core construct in which they interact in a synergistic way (Luthans, Avolio, Avey, & Norman, 2007). In other words, the whole is greater than the sum of its parts. PsyCap is a dynamic topic that has experienced rapid growth in the literature (Luthans & Youssef-Morgan, 2017).

There are compilations on the theoretical predictive relationship between PsyCap and employee attitudes, behaviours, and performance (Luthans et al., 2015; Luthans, Youssef, et al., 2007), as well as numerous literature reviews (Dawkins, Martin, Scott, & Sanderson, 2013; Luthans, 2012; Luthans & Youssef-Morgan, 2017; Newman et al., 2014) and meta-analyses (Avey, Reichard, Luthans, & Mhatre, 2011) on this topic. Generally, the PsyCap literature supports the higher-order factor structure of the core construct, the prediction of desirable levels of performance (self-reported, manager-rated, and objective performance), and positive attitudes and behaviours such as problem solving, innovative behaviour, organizational citizenship behaviours (OCB), commitment, job satisfaction, and psychological well-being (Abbas & Raja, 2015; Avey, Luthans, Smith, & Palmer, 2010; Avey, Luthans, & Youssef, 2010; Avey, Wernsing, & Luthans, 2008; Baron, Franklin, & Hmieleski, 2013; Choi & Lee, 2014; Culbertson, Fullagar, & Mills, 2010; Liu, 2013; Luthans, Luthans, & Jensen, 2012; Luthans, Avey, Clapp-Smith, & Li, 2008; Luthans, Avolio, et al. 2007; Luthans, Avolio, Norman, & Avey, 2006; Luthans, Avolio, Walumbwa, & Li, 2005; Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011; Rego, Marques, Leal, Sousa, & Pina e Cunha, 2010; Youssef & Luthans, 2007), as well as the prediction of lower levels of undesirable attitudes and behaviours such as absenteeism, counterproductive work behaviours, cynicism, deviance, job search behaviours, stress, and turnover intentions (Abbas & Raja, 2015; Avey, Luthans, & Jensen, 2009; Avey, Patera, & West, 2006; Avey et al., 2008, Avey, Luthans, & Youssef, 2010; Choi & Lee, 2014).

Moreover, PsyCap has been conceptualized—and empirically demonstrated—as a malleable state-like psychological resource, which means that it can be developed through Positive Psychology Interventions (PPIs) (Luthans, Avey, & Patera, 2008; Luthans et al., 2015), making it a very interesting variable for practitioners who want to invest in evidence-based positive actions now in order to reduce future costs. Since Luthans and colleagues proposed the Psychological Capital Intervention (PCI) model (Luthans, Youssef, et al., 2007), a cumulative body of research on PsyCap development has been published. There is empirical evidence about face-to-face micro-interventions (Luthans, Avey, Avolio, & Peterson, 2010) and web-based interventions (Luthans, Avey, & Patera, 2008) in samples of students and employees (Dello Russo & Stoykova, 2015), people at risk of social exclusion (Rew, Powell, Brown, Becker, & Slesnick, 2017), and expatriate workers (Reichard, Dollwet, & Louw-Potgieter, 2014). The majority of the PsyCap intervention literature replicates the PCI. However, some of the research is based on PCI, but introduces some variations (Rew et al., 2017), developing a new PsyCap intervention approach (Zhang, Li, Ma, Hu, & Jiang, 2014) or combining PsyCap and strengths interventions (Mey-

ers, Van Woerkom, De Reuver, Bakk, & Oberski, 2015). There is also evidence of a PsyCap increase at the end of the intervention (Luthans, Avey, & Patera, 2008), and even after a follow-up period (Reichard et al., 2014). Moreover, PsyCap development increases positive outcomes in performance levels (Luthans et al., 2010), assertiveness (Demerouti, Eeuwijk, Snelder, & Wild, 2011), positive emotions (Reichard et al., 2014), and job satisfaction (Harty, Gustafsson, Björkdahl, & Möller, 2016).

However, to the best of our knowledge, there has been no comprehensive review and update of the research on PsyCap interventions, which might be very useful for both researchers and practitioners engaged in Work and Organizational Positive Psychology. To begin to fill this gap and facilitate more rigorous HRD and performance programs and increase practitioners' confidence in PsyCap interventions, Ortega-Maldonado (2018) performed an integrative review of 32 works on PsyCap interventions, including different types of publications such as journal articles, doctoral dissertations, books, chapters, and conference papers (reviewed studies appear in Table 1). Based on this work, in this chapter we synthesize different published strategies, procedures, and methodologies for PsyCap development and analyse their effectiveness and results. We especially explore whether there are cultural differences in PsyCap development, and we compare the advantages and disadvantages of each intervention.

2 Method

To provide a comprehensive and integrative perspective on PsyCap interventions, Ortega-Maldonado (2018) systematically searched in his dissertation both research and professional literature, including journal articles, doctoral dissertations, books, chapters, and conference papers. First, three databases on business, management, and psychology were searched (i.e. PsycNet, ABI/INFORM complete, and ProQuest Central). Two keywords were used as descriptors ("psychological capital" and "PsyCap"), combined with one operator "and" ("intervention") in two different fields: "title" and "abstract". Literature on PsyCap interventions was selected for review only if, after reading the abstract, it met all of the following inclusion criteria: (1) they were focused on PsyCap interventions (application and evaluation), (2) they were written in English or Spanish, and (3) they were accessible either searching in the author's University electronic library or requesting from the corresponding authors by email.

Second, the search was completed by using additional sources of information, such as publications included in the Google Scholar and Researchgate profiles of the main PsyCap authors, or articles published in a topic-related, specific, applied journal: "The Positive Work and Organizations: Research and Practice (PWORP)", which belongs to a scientific and professional association: the Work and Organizations Division of the International Positive Psychology Association (<http://www.ippanetwork.org>).

To analyse the literature a complete reading of each selected literature source was conducted identifying the intervention objective, characteristics and proce-

Table 1 PsyCap intervention procedures organized by duration (Ortega-Maldonado, 2018)

Timing	Type of session	Intervention model	Follow up activities (Transfer of training)	Studies
1 × 30 min	Individual	Reading intervention	–	Zhang et al. (2014)
1 × 37 min	Computer-based (individual)	PCI	–	Griffith (2010)
1 × 1 h	Face-to-face (group)	PCI	–	Luthans, Avey, et al. (2006), O’Reilly (2016)
1 × 2 h	Face-to-face (group)	PCI	–	Gutierrez (2016), Luthans, Luthans, and Avey (2014), Luthans, Avey, et al. (2006, 2010)
1 × 2 h	Face-to-face (group)	Cross-cultural PsyCap training	–	Reichard et al. (2014)
1 × 2 h	Face-to-face (group)	PsyCap development training program (similar to PCI)	–	Ertosun, Erdil, Deniz, and Alpkın (2015)
1 × 2.5 h	Face-to-face (group)	PCI	–	Luthans, Avey, et al. (2006), Luthans, Youssef, et al. (2007)
1 × 1–3 h	Face-to-face (group)	PCI	–	Luthans, Youssef, et al. (2007)
1 × 1–3 h	Face-to-face (group)	HERO workshop (similar to PCI)	–	Dello Russo (2014), Dello Russo and Stoykova (2015)
1 × 3 h	Face-to-face (group)	PCI	–	Diedrich (2015)
1 × 3 h	Face-to-face (group)	SOAR personal branding intervention	–	Bell (2016)
1 × 3.5 h	Face-to-face (group)	PCI + happiness	Weekly (4 weeks)	Hodges (2010)
½ day	Face-to-face (group)	Strengths intervention	Homework tasks	Meyers and Van Woerkom (2017)

(continued)

Table 1 (continued)

Timing	Type of session	Intervention model	Follow up activities (Transfer of training)	Studies
1 day	Face-to-face (group)	Strengths intervention	2 short homework tasks (2 weeks and 2 months after)	Meyers et al. (2015)
1 day	Face-to-face (group)	Deficiency intervention	2 short homework tasks (2 weeks and 2 months after)	Meyers et al. (2015)
2 × 45 min	Computer-based (individual)	PCI	–	Luthans et al. (2008)
2 × 1 h (1/week)	Face-to-face (group)	Navigating the college experience (similar to PCI)	–	Bauman (2014)
2 × 4 h (1 day off)	Face-to-face (group)	PsyCap components intervention	–	Larson (2004)
3 × 1.5 h (6 weeks)	Face-to-face (individual)	Brief resilience coaching programme	Pre-work activities	Sherlock-Storey, Moss, and Timson (2013)
3 × 2 h (consecutive days)	Face-to-face (group)	Positive psychology training intervention	–	Williams, Kern, and Waters (2016)
3 × 4 h (5 weeks)	Face-to-face (group)	JD-R intervention	Homework tasks between session 2 and 3 (4 weeks)	Van Wingerden, Bakker, and Derks (2016)
3 sessions (6 weeks)	Face-to-face (group)	Personal resources intervention	Homework tasks between session 2 and 3 (4 weeks)	Van Wingerden, Derks, and Bakker (2017)
3 sessions (6 weeks)	Face-to-face (group)	Job crafting intervention	Homework tasks between session 2 and 3 (4 weeks)	Van Wingerden et al. (2017)
3 sessions (6 weeks)	Face-to-face (group)	Personal resources + job crafting intervention	Homework tasks between session 2 and 3 (4 weeks)	Van Wingerden et al. (2017)

(continued)

Table 1 (continued)

Timing	Type of session	Intervention model	Follow up activities (Transfer of training)	Studies
4 × 1 h	Face-to-face (group)	Health risk behaviours and PsyCap intervention	Weekly phone reminders (4 weeks)	Rew et al. (2017)
1 lunch and learn 2 × 45 min individual 1 × 2 h seminar	Computer-based and face-to-face	PCT (PCI + stress)	4 × 15 min web-based homework	Hargrove (2012)
5 × 1 h (10 weeks)	Face-to-face (group)	Program on positive focus	–	Harty et al. (2016)
5 × 1 h (10 weeks)	Face-to-face (group)	Program on constructive problem-solving	–	Harty et al. (2016)
8 × 2 h (2 months)	Face-to-face (group)	PCDTI	–	Kalman and Summak (2017)
20 × 2 (10 weeks)	Face-to-face (group)	Career development intervention based on PsyCap	–	Babinchak (2012)
No information	Face-to-face (group)	RET	–	Demerouti et al. (2011)

Note JD-R = Job-Demand Resources; PCDTI = Psychological Capital Development Training Intervention; PCI = Psychological Capital Intervention; PCT = Psychological Capital Training; RET = Rational-emotive Therapy; SOAR = Strength, Opportunities, Aspiration, Results

ture (i.e. design, participants, timing, and schedule), and the main results displayed (i.e. PsyCap increase, outcomes, and effect significance and size). In order to homogenize the data reported by every study reviewed, the percentage of increase or decrease in each variable from each study was calculated.

3 Developing PsyCap Through a Specific Micro-intervention: The PCI Model

As Table 1 shows, most of the PsyCap interventions found in the literature (58%) are micro-interventions, a highly focused and very short strategy (1 or 2 sessions) for developing this set of psychological resources (Luthans, Avey, et al., 2006). Micro-interventions are a highly cost-effective tool for HRD practitioners and man-

agers (Luthans et al., 2015) that might lead organizations towards a culture of health and resilience (Salanova, Llorens, Cifre, & Martínez, 2012). Of these micro-interventions, the most popular procedure for developing PsyCap to date is the Psychological Capital Intervention model (PCI) (Luthans, Avey, et al., 2006). At least 38% of the studies reviewed conducted PCI, either the original version proposed by Fred Luthans and colleagues or an adapted or similar intervention based on the PCI proposal. PCI is a micro-intervention that generally consists of a 1–4 h group workshop designed to develop PsyCap through different strategies to increase participants' levels of each of the four PsyCap components. Based on previous research on self-efficacy, hope, optimism, and resilience development, PCI presents participants with a wide range of activities designed to develop each resource through several cognitive and affective strategies (Luthans, 2012). Moreover, due to the higher-order core construct property of PsyCap, the PCI approach is a synergetic model based on increasing PsyCap through the reinforcing effects of developing its components in the activities performed (for more information about PCI, see Luthans, Avey, et al., 2006; Luthans et al., 2015; Luthans, Youssef, et al., 2007). Next, we synthesize the psychological strategies detected in the literature review to develop each of the PsyCap components.

Hope development strategies are mainly grounded in Snyder's (2000) theory and research on Hope, which proposes two primary cognitive processes for hope-building: will-power (agency) and way-power (pathway). Hope is conceptualized as a positive goal-directed motivational state, and so several activities to improve the individual's goal design capacity were suggested in the literature. Thus, activities such as SMART goal-setting (designing Specific, Measurable, Achievable, Relevant and Time-bound goals), stepping (dividing goals into several sub-goals), and learning to fit goals to personal values and challenges, are conducted to enhance agency (Luthans et al., 2015). On the other hand, way-power is addressed as a pathway generation capacity to overcome obstacles. Activities are focused on learning to adopt an approach orientation rather than an avoidance orientation, obstacle planning and designing alternative pathways, and positive self-talk training. Participants usually work on their own the first time and then share their ideas and reflections through group activities. Practices such as real task-related role-play are also performed in hope development training.

Optimism development strategies are mainly based on the positive expectancy definition of this positive resource (Seligman, 2011). Optimism training is focused on learning to accept the past, appreciate the present, and be confident through opportunity-seeking for the future. Suggested activities are again self-talk training in positive and realistic expectations and reported activities such as the "best positive self" exercise (Sheldon & Lyubomirsky, 2006) and the ABCDE model (Seligman, 2011). This is a cognitive strategy to address life's bad circumstances, become aware of real Adversity, self-related Beliefs, and real Consequences, Dispute personal negative beliefs, and Energize proactive behaviour to overcome setbacks. Because PsyCap is a higher-order construct, optimism is also developed through hope, self-efficacy, and resilience training.

Self-efficacy development strategies are grounded in social cognitive theory (Bandura, 1997), which proposes self-efficacy development via five psychological processes: task mastery, vicarious learning and role modelling, social persuasion, positive feedback, and physiological and psychological arousal. Activities suggested in the PsyCap development literature are visualization (mastery-experiences) and communication skills exercises (positive feedback). Moreover, self-efficacy is trained through group interaction (social persuasion) and facilitator interaction (modelling).

Resilience development strategies are designed to obtain an ideal resilience process, characterized by having a realistic and objective perception of negative events and performing ideal reactions when setbacks arise. The interventions reviewed focused on three well-recognized elements of resilience: (1) increasing asset factors, (2) decreasing risk factors, and (3) enhancing an adaptive perception of influence processes when adverse events occur (Masten, 2001). Thus, suggested activities to increase asset factors included recognizing and increasing personal, group, and organizational resources, such as personal reflexion and communication skill exercises. Suggested activities to decrease risk factors were focused, on the one hand, on diminishing stressors through visualizing, anticipating, and planning obstacles in order to proactively avoid the risk of adversities. On the other hand, activities were focused on mobilizing the power of the individual's adaptation system through training in adaptive coping and problem-solving strategies, enhancing stress management skills, and practicing goal-setting exercises. Suggested activities for enhancing the adaptive perception of influence processes when adverse events occur involved cognitive reframing of adverse events (ABCDE model). In summary, the resilience development strategies were mostly designed to increase participants' level of control and pathway generation when obstacles arise and interfere with the desired goal.

3.1 *Micro-interventions' Efficacy*

PCI or similar PsyCap micro-interventions are conceptualized as a cost-effective tool for developing PsyCap. However, scholars and practitioners might wonder whether this procedure is really effective and worthwhile in terms of HRD investment (Luthans & Youssef-Morgan, 2017). According to our review, the average PsyCap increase after this type of intervention was 3.11%, ranging from -5.60% (decrease) to 7.50%, with the majority obtaining an increment of 2-4%. Moreover, some of these studies obtained an increase of about 5% (Dello Russo & Stoykova, 2015; Ertosun et al., 2015; Reichard et al., 2014), and one developed PsyCap by 7.50% (Reichard et al., 2014). The increase in PsyCap participants' levels was statistically significant,¹ except for the study conducted by Bauman (2014). Effect sizes reported were small (Cohen's *d* ranged from 0.19 to 0.40) (Bauman, 2014; Luthans, Avey, & Patera, 2008, 2010), which is consistent with effect sizes in the Positive Psychology interventions literature (see Bolier et al., 2013, for a positive interventions meta-

¹Some articles did not report information about significant differences.

analysis). However, two of the micro-interventions reviewed were not successful in increasing PsyCap participants' levels, which hardly increased (0.40%) or even decreased (-5.60%) (Griffith, 2010; Hodges, 2010). Despite of these unsuccessful results weren't statistically significant, it was argued that their results may be due to the so-called ceiling effect (i.e., participants' level scored near the upper limit at the pre-test so that developing PsyCap through the intervention was almost impossible) (Griffith, 2010). Furthermore, the qualitative data were successful in reporting changes in the variables of study (Hodges, 2010).

4 Developing PsyCap Through Broader Positive Psychology Interventions

As Table 1 shows, other interventions for developing PsyCap consist of general PPI (Williams et al., 2016) or specific PPI, such as strengths development (Bell, 2016; Meyers & Van Woerkom, 2017; Meyers et al., 2015), personal resources interventions (Van Wingerden et al., 2017), and positive focus training and constructive problem-solving exercises (Harty et al., 2016). Moreover, the PsyCap intervention literature also utilizes Organizational or Clinical Psychology procedures to enhance participants' PsyCap levels, such as Ellis Rational-Emotive Therapy (RET). For example, Demerouti et al. (2011) conducted a training program based on this psychotherapeutic approach with 36 Dutch employees, showing an increase in the four PsyCap dimensions after the training intervention. Unfortunately, there was no control group to compare training program effects. More recently, Manesh and Shibani (2018) conducted an Ellis intervention model to promote the psychological capital of 60 experts working in industrial centres in the Iran Khodro Diesel Company. They used a randomly controlled design with experimental and control groups. The experimental group received training in 10 two-hour sessions using the Ellis rational emotive behavioural method, and results supported the increase in PsyCap in these employees compared to the control group, even on the follow-up measures.

Other Work and Organizational psychology interventions, such as career development (Babinchak, 2012), job crafting intervention (Van Wingerden et al., 2017), job demands and resources intervention (Van Wingerden, 2016), coaching (Sherlock-Storey et al., 2013), savouring (Sytine, Britt, Sawhney, Wilson, & Keith, 2018), and personal branding interventions (Bell, 2016), appeared in the literature as PsyCap development strategies. Furthermore, researchers also designed PsyCap development strategies that combine PCI and specific positive contents. There are combinations of PCI and happiness (Hodges, 2010), stress management (Hargrove, 2012), health risk behaviour avoidance (Rew et al., 2017), and even cross-cultural interactions (Reichard et al., 2014). However, it is important to note that there is also research on PsyCap development based on traditional Psychology, either with traditional contents such as deficiency intervention (Meyers et al., 2015) or traditional procedures such as a reading intervention (Zhang et al., 2014).

Finally, regarding the interventions conducted in more than two sessions (42%), they obtained an average increase of 4.56%, ranging from 1.20 to 8.88%. Two of these lengthenedPsyCap interventions obtained an increase of about 8% (Babinchak, 2012; Demerouti et al., 2011). The rest of the studies ($N = 9$) reported an increase in participants' PsyCap levels of about 1, 2, or 4%. These interventions again obtained an increase in participants' PsyCap levels, and this increment was statistically significant² (except for Hargrove, 2012). Moreover, the Van Wingerden et al. (2016) study reported a large effect size of the intervention ($\eta^2p = .27$), even when other-rated evaluations were used ($d = 0.89$) (Demerouti et al., 2011).

5 Comparing Micro Versus Long-Term Interventions

Many of the studies reviewed (62%) reported between-groups comparisons. These comparisons were successful in a wide range of studies, both in micro- and long-term interventions. In the case of PCI or similarly successful comparison studies, Bauman (2014) and Luthans et al. (2014) obtained highly significant differences between the PCI condition and a control or waiting list condition in university students. In addition, Zhang et al. (2014) found that using a brief 30-min structured reading materials-based PsyCap intervention significantly increased participants' levels of PsyCap, compared to workers who did not participate. Highly significant results were also found in a long-term PsyCap intervention. Babinchak (2012) reported a significant development of students' PsyCap levels, compared to a waiting list, in his career development program consisting of 20 two-hour sessions in 10 weeks.

Moreover, some of the PsyCap micro-intervention literature did not find significant differences between participants and control groups or a WL (waiting list) condition (or did not report them). Some of this literature carried out PCI with university students and workers (Ertosun et al., 2015; Luthans, Avey, et al., 2006; Luthans et al., 2010; Luthans, Avey, & Patera, 2008), whereas three studies corresponded to extended PsyCap programs conducted at work, such as positive psychology training interventions (Williams et al., 2016), job crafting training (Van Wingerden et al., 2017), and PCI plus stress management (Hargrove, 2012). However, some of the reviewed research reported inconsistent results. Thus, on the one hand, we found some PCI or similar studies that reported unsatisfactory effects in group comparison results (Griffith, 2010; Hodges, 2010; Larson, 2004; O' Reilly, 2016). Methodological problems in conducting the interventions and ceiling effects due to high baseline levels of PsyCap were discussed by the authors as possible explanations for these negative results. On the other hand, a four-week health risk behaviour and PsyCap intervention did not report satisfactory results when comparing the two conditions (Rew et al., 2017). However, participants in this program were a population at social risk, and it must be kept in mind that PsyCap development was not originally designed for people with mental health problems.

²See Footnote 1.

5.1 *PsyCap Interventions' Durability*

Some of the reviewed studies (24%) reported follow-up measures designed to assess the durability of the PsyCap intervention effects. The results reported generally support the sustained effects of PsyCap micro and long-term interventions, measured in a range from 2 weeks to 6 months. Bauman (2014) measured PsyCap two weeks after a micro-intervention ended and found that participants' levels of PsyCap remained at the baseline level. However, the waiting list levels significantly decreased (5.8%, $p < .01$), and this difference between groups was highly significant ($p < .05$, $\eta^2 p = .18$), confirming the post-intervention results. Additionally, other researchers performed the follow-up measure one month after the last training session. For example, two micro-interventions showed maintenance of participants' increased PsyCap levels after the program ended (Dello Russo & Stoykova, 2015; Meyers & Van Woerkom, 2017). These results were confirmed in between comparisons. For instance, significant differences with small effect sizes were found between the experimental and WL conditions in two studies: Dello Russo and Stoykova (2015) ($p < .05$, $d = .34$) and Meyers and Van Woerkom (2017) ($p < .05$, $\eta^2 p = .05$). Additionally, at the one-month follow-up after a long-term intervention (Rew et al., 2017), PsyCap levels continued to increase in the experimental condition, but the WL also reported a similar increase.

Regarding longer follow-up research designs, Reichard et al. (2014) measured PsyCap between one and two months after their cross-cultural PsyCap micro-intervention ended. They found that participants' PsyCap levels remained higher than baseline ($p < .01$), even though the scores were lower than in the post measurement. The same results were found by Zhang et al. (2014) in a three-month follow-up; furthermore, they found large significant differences between participants in their short reading intervention and the WL ($p < .01$). Additionally, a six-month follow-up study of a ten-week program on constructive problem-solving reported higher levels of participants' PsyCap compared to baseline (Harty et al., 2016).

Finally, the study by Meyers et al. (2015) reported two different follow-up measures after the first and third month, where PsyCap levels of participants showed a "rollercoaster" pattern. They increased after the micro-intervention, started to decrease one month later, and finally reached the highest scores in the third month. These results are consistent with PsyCap's definition as a state-like and developable psychological resource (Luthans, Youssef, et al., 2007).

5.2 *PsyCap Interventions and Positive Organizational Outcomes*

Some of the reviewed PsyCap interventions were designed to enhance not only participants' PsyCap levels, but also positive organizational outcomes such as employee performance, either self-reported or manager-rated. In both micro and long-term interventions, in-role self-reported performance was positively devel-

oped. Van Wingerden et al. (2016) found a significant 1.75% increase in participants' performance compared to a WL ($p < .05$) after a five-week JD-R intervention. Zhang et al. (2014) conducted a short reading intervention and found a significant increase of 3.8% in participants' performance, compared to a WL ($p < .001$), which remained after three months ($p < .05$). Extending the self-reported measure of performance, some studies combined self-reported measures with manager-ratings, showing increases on both measures (Hodges, 2010; Luthans et al., 2010). Moreover, Luthans and his team reported a high and significant increase in participants' self-reported performance (10.89%, $p < .01$, $d = .96$) and a small and significant increase in manager-rated performance (6%, $p < .05$, $d = .35$).

In addition to job performance enhancement, three studies aimed to increase positive job attitudes. Demerouti et al. (2011) found a high significant increase in both self-reported (14.6%, $p < .001$, $d = 1.27$) and other-rated (9.55%, $p < .001$, $d = 0.85$) assertiveness after participating in a RET program. Reichard et al. (2014) reported a high significant increase in participants' cultural intelligence after a cross-cultural PsyCap micro-intervention (4.25%, $p < .001$), and this increase was maintained two months later (4%, $p < .01$). They also reported a decrease in levels of negative attitudes, such as ethnocentrism at work, at both the post (3.60%, $p < .001$) and follow-up measures (1.6%). Similar positive effects were found after a brief resilience coaching program that achieved a 10.93% ($p < .01$) increase in readiness for organizational change (Sherlock-Storey et al., 2013).

The PsyCap intervention literature also aims to improve employees' health and well-being at work. Regarding engagement, the literature reviewed reported inconsistent results. A longer, general positive resources intervention obtained a 5.83% increase in engagement, which was significantly different from a WL ($p < .01$) (Van Wingerden et al., 2016). However, two PsyCap micro-interventions did not obtain work engagement improvements, compared to the experimental condition and WL (Hodges, 2010; Meyers & Van Woerkom, 2017). Positive results have been found with job satisfaction (4% increase), positive emotions (10.6%, $p < .001$), and work happiness (1%) (Harty et al., 2016; Meyers & Van Woerkom, 2017; Reichard et al., 2014; Williams et al., 2016). Finally, Meyers et al. (2015) reported positive results on a more general well-being measure: personal growth initiative. It showed an increase of about 8.4% after a strengths intervention and about 4.4% after a deficiency-solving intervention. These results remained stable at 1- and 3-month follow-up measures.

Additionally, the literature review showed psychological variables and cognitive mechanisms related to the effectiveness of PsyCap interventions, such as participants' levels of training transfer motivation and perceptions of organizational virtues (Griffith, 2010; Williams et al., 2016). Moreover, participants reported higher levels of positive selective exposure (focus on positive stimuli) than WL members (5 and 0.18%, respectively) (Williams et al., 2016).

5.3 *Qualitative Data*

Some of the reviewed articles provided qualitative data to complement the quantitative information about the effectiveness of PsyCap interventions. Kalman and Summak (2017) conducted a qualitative study to explore the participants' evaluation of the experience of a PsyCap intervention. Content analysis of semi-structured interviews revealed participants' general satisfaction with the intervention implementation. They found the program to be useful for their personal and professional growth, and they described having higher levels of personal awareness, positive affect, and efficacy in problem-solving after the intervention. Moreover, some of the literature reviewed used a mixed methodology with quantitative and qualitative data. The qualitative data generally confirmed the PsyCap intervention effects found in quantitative research. This literature suggested that participants understood what PsyCap means, and they benefitted from the training transfer of the resources developed to their daily work lives. They reported positive changes at work, feeling more positive emotions and facing difficulties with a more positive approach by being more aware of their personal resources (Diedrich, 2015; Hargrove, 2012; Harty et al., 2016; Hodges, 2010; Van Wingerden et al., 2017).

6 **Transfer Training Approaches**

The main goal of POB training intervention is not only to obtain changes immediately after the intervention, but also to ensure that positive resources acquired during training will be useful in daily work life, in order to truly provide an organizational competitive edge (Nielsen, Randall, & Christensen, 2015). According to this proposal and related to the follow-up methodology explained above (Bauman, 2014; Dello Russo & Stoykova, 2015; Harty et al., 2016; Meyers & Van Woerkom, 2017; Meyers et al., 2015; Reichard et al., 2014; Zhang et al., 2014), some of the reviewed studies designed activities for training transfer. The most widely utilized strategy was planning short daily or weekly follow-up "homework" tasks to develop PsyCap in daily work life. These activities were performed between the intervention sessions (Meyers et al., 2015; Van Wingerden et al., 2017) or when all the sessions had ended (Hargrove, 2012; Hodges, 2010; Meyers & Van Woerkom, 2017), and they were based on reinforcing and practicing the PsyCap contents learned during the sessions (i.e. specific behaviours and cognitions). Electronic devices were utilized by some of these studies reviewed, such as a web-based "homework" format (Hargrove, 2012) or weekly phone reminders to participants (Rew et al., 2017).

Finally, one of the PsyCap intervention studies did not report post-intervention tasks, but rather pre-intervention activities. Sherlock-Storey et al. (2013) conducted a brief resilience coaching program with managers from a public organization. They required participants to complete some workbook activities related to the intervention before the first meeting with the coach assigned to them.

7 PsyCap Interventions and Cultural Differences

Research on PsyCap has considered the relevance of cultural differences in this construct. There are numerous studies on this topic, with aspects emerging such as: the evidence of cultural differences in Psycap (Dorling, 2017), measure sensitivity to cultural differences (López-Núñez, de Jesús, Viseu, & Santana-Cárdenas, 2018), implications of measuring cross-cultural PsyCap in employees who work internationally or within a diverse workplace (Dollwet & Reichard, 2014), and cultural boundary conditions of current tools employed for empirical research on PsyCap (Avey, 2014). Moreover, there are evidence for a cross-cultural nine-item PsyCap instrument with three factors, based on a large study with a sample of 56,363 employees from 12 national cultures (GLOBE project) (Wernsing, 2014), or even for the identification of cultural psychological capital as an important resource for expatriates (Avey, Nimnicht, & Pigeon, 2010; Yunlu & Clapp-Smith, 2014).

Regarding the PsyCap intervention literature, as we show in this chapter, there are studies on employees, supervisors, students, and unemployed people across different jobs, organizations and even countries. However, regarding countries, it is important to note that the majority of the research was conducted in Western contexts, for example, in the USA (53%) and Europe (34%, specifically in Bulgaria, Ireland, The Netherlands, Turkey, Spain, Sweden, and UK). However, there were only three studies in Asia (two in China and one in Iran), one in South America (Venezuela), one in Africa (South Africa), and one in Oceania (Australia). So far, there are many more studies in Western countries on PsyCap interventions that could be replicated in other Eastern cultures and countries in order to validate past results.

Cultural and societal settings are important factors to consider in POB and HRD interventions (Luthans & Youssef-Morgan, 2017). For example, this is illustrated by the PsyCap intervention conducted by Zhang et al. (2014) in an Eastern context. These researchers designed a structured reading materials-based PsyCap intervention in which participants read a text about psychological capital individually and silently. The material was designed according to the PCI model, and participants had 30 min to carefully read it and comprehend its meaning. At the post-test, participants' PsyCap levels had significantly increased, compared to workers who did not participate, and this increase remained stable after three months. Moreover, this short reading intervention produced a significant 3.8% increase in participants' performance, compared to those who did not participate, which also remained stable after three months. However, all of the individual PsyCap development studies conducted in Western contexts were computer- or web-based interventions, which are suitable for the individual approach due to their didactic characteristics (Griffith, 2010; Hargrove, 2012; Luthans, Avey, & Patera, 2008). Thus, it is worth wondering whether it would be possible to conduct this structured reading materials-based PsyCap intervention in Western contexts, where HRD scholars are concerned with engaging participants in PsyCap interventions and have suggested using gamification strategies supported by hand held devices, video games, or smartphone apps, as a new type of PsyCap development strategies (Luthans & Youssef-Morgan, 2017).

Finally, the applicability of PsyCap development has extended into the domain of cross-cultural interactions. Reichard et al. (2014) conducted a PsyCap intervention designed to increase cross-cultural PsyCap and cultural intelligence and decrease ethnocentrism. They reported a highly significant increase in participants' cultural intelligence after the training that remained two months later. They also reported a decrease in levels of negative attitudes, such as ethnocentrism at work, at both the post and follow-up measures. As the authors of this study suggest, the findings from this study provide important practical applications for the contemporary global work setting, which is leading most societies to become increasingly more multicultural and diverse.

In summary, PsyCap interventions emerge as a social and development strategy to reinforce social cohesion and inclusion in organizations and society at large. From our perspective, effectiveness research on PsyCap interventions from a cross-cultural viewpoint helps to advance the scientific knowledge on this topic.

8 Limitations and Future Directions

Our study has limitations what could be solved in future research. First, inclusion criteria for this review could be put apart and no reviewed some studies. Future studies could include more papers and research with inclusion criteria broader. Second, although the studies reviewed found increases in participants' PsyCap levels after the interventions that were also statistically significant, with a broad range of effect sizes, further research should investigate PsyCap interventions by improving statistical power and significance. Two strategies could be useful: using larger sample sizes and using different methodologies for the traditional analysis of variance, such as longitudinal growth models (Moskowitz et al., 2017).

Results obtained did not lead to robust conclusions about the sustainability of the effects, and there were large discrepancies between the studies' follow-up measures, ranging from 2 weeks to 6 months. Moreover, researchers are interested in determining the sustainability of PsyCap development through longitudinal research designs and analyses, suggesting the need for future follow-up studies with measurements after 1, 3, and/or 6 months, or even after a whole year (Dello Russo & Stoykova, 2015; Meyers & Van Woerkom, 2017; O' Reilly, 2016; Rew et al., 2017; Yuan, Liu, Tang, & Zhang, 2014). Future research on sustaining PsyCap intervention effects might focus on training transfer, testing strategies such as using positive resources in the workplace and receiving reminders from HRD practitioners.

Finally, for greater external validity of the PsyCap intervention research, we suggest further developing research on cultural differences, conducting comparative studies and extending the literature to Eastern contexts. PsyCap development is also relevant for cross-cultural interactions, and so we think further research should investigate whether PsyCap interventions might encourage the construction of more inclusive and respectful societies, contributing to avoiding social problems such as racism or social exclusion and seeking a more diverse world.

9 Conclusions

Based on our PsyCap review, we can conclude that PsyCap is a promising developable psychological resource related to positive organizational outcomes. Specifically, we can conclude the following:

- PsyCap interventions seem to be a promising area for researchers and practitioners to increase wellbeing and performance in organizations, as well as other positive attitudes and behaviours.
- Many of the studies are micro-interventions with 1 or 2 sessions, mainly using the Psychological Capital Intervention Model (PCI). Broader PPIs to develop PsyCap also exist, such as focusing on strengths, personal resources, Ellis RET therapy, positive focus and constructive problem-solving activities, career development, job crafting, savouring, and so on. Both types of PsyCap interventions had positive effects on PsyCap, but some inconsistencies were also noted. Additionally, in many of these studies, the authors did not report whether there were significant differences between experimental and control/waiting list groups, and so it is difficult to generalize the results.
- Effects durability: results generally support the long-term effects of PsyCap micro and long-term interventions, measured in a range from 2 weeks to 6 months.
- PsyCap interventions were effective in increasing not only baseline levels of PsyCap, but also positive organizational outcomes such as job performance, job attitudes (i.e., assertiveness, cultural intelligence, and change readiness), and employee well-being, as well as training transfer motivation and organizational virtues perception.
- It is relevant to use a combination of quantitative and qualitative methodologies to test the PsyCap intervention effects.
- In order to increase the effectiveness of PsyCap interventions, it is important to focus on strategies to extend transference of these effects, such as follow-up homework.
- Further studies on PsyCap Interventions should use a more sophisticated methodology, improving statistical power and significance, i.e., using larger sample sizes and longitudinal growth models.
- Most of the PsyCap interventions were conducted in western countries such as the USA and various European countries (87% of the reviewed studies), and so many of the conclusions of these interventions can only be generalized to western employees and organizations. In this area, we recommend further developing research on cultural differences, conducting comparative studies, and extending the literature to Eastern contexts.

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Job Crafting Interventions: Do They Work and Why?



Evangelia Demerouti, Maria C. W. Peeters and Machteld van den Heuvel

Abstract The majority of job redesign initiatives follow a ‘top-down’ approach, in which management optimizes job demands and resources to obtain successful organizational outcomes. However, these approaches are not always effective. Little is known about the effectiveness of interventions, where employees proactively optimize their work environment in order to improve their well-being, motivation, and performance. One such job redesign strategy is job crafting. Job crafting is proactive behaviour that enables individuals to fit the job characteristics to their needs and preferences by seeking resources, seeking challenges and reducing demands. The first aim of this chapter is to describe the design of the job crafting intervention, which integrates a two-day crafting workshop intervention, followed by 3 or 4 weekly self-set crafting assignments and a reflection session. The second aim of this chapter is to present theoretical explanations regarding how the job crafting intervention leads to desired changes for both employees and organisations. We base our argumentation on social cognitive theory, experiential learning theory and situated experiential learning narratives. The final aim is to present an overview of the existing evidence regarding the effectiveness of the intervention. It is concluded that the job crafting intervention is a promising tool to help organisations to support and maintain employee well-being and (to a somewhat lesser extent) performance, even during times of organizational change. The chapter ends with several suggestions for future research and practice.

Keywords Job crafting intervention · Performance · Well-being

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1 Introduction

The vast majority of job redesign studies have followed a ‘top-down’ approach (e.g., introducing autonomous work groups or job enrichment interventions) in which management optimizes job demands and resources to obtain successful organisational outcomes (Briner & Reynolds, 1999; Nielsen, 2013). However, only 30% of ‘top-down’ job redesign interventions are effective in either improving health and well-being or performance, but not both (Balogun & Hope Hailey, 2004). As the complexity of contemporary jobs increases, job redesign interventions with more participatory approaches are required (Nielsen, Randall, Holten, & Rial-Gonzales, 2010). In addition, interventions where employees learn how to take initiative to shape their own job design and work contexts (Grant & Parker, 2009), are becoming increasingly important for organizational success and can form part of such participatory approaches. Organisational processes seem too complex to be captured by strict ‘traditional’ job redesign frameworks only (Briner & Reynolds, 1999), and more positive, proactive interventions ‘that work’ are needed in all work domains (Karanika-Murray, Biron, & Cooper, 2012; Meyers, van Woerkom, & Bakker, 2013).

By emphasising active collaboration between employees and management during change processes, participatory approaches have many benefits. They offer individuals more job control and take into account individuals’ active adjustments to their work environment (Nielsen, 2013). Most importantly, they view workers themselves as ‘the experts’ of their jobs, since they know their own job best. Therefore, it is crucial that intervention design and implementation make use of that expert knowledge (Dollard, Le Blanc, & Cotton, 2008). However, Daniels, Gedikli, Watson, Semkina, and Vaughn (2017) concluded after a systematic review of intervention studies that “participatory approaches to improve job design have mixed effects on well-being, job design and performance, including adverse outcomes in some circumstances” (p. 1184). This happened despite the fact that the interventions used randomised control trials and large sample sizes. The authors state that process analysis could not uncover whether implementation issues were responsible for null or adverse effects.

In this chapter we focus on interventions that have the potential to be effective in various work contexts. The Job Demands-Resources (JD-R) theory (Bakker & Demerouti, 2017; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) provides a useful framework to explore how individuals can proactively ‘fit’ their work environment to their personal skills, needs, and abilities as it stresses the role of job demands and job resources (Tims, Bakker, & Derks, 2012). In detail, the JD-R theory considers individuals as active agents in the ever-changing work context (Demerouti, 2014), who can be motivated to optimize their job demands (i.e., aspects of the job that require effort) and resources (i.e. aspects of the job that facilitate effective functioning) to achieve their work goals. Teaching employees how to adapt demands and resources can have a positive impact on their work-related well-being, motivation, and performance as they can face future job challenges with more control (Seligman, Steen, Park, & Peterson, 2005). One job redesign strategy that gives individuals more

control in changing their work environment is ‘job crafting’, because it enables individuals to shape the job to their own needs and preferences (Tims & Bakker, 2010). Because individuals adjust the task, relational, or cognitive boundaries of their work when they craft their job, the levels of work engagement and work meaning are also expected to increase (Demerouti, 2014; Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001).

The goals of this chapter are (1) to explain what is meant by job crafting as a tool for individual job redesign, (2) to describe an intervention aimed at stimulating job crafting behaviour, work-related well-being and employee work performance, from now on called ‘the job crafting intervention’ (3) to explain how the job crafting intervention leads to desired changes for both employees and organisations, (4) to present an overview of the existing evidence regarding the effectiveness of the intervention and (5) to conclude with several suggestions for future research.

2 Job Crafting as a Tool for Individual Job Redesign

Job crafting is defined as the changes individuals make in their task or relational boundaries, as well as cognitive changes in perceptions of their work, in order to find more meaning in their job (Wrzesniewski & Dutton, 2001). Task-related changes refer to adaptations to the form, scope or number of job tasks, relational changes refer to adaptations to whom one interacts with or how, and cognitive changes refer to reframing how one perceives the job. Wrzesniewski and Dutton (2001) define job crafting as daily behaviour rather than long-term changes. In order to capture the daily changes in job characteristics that employees may pursue, some scholars (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012; Tims & Bakker, 2010) theoretically frame job crafting in the JD–R theory (Bakker & Demerouti, 2007; Demerouti et al., 2001). Job crafting is then conceptualized as the changes employees make in their job to balance their job demands and job resources with their personal abilities and needs (cf., Tims & Bakker, 2010). Job demands refer to aspects of the job that require effort and therefore are associated with psychophysiological costs, whereas job resources refer to aspects of the job that facilitate dealing with job demands, goal accomplishment, and growth (Demerouti et al., 2001).

Petrou et al. (2012) defined job crafting as proactive employee behaviour consisting of seeking resources, seeking challenges, and reducing demands. Specifically, *seeking resources* (e.g., performance feedback, advice from colleagues, support from managers, maximizing job autonomy) represents a strategy to deal with job demands and to achieve goals or to complete tasks. This is underpinned by Hobfoll’s (2001) suggestion that a basic human motivation is directed towards the accumulation of resources, which are important for the protection of other valued resources. *Seeking challenges* may include behaviours such as seeking new tasks at work or asking for more responsibilities once assigned tasks have been finished. Csikszentmihalyi and Nakamura (1989) argue that when individuals engage in activities offering opportunities for growth, they seek challenges to maintain motivation and avoid boredom.

While these *expansion-oriented* forms of job crafting are aimed at accumulating external and internal resources that enable employees to grow and find meaning (i.e., seeking resources, seeking challenges), *reduction-oriented* job crafting (Demerouti & Peeters, 2018) refers to behaviours that are targeted towards minimizing or optimizing the emotionally, mentally, or physically demanding aspects of one's job (i.e., reducing or optimizing demands). Reducing job demands might be a strategy to protect health from the negative impact of excessively high demands. Training people to craft their job may enhance feelings of self-efficacy and control, because the training integrates principles to build self-efficacy (i.e., role modelling, verbal persuasion and mastery experiences) and individuals are in charge of any changes that occur (Van den Heuvel, Demerouti, & Peeters, 2015). Next, we discuss the design and basic principles of our job crafting training.

3 Description of the Job Crafting Intervention

In 2015, Van den Heuvel, Demerouti and Peeters were among the first to develop and test a job crafting intervention. The intervention aims to increase employees' awareness regarding the ways in which they can adapt their job to their own needs in order to experience more joy, engagement, and meaning in their work. In line with the JD-R conceptualisation of job crafting, the adjustments refer to specific job demands and job and personal resources. Participants learn to identify and target job demands and resources that are unique to their work environment. The objective of the job crafting intervention is to increase participants' motivation and engagement via two different routes: (1) through promoting self-directed behaviour of employees and (2) through strengthening personal resources. Previous research showed that it is possible to facilitate self-directed behaviour through interventions (e.g., Demerouti, van Eeuwijk, Snelder, & Wild, 2011).

The job crafting intervention consists of a number of phases (see Fig. 1): (1) Conducting interviews with employees and other relevant stakeholders such as supervisors/ managers, to get a thorough understanding of the type of work and the context; (2) A job crafting workshop; (3) weekly job crafting 'experiments' in the everyday reality of employees' work setting, using a diary or logbook; and (4) a reflection session in which participants reflect on the entire job crafting process.

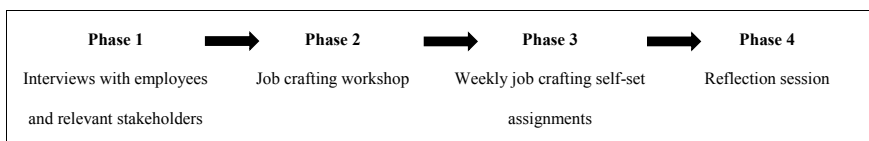


Fig. 1 Timeline of the job crafting intervention

Specifically, in the first phase, and in order to make sure the intervention covered the needs of employees, interviews are conducted with potential participants prior to the intervention. The interviews generally focus on the tasks of the employees that will potentially attend the training as well as the relevant demands (e.g., ‘what are hindering aspects in your work contexts?’; ‘what positive challenges do you perceive at work?’) and resources (e.g., ‘what helps you to achieve your work-related goals?’). Moreover, during the interviews, we generally discuss what good performance looks like in their role and what may hinder them from achieving this. Additionally, we explore examples of their past crafting behavior. During the training, this input is used to inspire and set examples and to customize the intervention.

The second phase of the intervention concerns the job crafting workshop consisting of a full-day or half-day session in small groups of employees (up to a maximum of 20). First, through various explanations and exercises the employees get to know the JD-R model. The exercises are designed to build awareness of employees’ working environment according to the JD-R principles. A simple job analysis is conducted during which participants make an overview of their most important tasks and sub-tasks. Consequently, they focus on job demands and job resources that are relevant for their job. Next, the theory on job crafting is explained and participants are asked to identify a work characteristic (demand or resource) or work situation that they would like to change via crafting. They are asked to share these situations as a case study. These personal stories are then discussed in sub-groups to inspire and help each other to find ways of crafting the situation. This approach helps participants to learn from each other’s ideas, which is useful for drawing up their crafting plan in a later stage of the training. The trainers walk around during the exercises assisting the participants. The last part of the workshop is dedicated to preparing a so-called ‘Personal Crafting Plan’ (PCP). Participants again focus on their own work environment and identify one or more work characteristics (demands or resources) or work situation that they would like to change using crafting. The PCP consists of specific crafting actions that the participants undertake for a period of three or four weeks depending on the study context (see Table 1 for some examples). Employees are asked to write down crafting goals for the weeks following the workshop in a small booklet (a diary) and to keep reports of their crafting activities of that week. The goals have to be SMART (Specific, Measurable, Attainable, Realistic and Timely) and participants are encouraged to transfer their goals to their diaries during the training.

During the third phase, the intervention continues with weekly job crafting ‘experiments’ in the everyday reality of employees’ work setting. In the job crafting intervention of Van den Heuvel et al. (2015), participants were asked to perform the self-set job crafting actions in the following order per week: increase job resources (i.e., search for feedback and for social support), decrease job demands (i.e., reduce physical or cognitive demands), seek job challenges (i.e., new tasks and responsibilities), and finally again increase job resources (i.e., search for autonomy, participation in decision making, and developmental possibilities). This was based on the idea that boosting the presence of resources may be easier than working on demands, and also it may help to generate the necessary energy to work on demands in the two ‘middle’

Table 1 Examples of crafting strategies to be customized by participants

Seeking resources	Seeking challenges	Reducing demands
<ul style="list-style-type: none"> • Look for feedback • Look for support • Use your autonomy • Participation in works council • Look for learning opportunities • Decoration of workplace • Compliments folder in outlook • Invest in relationships 	<ul style="list-style-type: none"> • Use your talent/interests (sports, language knowledge) • Coaching/mentoring • Strategic thinking • New projects 	<ul style="list-style-type: none"> • Simplify tasks • Work more efficiently/plan/time management • Delegate tasks • Check e-mail twice a day • Make clear agreements • Look for quiet space

weeks. Indeed, in the process evaluation of this first intervention, it was observed that reducing demands is at times difficult for employees, since not all demands are within their span of control. Later intervention studies have sometimes chosen a different order for the PCP content, depending on the particular needs of the organizations involved. For instance, in the study of Gordon et al. (2018) participants were asked to first seek resources (week 1) then to seek challenges (week 2) and finally to reduce demands (week 3). In the study of Demerouti, Xanthopoulou, Petrou, and Karagkounis (2017) increasing demands (seeking challenges) was not included and the focus was more on resources. During the first week, participants worked on increasing job resources, during the second week they focused on reducing job demands, and during the third week the goal was again to increase resources. In this way, they started and ended with a simpler assignment, as during interviews it became clear that employees found it easier to seek resources than to reduce demands. However, based on the limited existing evidence, no conclusions can be drawn regarding which sequence of job crafting assignments may work best in a certain context.

In the last phase, the intervention concludes with a reflection session. During this half-day, participants discuss successes, problems, solutions, and next steps. In this way, employees learn from each other's experiences during the four weeks of experimenting with job crafting. Moreover, attention is given to how employees can overcome future, potential obstacles that hinder their job crafting attempts.

4 The Job Crafting Intervention Versus Workplace Interventions

Where does the job crafting intervention fit in theoretically when zooming out and focusing on the broader workplace interventions literature? Numerous interventions are available to increase motivation and well-being at work. Workplace interventions aimed at preventing stress at work or increasing motivation and well-being at

work can roughly be divided into three categories: (1) primary interventions; i.e., interventions aimed at actively eliminating or tackling the stressors at work (e.g., redesigning the workplace, changing time schedules, or changing tasks initiated by the supervisor), (2) secondary interventions; interventions that boost resilience by teaching employees how to deal with stressors at work (e.g., stress management training, relaxation techniques, cognitive strategies or coping-methods) and (3) tertiary interventions that focus on treatment of employees with serious stress-related health problems (Kompier & Cooper, 1999). Tertiary interventions are less relevant for the purpose of this chapter, as the current job crafting intervention is not developed for treating employees with (mental) health problems. A further distinction is that interventions can be focused on the individual or on the organization as a whole (cf. Semmer, 2006).

Job crafting as a proactive form of behaviour can express itself in both primary as well as secondary actions (Van den Heuvel et al., 2015). Job crafting behaviour tends to have a primary focus, in that employees proactively make changes to optimize their work environment (without having been taught to do so). The job crafting intervention in the form of a training course can be described as a secondary intervention focused on teaching the individual to initiate self-set actions that can be both secondary and/or primary in nature (Van den Heuvel et al., 2015). Job crafting actions can include elements that re-design the work environment to eliminate stressors (primary focus). For example, when an employee delegates certain highly demanding tasks, or exchanges stressful tasks for other more enjoyable tasks. As an outcome of the job crafting intervention some employees decided to change jobs or to apply for a transfer within their organization. Job crafting behaviours can also focus on activities that gear the employee to build resilience, for example, building support-networks, taking regular breaks or asking for feedback. These actions may be classified as secondary since they help to deal with stressors, but will not necessarily eliminate the stressor or structurally change the workload. We think that because job crafting may include both primary and secondary actions, it makes it an effective strategy to achieve positive outcomes.

4.1 How Does the Job Crafting Intervention Lead to Desired Changes?

From the description of the intervention programme, it can be inferred that the intervention focuses on achieving individual change at two levels: (1) cognitions and (2) behaviour. To achieve a change in cognitions, employees are encouraged to reflect on their work situation and to recognize their work tasks and aspects of their job that they would like to change. Changing behaviour is reflected in the training through familiarisation with the theory on job crafting and the JD-R model (verbal persuasion and persuasive suggestions), role-modelling (vicarious learning), as well as goal set-

ting, sharing, shaping, and positive feedback (during the training and the reflection session) to enforce new behaviour (Bandura, Adams, & Beyer, 1977).

The core elements of the intervention are based on social cognitive theory (Bandura, 1989), which suggests that the interaction between person, behaviour, and environment is critical for planning behaviour change interventions, underscoring that people are not passive recipients of an intervention. The theory states that learning occurs in a social context (Bandura, 1989) and emphasises the human ability to self-regulate, via self-monitoring (i.e., observation of one's own behaviour), goal-setting, feedback, and the enlistment of social support (Bandura, 1997). Accordingly, successful behaviour change is achieved through mastery experiences, triggered by vicarious learning and imagery, verbal persuasion from others, and adjustments to physiological and emotional states. Moreover, goal-setting, persistence, and focused selection of activities and environments are also significant for learning and behaviour change. During the training, employees challenge assumptions regarding their work characteristics, via group discussions and the sharing of success stories. At the end of the training, employees draw up a PCP for a number of weeks directly after the training. The plan stimulates effective job crafting behaviour, because it concerns self-chosen job crafting actions, that employees believe will help them adapt better at work and to experience more work enjoyment. These PCP goals represent manageable units that enhance efficacy beliefs (Luthans, Avey, Avolio, & Peterson, 2010).

In addition to focussing on insights of social cognitive theory, the intervention uses elements of experiential learning theory to increase job crafting behaviour (Kolb, Boyatzis, & Mainemelis, 2001). That is, the intervention highlights participants' past experiences with job crafting to facilitate learning and actual behavioural change. Past experiences are important in learning new behaviour according to the experiential learning theory, which proposes that knowledge is created by transforming past experiences (Kolb et al., 2001). Therefore, the intervention incorporates the four stages that are important in the learning process. That is, learning starts with concrete experiences with the behaviour, followed by reflection on this behaviour (Sumsion & Fleet, 1996). After reflection, individuals are in the third stage and have abstract ideas about the new behaviour and how they could benefit from implementing it (Kolb et al., 2001; Sumsion & Fleet, 1996). During this stage it is important to stress the value of behaviour to increase individual's willingness to invest energy and time in implementing the behaviour (Nielsen, Randall, Brenner, & Albertsen, 2009). During the last stage individuals actively test the behaviour to create new experiences (Kolb et al., 2001). In order to stimulate the implementation process, implementation intentions and goal-setting is extremely important (Arneson & Ekberg, 2005; Gollwitzer & Sheeran, 2006). The above-mentioned theoretical behaviour change methods are incorporated in our intervention (for an overview see Table 2), to encourage employees to actively apply all three job crafting dimensions and to stimulate behavioural change.

In order to further improve the original intervention of Van den Heuvel et al. (2015), Gordon et al. (2018) added an exercise, based on the 'thinking-in-action approach' (Benner, Benner, Hooper-Kyriakidis, Kyriakidis, & Stannard,

Table 2 Overview of the job crafting intervention according to Dubbelt, Demerouti, and Rispens (submitted)

Steps	Aspects of the intervention that reflect the experiential learning theory
Step 1: Concrete experiences	<ul style="list-style-type: none"> • Providing real-life examples from interviews conducted with employees • Every employee has at least some experience with job crafting (Lyons, 2008) by doing a Situated Learning Narratives (SELN; Benner, 1984) exercise, we encourage people to think about positive past behaviour in problem solving situations
Step 2: Reflection	<ul style="list-style-type: none"> • SELN exercise further encourages employees to think about how that behaviour may be helpful in attaining future goals. In a group context, they stimulate others' thinking about problem solving behaviours
Step 3: Abstract concepts	<ul style="list-style-type: none"> • Demonstrating the value of job crafting for work-related outcomes such as work engagement (Schaufeli, Salanova, González-Romá, & Bakker, 2002), via the Job Demands-Resources model (Bakker & Demerouti, 2007)
Step 4: Creating new experiences	<ul style="list-style-type: none"> • Setting three specific, measurable, acceptable, realistic, and time-bound (SMART) goals (Doran, 1981) for the three/four weeks after the intervention (e.g. week 1: seeking resources, week 2: decreasing demands, week 3: seeking challenges). By setting three goals, employees can practice all three job crafting strategies • Weekly reminders are sent to encourage goal achievement (e.g., Fjeldsoe, Marshall, & Miller, 2009) • The trainer encourages participants to think about possible facilitating factors and obstacles for their goals. This way, employees can think ahead about dealing with obstacles and how to optimally use facilitators

2011; Benner, 1984). Their intervention was set in a healthcare context and this approach integrates nursing theory into practice, with the use of experiential learning in the form of narratives to help build expert clinical judgment (i.e., Situated Experiential Learning Narratives; SELN). The SELN helps to stimulate participants' actualization and understanding of how their work behaviours could be viewed as a form of job crafting. Stimulating reflection can help individuals to bridge the gap between positive past behavioural and future goals (i.e., stimulate actualization of job crafting) and increase understanding of what helps them to proactively adjust their jobs (Benner, 1984). Simulated patient encounters and experiential narratives are being successfully used in medical schools and nursing to improve problem understanding, clinical forethought, critical and creative thinking and skilled know-how regarding patient health care (Benner et al., 2011).

Taken together, the job crafting intervention is based on insights of social cognitive theory (Bandura, 1989), experiential learning theory (Kolb et al., 2001) and situated experiential learning narratives (Benner, 1984). It builds on past experiences, stimu-

lates reflection, learning and goal-setting and creates success experiences by teaching people how they can be co-creators of their own job. It is expected to work because it teaches individuals how to adjust their work in small and effective ways such that it fits to their preferences. Put differently, job crafting enhances the person—environment fit (Lu, Wang, Lu, Du, & Bakker, 2014). Due to top-down interventions, organizational changes or rigid job descriptions, the P-E fit of employees can be endangered, possibly leading to a less optimal fit and sub-optimal well-being and performance (Caldwell, Herold, & Fedor, 2004). As job crafting concerns changes that individuals make to their tasks, demands and resources with the aim to align those elements to their preferences, they can potentially restore their P-E fit, assuming they are successful in executing their crafting actions.

4.2 To What Extent Is the Job Crafting Intervention Effective?

The job crafting intervention as described above was originally developed and tested by Van den Heuvel et al. (2015) (study 1) and has served as a blueprint for implementations in many different kinds of organizations and for slightly different purposes. In this section, we discuss the studies that are based on the original intervention of Van den Heuvel et al. (2015) and describe how the intervention was adapted to the specific target group, what the specific aim of the intervention was and what the effects of the intervention were. All these interventions have in common that they use the same methodology and are primarily aimed at training employees how to craft their job demands and job and personal resources effectively. We excluded job crafting interventions that were designed on the basis of different guidelines, such as the interventions of Van Wingerden, Bakker, and Derks (2016). The latter were based on the Michigan Job Crafting Exercise (JCE) (Berg, Dutton, Wrzesniewski, & Baker, 2008). Also, interventions that explicitly trained other aspects than job crafting itself, such as enhancing personal resources (Van Wingerden, Bakker, & Derks, 2017) or strength and interests crafting (Kooij, van Woerkom, Wilkenloh, Dorenbosch, & Denissen, 2017) were excluded. Table 3 presents an overview of the studies that will be discussed in this section.

All studies presented in Table 3 had a quasi-experimental design (including an intervention group and a control group) with a pre- and post-test. The pre-test occurred just before the intervention started whereas the post-test was taken up to four weeks after the completion of the job crafting assignments. In general, individuals in the intervention group participated voluntarily, whereas the control group was not selected randomly in all cases. For measuring job crafting, most studies used the scale of Petrou et al. (2012). In the study of Demerouti, Xanthopoulou, et al. (2017) (study 5) the seeking resources and reducing demands scale were each supplemented with 1 item ('I made sure I had enough variety in my work activities' and 'I tried to set less strict deadlines for myself', respectively), because these behaviours were

Table 3 Overview of studies on the job crafting intervention

Study	Occupational group	Effect on job crafting	Effect on job resources	Effect on personal resources	Effect on well-being	Effect on performance
1. Van den Heuvel, Demerouti, and Peeters (2012), Van den Heuvel et al. (2015)	39 employees of police district	NS	Opportunities for development LMX	Self-efficacy	Negative affect Positive affect	NI
2. Gordon, Demerouti, and Le Blanc (2018)	119 medical specialists	Seeking challenges Reducing demands	NI	NI	Engagement Exhaustion Health	Adaptive Task Contextual
3. Gordon et al. (2018)	58 nurses	Seeking resources Reducing demands	NI	NI	Engagement Exhaustion	Adaptive Task (NS) Contextual (NS) Objective performance (NS)
4. Dubbelt et al. (submitted)	60 university employees	Seeking resources Reducing demands			Engagement	Task performance (NS) Career satisfaction (NS)
5. Demerouti, Xanthopoulou, et al. (2017)	72 municipality workers	Reducing demands	NI	NI	Positive affect Openness to change	Adaptive performance (NS)

(continued)

Table 3 (continued)

Study	Occupational group	Effect on job crafting	Effect on job resources	Effect on personal resources	Effect on well-being	Effect on performance
6. Huisshof et al. (2019)	74 unemployment agency employees	Reducing (hindering) demands	NI	NI	Engagement Empowerment	Service-oriented performance (NS) Empowering service (NS) Customer-rated empowering service (3 month) (NS) Customer-rated empowering service (1 year) Objective performance (8 month) (NS)
7. Peeters, Van den Heuvel, and Demerouti (2017)	83 civil servants	Seeking resources Seeking challenges Reducing demands Cognitive crafting	Social support colleagues (NS) Autonomy Opportunities for development	Awareness Self-efficacy (NS)	Engagement Positive affect Negative affect	NI

addressed as important job crafting examples by the respondents. Hulshof, Demerouti, and Le Blanc (2019) (study 6) used the job crafting scale of Tims et al. (2012) consisting of four instead of three dimensions as is the case with the scale of Petrou et al. (2012).

Van den Heuvel et al. (2015) (study 1) tested the job crafting intervention among 39 employees of a police district, while the control group consisted of 47 police employees from different districts. The intervention had a positive effect on two job resources, namely leader-member exchange (LMX) and work-related opportunities for development. These were higher at time 2 compared to time 1, while for the control group, no change was found. Besides job resources, self-efficacy as a personal resource, also increased in the training group (and not in the control group). Finally, participants reported more positive affect and less negative affect after the training than before, indicating that the job crafting training not only influenced the job resources but also employee well-being. Interestingly, no effect of the intervention was found on the job crafting dimensions and all reported effects were detected with univariate (t-tests) rather than multi-variate tests (repeated measures ANOVAs). This may be due to the small sample size and limited statistical power. An interesting addition; this study also included weekly measures of levels of crafting behaviours and resulting outcomes. Although the sample size was very small, some results were found in terms of fluctuating levels of job crafting and its outcomes. During the weeks when participants experimented with 'seeking resources', results showed higher levels of job resources. Also, more positive affect was reported in the weeks when participants worked on seeking resources and reducing demands. No effects were found of weekly job crafting behaviours on weekly self-efficacy and weekly negative affect.

Gordon et al. (2018) (studies 2 and 3) applied a modified version of Van den Heuvel et al.'s (2015) intervention in order to increase individuals' understanding and application of job crafting behaviours into their daily work. Specifically, their intervention was shorter (i.e., including a three-hour instead of an eight-hour workshop), had less demands/requirements (e.g., participants had to complete fewer assignments), and built on participants' experiential learning experiences. Gordon et al. (2018) tested the impact of the job crafting intervention on employee well-being and job performance by using a group of Dutch medical specialists (N = 119) and a group of nurses (N = 58), who were confronted with changes in their work tasks. The job crafting intervention had positive effects on well-being (i.e., work engagement, health, and reduced exhaustion), and job performance (i.e., adaptive, task, contextual) for both intervention groups. Importantly, whereas Van den Heuvel et al. (2015) (study 1) found no effect of the intervention on the job crafting scores, Gordon et al. (2018) did find effects of the intervention on the job crafting scores, which explained the effects of the intervention on the well-being and job performance outcomes. More specifically, results reveal that the intervention positively related to some of the changes in individuals' job crafting behaviours (seeking challenges for medical specialists and seeking resources for nurses), which then related significantly and positively to their work engagement (for both groups) and performance (only for medical specialists).

Dubbelt et al. (in press) (study 4) examined whether job crafting was trainable among university employees (i.e., intervention group, $N = 60$, and control group, $N = 59$). The intervention was successful in increasing participants' seeking resources and decreasing demands behaviour, as well as work engagement. In contrast, the authors did not find a direct effect of the intervention on task performance and career satisfaction. Instead, they found that the intervention affected task performance and career satisfaction via the seeking resources behaviour of employees. In addition, they found that seeking resources behaviour mediated the relationship between the intervention and work engagement. By increasing seeking resources behaviour, the intervention indirectly affected participants' work engagement, task performance, and career satisfaction.

Demerouti, Xanthopoulou, et al. (2017) (study 5) evaluated the effects of a job crafting intervention designed to help Greek employees deal with organizational changes due to austerity measures and increase their well-being, adaptive performance and openness to such changes by stimulating job crafting behaviours. The intervention was conducted among 72 employees of a municipality in Greece. It was found that participants in the intervention group reported higher levels of reducing demands, as well as higher positive affect and openness to change. However, both the experimental and control group showed a significant decrease in adaptive performance over time, which may be explained by the unfavourable austerity context. Whereas seeking resources did not increase in the intervention group, it was found that *changes* in seeking resources related positively to changes in positive affect, openness to change and adaptive performance. Finally, whereas the effect of the intervention on adaptive performance was only explained by reducing demands, this indirect effect was not in line with expectations, since increases in reducing demands in the intervention (vs. the control) group, related negatively to adaptive performance. In additional analyses and in line with Oldham and Hackman (2010), Demerouti, Xanthopoulou, et al. (2017) found that participation in the intervention increased openness to change and adaptive performance because individuals felt more positive affect. These results support the central conclusion that stimulating employees to craft their job in general, relates to improvements in their well-being, openness to change and adaptation over time, but not always due to increases in job crafting behaviour.

Hulshof, Demerouti and Le Blanc (2019) (study 6) evaluated the effects of a job crafting intervention, aimed at preventing decreases in employee well-being and performance due to organizational changes. Seventy-four employees of a Dutch unemployment agency participated in the intervention. Whereas the multivariate analysis failed to result in significant effects, the univariate analysis detected a significant increase in decreasing hindering demands for the intervention group. The intervention was able to maintain empowerment levels: they only declined in the control group. Also, the intervention prevented a decrease in work engagement as univariate pre-post comparisons showed a decrease in work engagement for the control group, but not for the intervention group. The intervention had no effect on self-reported performance. Next to self-reported performance, the authors took customer-rated measures of performance into account. Although they did not find any differences

between the groups three months after the intervention, the intervention group was rated significantly more positively by their customers than the control group one year after the intervention. This may indicate that behavioural change takes time to occur, which could be an important explanatory mechanism to be considered in future research designs. Overall, the job crafting intervention was promising in sustaining employee well-being during times of change, as the intervention helped to prevent feelings of powerlessness due to organizational changes and helped to enable employees to reach their (work-related) goals.

Finally, Peeters et al. (2017) (study 7) tested the effects of a job crafting intervention among 83 civil servants. It was expected that participating in the intervention would lead to an increase in several personal and job resources, as well as situational awareness and higher levels of work-related well-being. First of all, univariate analyses revealed that the intervention group showed elevated levels of job crafting compared to the control group. In this study cognitive crafting was also included, which is a relatively understudied form of crafting in the current empirical literature. The intervention appeared to be successful in increasing cognitive crafting, which is in line with observations during the process evaluation, where many participants commented on how they enjoyed gaining a 'fresh' perspective on their job during the training and positively reframing their work or work environment. Also, the intervention increased perceptions of autonomy, opportunities for development and situational awareness. No effects were found for social support from colleagues and for self-efficacy. Finally, positive and negative affect changed in the desired direction and the increase in work engagement was marginally significant for the intervention group ($p = .056$), while this change was not significant for the control group.

Based on the existing evidence regarding the effectiveness of the job crafting intervention, a number of tentative conclusions can be drawn. First of all, the original intervention of Van den Heuvel et al. (2015) (study 1) has proven to be a valuable blueprint and seems to work well in guiding development and implementation of variations or customised versions of the job crafting intervention in different occupational settings. It provides clear guidelines for development, while offering enough degrees of freedom to adapt the intervention to the specific needs and wishes of different occupational groups and clients.

Next, results suggest that the job crafting intervention is effective in stimulating aspects of job crafting behaviour, although the effects cannot always be detected with multivariate tests. Discussions with participants indicate that the questionnaires we use to measure crafting, are not appropriate to capture the whole range of behaviours. Participants may very well craft specific aspects of their work, that are not reflected in the scale, and thus quantitative methods at times miss out on interesting idiosyncratic forms of job crafting that the intervention may stimulate.

Taking a closer look at the specific crafting behaviours that have been triggered by the intervention, it seems that reducing (hindering) demands especially shows consistent results; it changed in all seven studies reviewed. This is surprising because reducing demands is the job crafting behaviour that employees seem to have most difficulties with when formulating a self-chosen goal during the workshops and that they use less often. Perhaps this also statistically explains why we find the effect

on this dimension (reducing demands) and not on the other dimensions (seeking resources and challenges), which are practiced by individuals to a higher extent even before the intervention (cf. ceiling effect).

Further, the intervention is effective for improving employee well-being, particularly work engagement and affect. For performance (including task, contextual and adaptive performance) the effects were slightly more fragmented. Five of the studies included 15 performance indicators in total, of which only 5 indicators appeared to have changed after the intervention. Moreover, Gordon et al. (2018) (studies 2 and 3) and Hulshof et al. (2019) (study 6), were able to include other-rated performance indicators and/or objective performance, and it appeared that only other-rated performance one year later was affected by the intervention. We might speculate that the job crafting intervention is especially effective in improving well-being of employees while it takes more effort to create lasting effects on the performance of the participants.

Several of the studies confirmed that specific crafting dimensions (that differed by study) explained the effects of the intervention on well-being and performance outcomes. The resulting significant mediation effects provide evidence that a Hawthorne effect cannot explain the effects of these interventions. However, one of the studies in a changing organizational context due to austerity measures, showed that job crafting is not the only explanation why the intervention is effective. Rather, positive affect proved to be another mediator, indicating the complexity of the impact of job crafting interventions within contexts. These findings seem to support the proposition of Oldham and Hackman (2010) that the benefits of job crafting may “derive from substantive changes in the work itself” or “merely from having the opportunity to tailor one’s own work responsibilities” (p. 471). In a related vein, the studies of Van den Heuvel et al. (2015) (study 1) and Peeters et al. (2017) (study 7) show that the job crafting intervention is also effective in improving job resources and personal resources. Although it differed between both studies which specific resources increased after the study, it also supports the assumption that a Hawthorne effect is not responsible for the effects of the intervention.

Taken together, the job crafting intervention is a promising tool to help organisations to support and maintain employee well-being and (to a somewhat lesser extent) performance, even during times of organizational change.

5 The Future of the Job Crafting Intervention

Ever since the first study by Van den Heuvel and colleagues was published (first in Dutch in 2012 and later in English in 2015) we have gained new practical experience and evidence regarding the merits of the intervention. In this section we describe how we think both research and practice can proceed in order to further improve the content and implementation of the intervention as well as the research on its effectiveness.

So far, an important unresolved issue refers to the lack of appropriateness of the current job crafting scales for capturing all important job crafting behaviours of employees in specific occupational groups (see earlier). This might explain why the effect of the intervention on job crafting behaviours is often not significant: the scales are perhaps not sensitive enough (Van den Heuvel et al., 2015). In support of this assumption, Demerouti, Xanthopoulou, et al. (2017) did find an effect of the intervention on both job crafting dimensions where additional items were added. This might be a good example to follow in future studies. On the basis of interviews with representative employees of the specific target group, one could get an impression of how job crafting could evolve and which crafting behaviours are specifically relevant for this group and, depending on the outcomes, researchers could decide to add specific items to the original scale. However, next to the sensitivity of the job crafting scales to capture specific behaviours that may change after the intervention, it is possible that the intervention effects take longer to occur than just a few weeks after the intervention which is generally when the post measure took place, although the exact number of weeks is not explicitly specified in all studies. Future studies should explore this explanation but using longer time frames, e.g., three to six months.

From our practical experience, we know that it is important to keep employees committed to the intervention and their self-set goals by communicating regularly with them and sending them reminders about their goals. This motivates them to complete the whole intervention programme (including the reflection session). The reminder emails however, are general and not personalized for each individual. We think that the job crafting intervention would be even more effective if it would be supported by an on-line or e-health tool or app. Such a tool could support and encourage participants by providing extra material about the training, reminding them of their self-set goals, and to monitor their own state daily. We do not necessarily suggest that an on-line tool should replace the face-to-face intervention, but we think such a tool could support and improve commitment and behaviour change, especially during the weeks of experimenting with the new job crafting behaviours.

During the job crafting training employees learn how to craft their job effectively and are stimulated to do so, as they set SMART goals, which they work on after the workshop. The critical question is how to stimulate employees to keep crafting their job even after the training is completed. This issue is discussed during the reflection session, when employees reflect on possible obstacles and facilitators for continuing their job crafting behaviour. Nevertheless, it remains unclear how to maintain the effects of the intervention in the long run. Although one study found that the effect of the intervention on customer ratings of employee service quality was significant even one year after the intervention, all other studies measured the effect of the intervention shortly after its completion. In this way, it is hard to determine whether the intervention has enduring effects and what can be done to increase its impact over time. Are, for instance, physical reminders to the intervention (in the form of a card or poster) sufficient or should the organisation or leaders/supervisors regularly remind participants during meetings or other organisational processes? Another road to improve the long-term learning transfer of the intervention to daily work routines is to apply the insights from relapse prevention theory more systematically (Rahyuda,

Syed, & Soltani, 2014). Marx (1982) introduced the term relapse prevention for the first time in the corporate training context and defined relapse prevention as a self-management intervention that teaches trainees the strategies to overcome the potential threats that impede the generalization of the newly learned skills [such as: understanding the difference between the training and the job contexts, creating a support network, predicting the first slip in the transfer of training, developing a threat coping strategy, and monitoring the process of skill transfer (Marx, 1986)]. It could be worthwhile to train the participants in an extra session on these relapse prevention skills.

Although the job crafting intervention was effective in stimulating reducing demands behaviour in several studies (i.e., studies 2–7), this dimension did not prove to be a significant mediator of the effects of the intervention on the examined outcomes except in the study by Demerouti, Xanthopoulou, et al. (2017) (study 5) where it was significantly, but negative instead of positively related to adaptive performance. This seems to indicate that reducing demands tends to be a dysfunctional crafting strategy, which does not necessarily need to be trained during job crafting interventions. To overcome this problem, Demerouti and Peeters (2018) recently introduced ‘optimising demands’ as a new, additional type of reduction-oriented job crafting behaviour. Whereas reducing or minimising demands refers to making a job less strenuous, optimising demands refers to simplifying the job and making work processes more efficient. Their study showed that optimising demands was positively related to work engagement. Because of its promising role for improving well-being and its constructive nature we would like to encourage future scholars to include this new type of job crafting in the job crafting intervention.

Related to this point, researchers could examine to what extent the intervention is successful in changing the perception of job characteristics (Demerouti, Van den Heuvel, Xanthopoulou, Dubbelt, & Gordon, 2017). Currently, only two studies focus on the change in levels of job resources, i.e., van den Heuvel et al. (2015) and Peeters et al. (2017). However, as job crafting aims to change challenges and demands, it is important to examine whether the intervention does alter the perceptions of these job characteristics. A focus on the change of both resources and demands could give more insight into the process of how well-being and performance change as a result of the intervention. For instance, perceived or real changes in job demands and job resources may explain why the job crafting intervention is effective.

Another critical question is what the role of the supervisor is in facilitating the effectiveness of the intervention. This issue has not been examined yet in any of the studies, although it may be very important. The supervisor can create the context in which job crafting behaviour is possible and accepted (by empowering employees). On the contrary, the supervisor can also restrict or frustrate the crafting attempts of the employees by being authoritarian. Additionally, the supervisor can play a key role in stimulating employees to keep crafting their job after the intervention, and by using crafting in daily team practices. Supervisors may also stimulate how employees cognitively craft meaningfulness during organizational change, by providing information that helps employees to make sense of the changes (Van den Heuvel, Demerouti, Bakker, & Schaufeli, 2013). Finally, the supervisor can play a

crucial role in highlighting which crafting behaviour is in line with the organizational goals and in helping employees to align their own goals with those of the organization/team. Recent research of Wang (2017) demonstrates that leaders can cultivate well-performing employees by facilitating their job crafting behaviour. Their findings suggest that mainly expanding job crafting behaviour (i.e., seeking resources and seeking challenges) are more likely to take place under transformational, moral and empowering leadership. Future scholars could further consider how to involve the supervisor in the job crafting process.

In some intervention groups we noticed that the composition of the groups in terms of well-being levels was very diverse. Although most employees appeared to have moderate well-being levels, some individuals were at high risk of developing burnout or were recovering from burnout. Having such diversity in a training group influences the group dynamics and can at times undermine levels of positivity. A positive development would be to develop a customised version of the job crafting intervention specifically targeted at training employees at high risk of developing burnout and employees returning to work after burn-out such that not only their burnout symptoms are reduced but also their functioning/performance at work is improved.

The intervention has been extensively tested in Dutch organizations and operating within Dutch culture which, in line with Hofstede (<https://www.hofstede-insights.com/country-comparison/greece,the-netherlands>) is characterized by low power distance, low masculinity and high individualism (Hofstede, 1980). The intervention proved also to be partly effective in the Greek context (affected by austerity led organizational changes), which is high on power distance, high on masculinity and low on individualism. This finding suggests that the job crafting intervention may be effective in other country contexts as well. However, more research is necessary to justify whether the job crafting intervention is effective in various cultural contexts.

6 Conclusions

The goal of this chapter was to discuss an intervention aimed at stimulating job crafting behaviour as a bottom-up, proactive type of behaviour that employees may use to improve their job characteristics. The intervention is tested in a number of studies, and in this chapter we reviewed the existing evidence, explained how and why it works and we made several suggestions for future research and practice. This chapter discussed the studies that are based on the job crafting intervention of Van den Heuvel et al. (2015). There are, however, other nice examples of job crafting interventions available (e.g. van Wingerden et al., 2016, 2017), which are worthwhile considering when one is interested in job crafting interventions. Moreover, up until now the focus has mainly been on the effect evaluation. Future efforts could additionally pay more attention to process evaluation of the intervention (Abildgaard, Saksvik, & Nielsen, 2016) and mediating mechanisms. Taken together, evidence from the 7 studies that were discussed in this chapter strengthens our belief and

trust in the current job crafting intervention. It is not only based on theories of work motivation and learning behaviour, it also leaves enough room for customizing it to specific target groups (such as employees at high risk for burnout) and occupational situations (such as organizational change) and other relevant settings. We hope that future studies will improve the effectiveness of the interventions such that it becomes even more valuable for employees and their organizations.

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Gratitude Interventions: Meta-analytic Support for Numerous Personal Benefits, with Caveats



Leah R. Dickens

Abstract Gratitude is all the rage at present. Both researchers and popular media have latched on to gratitude as an easy way to make significant life improvements, ranging from increasing well-being to strengthening relationships. Can the simple practice of gratitude really produce noteworthy effects? Many authors cite one particular paper in support (c.f. Emmons & McCullough in *J Pers Soc Psychol* 84(2):377–389, 2003), which has major limitations and open questions, due to at times conflicting findings across three studies and numerous comparison groups. Further, the lack of research in multicultural contexts limits insights and leaves room for wide speculation. In response to this overreliance on one imperfect publication, the purpose of this chapter is to review the current state of the literature on gratitude interventions to determine their effects in diverse contexts. Specifically, a meta-analytic design was employed to determine the collective conclusions about the benefits of such gratitude practices, and the factors that influence the size of the effects. The meta-analysis included 38 articles spanning from 2003 to 2016 and examined 16 positive outcomes of gratitude interventions (e.g., positive affect, physical health, optimism). Data analysis showed small but significant findings for several of the outcome variables. Importantly, effects were generally larger when studies compared a gratitude intervention condition with a negative condition (such as listing daily hassles) and were most often negligible when gratitude was compared with another positive psychology intervention (such as performing random acts of kindness). This latter finding suggests that perhaps gratitude is no more effective at promoting well-being than other positive interventions. Finally, the results showed a significant lack of studies on gratitude practices within multi-cultural contexts. The chapter will conclude with suggestions of ways for the sub-discipline of gratitude to improve.

Keywords Meta-analysis · Gratitude interventions · Applied research · Well-being

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1 Introduction

The concept of gratitude appears to be trending. Posters and artwork emboldened with slogans like “Be grateful,” “Appreciate the little things,” and “Gratitude turns what you have into enough” line store shelves. Books about people’s personal experiences trying to cultivate gratitude are easy to find, with titles including *A Simple Act of Gratitude: How Learning to Say Thank You Changed My Life* (Kralik, 2010) and *The Gratitude Diaries: How a Year Looking on the Bright Side Can Transform Your Life* (Kaplan, 2015). In addition, journals in which one can write one’s own life blessings are numerous on Amazon. Although it is hard to say what exactly started this gratitude trend, many people have decided to make the development of an attitude of gratitude an important life goal, as evidenced by this surge in gratitude products. Indeed, many self-help authors claim gratitude can change lives for the better. Their titles include rather bold phrases, like, *Living in Gratitude: A Journey that will Change your Life* (Arrien, 2013) and *The Gratitude Factor: Enhancing your Life through Grateful Living* (Shelton, 2010). Such books encourage readers to try gratitude out for themselves, with the understanding it can be life-changing.

But is there empirical evidence that gratitude has positive benefits for the self? Is gratitude worth cultivating, and can it actually be life-changing? As a positive psychology intervention, does gratitude have merit? The current chapter aims to provide empirical evidence from the literature—in the form of meta-analysis—that creates an accurate picture and summary of gratitude’s outcomes and indicates where further research is required to strengthen our understanding of gratitude as an intervention.

2 The Complexity of Gratitude

Gratitude is recognized as a virtue in numerous religions, and has been a topic of interest for philosophers for centuries (McCullough, Kilpatrick, Emmons, & Larson, 2001). Within psychology, gratitude has a shorter history. After being neglected for decades, the positive psychology movement came into being around the turn of the twenty-first century, and constructs such as gratitude, happiness, and well-being became acceptable topics of study (Fredrickson, 2001; Seligman & Csikszentmihalyi, 2000). Researchers started asking how something like gratitude could relate to positive human functioning. This has been a fruitful area of research, in part because of gratitude’s complex nature. Researchers have defined it and investigated it in various ways.

Gratitude as an emotion. First, it can be considered as an emotional state. If Dana does something nice for Shanon, then Shanon might feel gratitude—a positive and temporary emotional state, caused by Dana’s kind deed (e.g., Emmons & Crumpler, 2000). In order for her to experience gratitude, Shanon likely has to recognize a few things: *value*, *cost*, and *intention* (McCullough et al., 2001; Tesser, Gatewood, & Driver, 1968; Wood, Maltby, Stewart, Linley, & Joseph, 2008c). First, she has

to see *value* in the gift or favor. Does she like the gift? If Dana gave her a TV, but Shanon didn't want a TV, this would impact the level of gratitude she feels. Conversely, if Shanon has always wanted a TV, her emotional response will be more intense. Second, she has to understand the *cost*. Did Dana spend time, money, or effort in order to give the gift? For instance, if Dana spent her whole paycheck on Shanon's birthday present, or if she spent a whole day helping Shanon move—when she could've been doing something more fun—then Shanon might be more likely to feel grateful, and may feel it more intensely. Finally, she has to realize the act was *intentional* and not required (that is, that Dana intended to be kind, and didn't have to be), and has to understand it was done with Shanon's best interests in mind, with no ulterior motives. Ultimately here, gratitude is a brief, positive emotional experience, caused by another person's actions (McCullough et al., 2001). It is distinctive from indebtedness, which is a negative emotional experience, due to someone doing something or giving something to another, who then feels obligated to return the favor (Greenberg, Bar-Tal, Mowrey, & Steinberg, 1982; McCullough et al., 2001; Watkins, Scheer, Ovnicek, & Kolts, 2006).

Research investigating gratitude as an emotional state has found that it not only feels good to experience, but also can motivate prosocial behavior—leading people to help those who have helped them in the past, both with time and money, and in some contexts, paying forward the good deed to an unknown third party (Bartlett & DeSteno, 2006; DeSteno, Bartlett, Baumann, Williams, & Dickens, 2010; Tsang, 2006). Temporary emotional experiences of gratitude felt toward a benefactor make people more likely to be more socially inclusive toward that person, and can increase their desire to work with that person in the future (Bartlett, Condon, Cruz, Baumann, & DeSteno, 2012). Taken together, the research on gratitude suggests that it serves to aid in relationship formation, maintenance, and quality (e.g., Algoe, 2012) and is therefore an important part of social bonding.

Gratitude as a disposition. A second way of defining gratitude would be as a disposition or trait, or a “life orientation” (Wood, Froh, & Geraghty, 2010). Some researchers define gratitude as one's propensity to experience the emotion. That is, how often does a person feel gratitude in her everyday life? From this perspective, gratitude is treated like a personality trait, similar to extraversion or agreeableness. Some people may be “high” in dispositional gratitude—meaning they experience it often and tend to feel grateful for things in life—while others may be “low” in gratitude—less likely to feel grateful for people or things they have.

Researchers investigating gratitude at the trait level have devised the Gratitude Questionnaire (GQ-6; McCullough, Emmons, & Tsang, 2002), a six-item survey asking people to respond to statements such as, “I have so much in life to be thankful for” and “If I had to list everything that I felt grateful for, it would be a very long list.” Gratitude here would include people's tendency to think in ways that bring about the emotion. That is, they might be more consciously aware when people do nice things for them, and this manner of thinking might bring about a grateful emotional state more often. Measured in this way, dispositional gratitude has been linked with myriad positive variables in correlational research, including life satisfaction, optimism, positive affect, purpose in life, and positive relationships with others (McCullough

et al., 2002; Park, Peterson, & Seligman, 2004; Wood, Joseph, & Maltby, 2009). Dispositional gratitude also shows an unsurprising relation to negative variables, with higher gratitude relating to lower depression and lower stress (McCullough et al., 2002; Wood, Maltby, Gillett, Linley, & Joseph, 2008a).

Gratitude versus appreciation. What further complicates the task of defining gratitude is clarifying the difference between gratitude and appreciation. In the general population, the terms are often used interchangeably. However, in the psychology literature, most scholars treat them as separate concepts, usually considering dispositional gratitude to be a higher order construct, with appreciation as one lower order factor¹ (e.g., Wood, Maltby, Stewart, & Joseph, 2008b). That is, dispositional gratitude would be an umbrella term that would include several types of related experiences, thoughts, and feelings. Indeed, those distinguishing them in this way would also say that gratitude felt toward another person (or a higher power, such as God) would be a specific lower order factor, referred to as *interpersonal gratitude* (or *benefit-triggered gratitude*; Lambert, Graham, & Fincham, 2009). This could then account for gratitude as an emotional state—a temporary, other-focused experience. People high in dispositional gratitude overall likely would report stronger or more frequent tendencies to experience interpersonal gratitude. In contrast, *appreciation* would be defined as a more general feeling of thankfulness for all that one has, and therefore would lack a direct other-focus (Wood et al., 2008b). Again, people high in dispositional gratitude overall would likely be more prone to experience appreciation on a daily basis. Beyond the emotional component, high dispositional gratitude would also suggest a person is more likely to think about and recognize instances where gratitude or appreciation would be an appropriate response (“noticing the little things”), and may be more likely to express gratitude verbally or respond with reciprocal behavior to the other (if gratitude was other-inspired).

Gratitude as an application. One last element adding to the complexity of gratitude is the current focus here: the application of gratitude interventions. Researchers studying these interventions are suggesting that gratitude is a concept that can be practiced and improved (e.g., Emmons & McCullough, 2003; Seligman, Steen, Park, & Peterson, 2005). That is, a person can work to improve her experiences of gratitude on a daily basis. This could be thought of as increasing the number of grateful thoughts and moments (increasing gratitude as emotion), or increasing the person’s trait level of gratitude (increasing gratitude as disposition or as a higher-order construct). Many interventions incorporate the cultivation of more general appreciation, as an element of the practice, again perhaps serving to increase higher-order gratitude more broadly (e.g., Cheng, Tsui, & Lam, 2014; Tricarico, 2012). The main focus of this literature is that gratitude, as a practice, might result in positive effects for the individual. Rather than focus on what gratitude does in the moment, or what it does for relationships, this literature investigates how cultivating grateful practices over time can lead to

¹Unfortunately, there is not full consensus on these definitions. Indeed, some refer to appreciation as the higher level construct (Adler & Fagley, 2005), which can lead to difficulties deciphering the literature. Fortunately, for the purposes of the current chapter, this distinction is not an issue we need to be concerned about.

positive outcomes for the individual herself. The focus of the current chapter centers on gratitude as a self-improvement aid.

Defining Gratitude Interventions

Given positive psychology's emphasis on the study of the life well-lived, many researchers and practitioners were eager to apply psychological research to improve the lives of participants and clients. Just as patients receiving medicine could show better physical health outcomes, psychologists wanted treatment options that could be effective in improving mental health, like increasing one's positive affect, optimism, and life satisfaction. Positive psychology interventions came into being as different attempts to succeed in this realm (e.g., Seligman et al., 2005).

Like other positive psychology interventions, researchers devised gratitude interventions as simple practices that a person could engage in, daily or weekly, without much required instruction or training, with the aim being to provide benefits for the individual over time. The first published work on gratitude interventions, by Emmons and McCullough (2003), introduced the preliminary type: gratitude journaling (or writing gratitude lists). They simply asked people to write down up to five things they were grateful about, at the end of each day or week. For instance, someone could write things like, "I'm grateful that my friend took me for coffee," "I'm grateful it was sunny outside," or "I'm grateful for my health." With this practice, one might write down both people to whom one feels gratitude, as well as things for which one feels grateful, so this intervention may contain elements of appreciation as well as interpersonal gratitude. Researchers did not provide any formal definitions for participants, but rather simply instructed them to record things they were "grateful or thankful for" (p. 379).

Another well-researched type of gratitude intervention was introduced by Seligman et al. (2005) and called a "gratitude visit." This intervention required people to write gratitude letters—thank-you notes to people they hadn't thanked in the past, but who had helped them in some way—and then deliver these letters to the recipient. This two-part process could induce feelings of gratitude at two time points: one, while writing the letter and reflecting on how this person had benefited them; and two, while reading the letter to the person, and experiencing her reaction. Unlike gratitude journaling, which could focus purely on things or life events one appreciates, this intervention always incorporates interpersonal gratitude, as there is always a benefactor being thanked. Additionally, while completing the visit, there is the obvious social component, which may impact the emotional experience of the individual (and also potentially impact the emotions of another person, although this effect is rarely studied; see Kumar & Epley, 2018).

Although researchers have used a few other styles of gratitude intervention, overall, gratitude journaling—with slight variations in instructions, and at times called "three good things" (e.g., Mongrain & Anselmo-Matthews, 2012; Odou & Vella-Brodick, 2013) or "counting blessings" (e.g., Emmons & McCullough, 2003; Froh, Sefick, & Emmons, 2008)—has been the most widely used type of gratitude intervention in the research literature. In many ways, it is the simplest intervention. Its emotional valence should be positive, allowing people to be mindful of the good

things going on in their lives, and the good people they engage with every day. It is simpler than gratitude visits, which require both the writing of a letter (which can be difficult and time-consuming), and the delivery of the letter (which adds more time, and needs the recipient to be present). People do not always feel comfortable expressing gratitude, even in writing, and might not find it easy to word their thoughts in a letter, or might find it hard to think of someone they can write to in the first place. The visit can also be an uncomfortable experience, rather than a purely positive one, as it is not a very natural social exchange. Reading a long thank-you note to another person is not a typical thing people do, and people might feel embarrassed or vulnerable. Gratitude journaling can be kept private, can be done alone, and can be done in just a few minutes each day (or week). It is likely for these reasons that researchers have put their focus mainly on journaling.

3 Most Cited Findings: Emmons and McCullough (2003)

Without question, the most cited work regarding gratitude interventions is the original paper by Emmons and McCullough (2003). They conducted three studies—two with American undergraduate populations and one with an American sample suffering from neuromuscular disorder—where they compared a gratitude journaling condition against one or more comparison groups and measured several outcome variables relating to psychological and physical well-being. Many popular media sources (e.g., *Psychology Today*, *The Washington Post*, *WebMD*) cite this work as evidence that practicing gratitude can improve outcomes such as life satisfaction, exercise levels, physical health, and mood. Unfortunately, there are a few problems with these conclusions.

First, only some of the outcomes between gratitude and comparison conditions were significant. For instance, in their Study 1, the number of hours spent exercising significantly differed between the gratitude condition and a “hassles” condition, which required participants to write down things that had annoyed or bothered them each day. However, in this same study, levels of exercise did not significantly differ between the gratitude condition and a neutral comparison condition, which just had participants record things that had happened and affected them each day. With these discrepant findings, can we really say conclusively that gratitude caused people to exercise more?

Similarly, the other issue is that some of the findings were significant in one study, but not in another. For example, Study 1 found differences in physical health symptoms between gratitude and neutral conditions, but Study 2 did not replicate these results. Despite these issues, Emmons and McCullough (2003) is often cited in the research realm, self-help literature, and popular media. Given the fact that this was not the only paper investigating gratitude interventions, I previously conducted a series of meta-analyses, attempting to synthesize the entire gratitude literature and discover more appropriate conclusions (see Dickens, 2017, for the complete project). The field of psychology has recently embraced the importance of such projects, given

the “crisis of replicability” that has gained media attention. Rather than base big conclusions on only a handful of studies, meta-analysis allows researchers to sum up an entire literature, and base conclusions instead on the sum of the whole. In this way, we can better determine gratitude’s impact.

Although other researchers (Davis et al., 2016) published a previous meta-analysis on this subject, their organization of the analyses made it impossible to make claims about comparison groups and how those might matter when considering the effectiveness of gratitude interventions. First, for studies involving more than one comparison condition, they collapsed across these groups, so that each study only contributed one effect size to the analysis. Similarly, in their main analyses, they also collapsed effect sizes across neutral, positive, and negative comparison conditions. It seems very likely that by doing analyses in this way, they may have cancelled out effects. That is, let us say that a large effect was found for happiness, versus a negative comparison, but a nonsignificant effect was found for happiness against a positive comparison group. If these were averaged, either to create a single effect size for a sample, or in the main meta-analysis calculation, these numbers and their conceptual meanings (e.g., that gratitude might be better than a negative intervention at improving happiness, but no different from a positive intervention) would be lost. The project described here organized data in such a way that solved this issue.

4 The Meta-analytic Project

Organization. This project included 38 studies, totaling 5322 participants. Studies had to use a gratitude intervention that lasted at least one week in duration, and was compared against another condition. Studies using multiple positive psychology interventions throughout the study were excluded, as were those that incorporated any type of training session. Most (35) studied college-age samples or adult samples, and 26 were conducted in the US or Canada. Most (33) were done with physically and mentally healthy samples, and most had predominantly female samples (mean percent women = 71%). Study designs were overall quite similar. Participants would engage in a simple intervention (typically 1–5 weeks in duration, although some extended to 12 weeks), requiring no training or education. In all studies included in the project, a gratitude condition was compared against one or more comparison conditions. Most were neutral comparisons, where participants might write about daily events in general, or they were on a waitlist and not experiencing any type of intervention. Some comparison groups were deemed negative, like Emmons and McCullough’s (2003) hassles condition, as they instructed participants to focus on negatively-valenced topics, like listing a few things that happened during the day that bothered or annoyed them. Finally, some studies used another positive psychology intervention as a comparison condition (e.g., Boehm, Lyubomirsky, & Sheldon, 2011; Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011). Participants might be instructed to perform random acts of kindness, for instance, which would be considered a positively-valenced activity, in that typically most people report pleasant

Table 1 Organization of the 56 meta-analyses

Time point	Comparison group		
	Neutral	Negative	Positive
Post-intervention	Grateful mood Grateful disposition Well-being Happiness Life satisfaction Positive affect Negative affect Depression Optimism Stress Depression Optimism Stress Exercise Quality of relationships Physical health	Grateful mood Life satisfaction Positive affect Negative affect Depression Optimism Stress Physical health Sleep Prosocial behavior	Grateful mood Well-being Happiness Life satisfaction Positive affect Negative affect Depression Optimism Stress Quality of relationships Physical health Sleep Self-esteem
Delayed follow-up	Grateful mood Grateful disposition Well-being Happiness Life satisfaction Positive affect Negative affect Depression Optimism Quality of relationships Physical health	Grateful mood Positive affect	Well-being Happiness Life satisfaction Positive affect Negative affect Depression Physical health

Post-intervention measures were administered immediately after the gratitude intervention concluded. Delayed follow-up measures were administered between one week and six months after the conclusion of the intervention (mode = one month)

feelings when engaging in such practices. In addition, all studies surveyed participants immediately post-intervention, and many also included measures at a delayed follow-up [ranging from one week (e.g., Peters, Meevissen, & Hanssen, 2013) to six months (e.g., Mongrain & Anselmo-Matthews, 2012); mode = one month].

Because many studies included multiple comparison groups (negative, neutral, positive), multiple time points (post and follow-up), and multiple outcome variables (16 possible outcomes in total), 56 independent meta-analyses were conducted in total, in order to maintain the independence of the effect sizes included in each. That is, effect sizes included in a given meta-analysis must be calculated from completely independent samples; participants included cannot overlap. These analyses were therefore broken down, as displayed in Table 1. Due to this type of organization system, each meta-analysis included only a small number of effect sizes (*k*s range = 2–19), which is important to note as a caution when interpreting the results.

The structure of this work allows us to assess the specific outcomes of gratitude interventions and ask numerous questions regarding their effectiveness. For instance, are they effective only in improving certain variables, like happiness? Are they only deemed effective if compared against a negative comparison condition? Do the significant improvements last over time? Ultimately, what does the literature say about the effectiveness of gratitude interventions, and what research must be done to give us a clearer and more comprehensive picture?

Findings. A summary of effect sizes for each independent meta-analysis is shown in Table 2. Most effects were small to medium, in terms of their magnitude (according to Cohen's standards; Cohen, 1988). Significant *ds* ranged from 0.13 to 1.23. Generally, it would seem that gratitude interventions tend to help people in terms of their short-term levels of well-being, happiness, life satisfaction, grateful mood, grateful disposition, positive affect, and depressive symptoms. Long-term effects (measured at delayed follow-up) were found when gratitude interventions were compared against neutral comparison groups for well-being, happiness, and depression, and against negative comparison groups for grateful mood (Dickens, 2017). Overall, these interventions didn't seem to significantly impact physical health, sleep, exercise, prosocial behavior, or self-esteem. There are a few important things to note, in order to present a clearer picture of the project's findings.

Type of comparison condition. First, overall, effect sizes were largest when the gratitude condition was compared against a negative condition (versus neutral or positive). This is not too surprising, as a hassles intervention could make people feel less positive—for example—at the same time that gratitude boosts people's positive affect, thereby maximizing the difference between conditions. Unfortunately, with this study design, it is hard to know how much gratitude boosts people up, and how much hassles pull people down, so assessing the gratitude intervention's unique impact is difficult to do. When comparing gratitude versus a neutral condition, the findings seem more straightforward. If the gratitude condition experiences a boost, as compared to neutral, it would be a plausible argument to say gratitude has a unique positive effect—as one wouldn't expect a neutral activity, or simply being on a waitlist, to impact participants negatively.

The lack of significant differences between gratitude conditions and positive comparison conditions (which only differed for well-being) is also somewhat hard to interpret. It could mean that neither gratitude nor other positive psychology interventions are effective in promoting positive change. However, perhaps more likely, both interventions could boost people's overall scores in similar ways, which would indicate that both are similarly effective in creating positive outcomes, but not significantly more or less effective than the other type of intervention. Indeed, researchers have noted that all emotions—including positive emotions—can at times be difficult to distinguish, as shared valence might overshadow more nuanced differences between emotion experiences (referred to as *emotional granularity* or *emotion differentiation*; e.g., Barrett, Gross, Christensen, & Benvenuto, 2001; Tugade, Fredrickson, & Barrett, 2004). This could mean that any positive intervention might similarly impact people's overall feelings of positivity, as people may fail to distinguish discrete positive emotional experiences from one another. Given

Table 2 Summary of effect sizes for outcome variables across comparison groups at post-intervention and delayed follow-up

Post-intervention	Comparison group					
	Negative		Neutral		Positive	
Outcome	<i>k</i>	<i>d</i>	<i>k</i>	<i>d</i>	<i>k</i>	<i>d</i>
Stress	2	1.23***	4	0.04	4	-0.03
Depression	2	0.85***	9	0.13*	5	0.02
Grateful mood	5	0.54***	9	0.31***	3	0.23
Life satisfaction	3	0.54***	19	0.17***	9	0.03
Positive affect	6	0.47***	19	0.18***	9	0.10
Negative affect	5	0.42***	15	0.05	8	0.04
Optimism	2	0.23*	5	0.22*	2	0.00
Physical health	3	0.03	5	0.06	3	-0.16
Quality of relationships	-	-	4	0.51***	2	0.00
Happiness	-	-	9	0.25***	2	0.00
Well-being	-	-	3	0.30**	3	0.17*
Sleep	2	-0.03	-	-	2	-0.07
Grateful disposition	-	-	8	0.23**	-	-
Exercise	-	-	2	0.10	-	-
Prosocial behavior	2	0.12	-	-	-	-
Self-esteem	-	-	-	-	2	0.03
Delayed follow-up	Comparison group					
	Negative		Neutral		Positive	
Outcome	<i>k</i>	<i>d</i>	<i>k</i>	<i>d</i>	<i>k</i>	<i>d</i>
Grateful mood	2	0.28*	4	0.07	-	-
Positive affect	2	ns	9	0.10†	5	ns
Well-being	-	-	9	0.55**	3	0.24†
Happiness	-	-	19	0.31**	9	ns
Depression	-	-	19	0.21**	9	ns
Life satisfaction	-	-	15	0.01	8	ns
Negative affect	-	-	5	0.07	2	ns
Physical health	-	-	5	0.00	3	ns
Optimism	-	-	-	0.02	-	-
Grateful Disposition	-	-	-	0.13	-	-
Quality of relationships	-	-	-	0.09	-	-

Note † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The *k* columns indicate the number of studies included in each meta-analysis. The *d* columns indicate fixed effects (weighted Cohen's *d*)

- Indicates outcome variable not analyzed in current meta-analyses

gratitude's current reign as a method of self-help, the lack of significance here could indicate that it might not belong on a pedestal, above other positive psychology interventions. Indeed, many researchers have argued that positive psychology interventions are probably best when tailored to specific individuals and their needs; what works well for one person might not for someone else (e.g., Lyubomirsky & Layous, 2013; Lyubomirsky et al., 2011; Schueller, 2010).

Although effects were not significant for physical health, sleep, exercise, prosocial behavior, or self-esteem, some of these variables were only tested against certain comparison groups. Physical health was analyzed against all comparison groups, lending some evidence that gratitude might not impact physical health. Similarly, sleep was compared to both a positive and negative group, and no differences were found. This might support the argument that gratitude does not influence sleep. However, for self-esteem, researchers only compared this against a positive intervention condition, so it is possible one could conclude that the lack of an effect is due to this comparison, rather than gratitude itself. As Table 2 makes clear, many of these meta-analyses were conducted on very small sets of samples (*ks* ranging from 2 to 19), so any conclusions should also be made somewhat cautiously.

Time of assessment. Overall, larger effects were seen at the immediate post-intervention assessment, as compared to a delayed follow-up. This is not surprising, given the fact that follow-up assessments were typically one month later (e.g., Mon-grain & Anselmo-Matthews, 2012; although some were sooner or later, depending on the study). Compared to a neutral condition, well-being, happiness, and depressive symptoms were still significantly improved for those who experienced the gratitude intervention, even at a delayed follow-up. In some ways, this is impressive, given the simplicity of the gratitude intervention design, and the relatively short duration of the experience. When compared against a positive condition, the only marginal effect was found for well-being at delayed follow-up, which lends more evidence that gratitude may not be significantly more impactful than other positive psychology interventions.

5 Limitations of the Gratitude Intervention Literature

The limitations of the gratitude intervention literature are numerous, leading to many unanswered questions. The most important of these fall under the topics of intervention design and sample characteristics. I consider each in turn.

Intervention design. One of the questions that the literature cannot answer is the matter of intervention duration and intensity. That is, are interventions more effective when they last longer, or when the practice is conducted more frequently? Studies ranged in intervention duration from one week to twelve weeks, with either daily or weekly practice. Although the meta-analysis project aimed to study duration as a potential moderator, the analysis could not be performed, due to the way the project was organized into such small individual meta-analyses. To perform moderator analyses, one typically needs more samples in order to draw strong conclusions.

It therefore remains an open question as to whether longer duration interventions would be more impactful than short durations. On the one hand, it seems possible that engaging in gratitude interventions for longer lengths of time would lead to stronger effects both post-intervention and at a delayed follow-up. People would get used to the practice of recording gratitude, and likely would be experiencing heightened gratitude over a greater period of time. However, it could also be possible that burn-out could occur, which would lead to diminishing returns of the activity. If the novelty of gratitude wore off, or if the practice became boring or burdensome, the intervention might become a neutral or even negative experience. Although we might see improvements after the first few weeks, it could be that things like life satisfaction or positive affect may return to prior levels if the practice dragged on. Future work would have to investigate this question, including any individual differences in efficacy (as some people might do better with more frequent daily practices versus weekly practices, or short-term interventions versus long-term).

Another open question about intervention design is the effectiveness of the various styles of gratitude interventions. Is journaling more or less impactful than gratitude visits? Given that the vast majority of studies used journaling (79% of the studies included in the analyses), it was not possible to assess differences between styles with the meta-analysis project. It seems possible that gratitude visits might be more impactful, given their more intense time commitment and the social element of the visit. They offer two opportunities to feel gratitude: both during the writing and the visit. Anecdotally, this can be an emotionally intense process, with people reporting overwhelming emotions while composing the note, as well as a meaningful and emotional social interaction when reading the note to the recipient. However, some people may find it challenging to write these letters, or may find the visits to be somewhat uncomfortable. Indeed, it's possible (although one would hope unlikely) that some recipients of letters might have awkward or negative reactions to these letters, and may not respond well or reciprocate gratitude. In these cases, individuals would likely not experience any improvements, and may actually feel negative. Additionally, the activity of writing thank-you notes—even if it was enjoyable at the beginning—could grow tiresome, repetitive, or inauthentic if practiced too frequently, which would also limit effectiveness when it comes to positive change. Journaling, on the other hand, may incorporate more daily experiences of interpersonal gratitude and appreciation, and may train people to be more cognizant of the positives in life. It could be that journaling would lead to more sustained, higher levels of gratitude, which could be more life-altering than localized letters. Just as small daily stresses seem to impact well-being more than larger, infrequent stressors (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982), it could be that small daily experiences of gratitude and appreciation would have more of a lasting impact than larger, less frequent gratitude letters and visits. Anecdotally, participants do seem to often find journaling to get easier with time, and could in fact experience “cumulative” effects of this practice, as they've listed so many things for which to be grateful.

Sample characteristics. In terms of sample characteristics, the literature is quite limited in the types of people studied. Numerous factors could be considered.

Age. The vast majority of studies focus on college students and adults (e.g., Dosssett, 2011; Harbaugh & Vasey, 2014; Toepfer & Walker, 2009). Moderator analysis indicated that overall, adults experienced the biggest effects, as compared to college students, and children had the smallest effects (although only three samples focused on children: Froh, Kashdan, Ozimkowski, & Miller, 2009a; Froh et al., 2008; Owens & Patterson, 2013). These findings could indicate that age influences the benefits of gratitude interventions, but one must be cautious about this claim, as there are limited numbers of studies involving older (e.g., Schueller, 2010; Shipon, 2007) and younger participants, and age of sample may also be confounded with the motivation to participate (with children and college students more extrinsically motivated than adults). Given the complexity of gratitude, it seems likely that older individuals may be most able to grapple with the concept, and may thus experience the biggest impact of a gratitude intervention. However, if younger individuals do not naturally experience gratitude, then an intervention that encourages them to experience and express gratitude may have profound effects. Unfortunately, the literature at this point really cannot speak to this issue. Some work has failed to find a correlation between trait gratitude and age (Kashdan, Mishra, Breen, & Froh, 2009), but this work is limited in scope and cannot speak to how age might impact the effectiveness of gratitude interventions.

Health status. Very few studies focus on anyone other than healthy, non-clinical populations. For individuals suffering from depression—as just one illustration—it seems possible that gratitude interventions might be very effective at drawing their attention to the positive things and people in their lives and away from the negative, which may ease depressive symptoms. Or, in contrast, it is possible that depressed individuals would find gratitude interventions more difficult than healthy participants, and would therefore experience fewer benefits from the practice. If they struggled to find things for which they felt grateful, this might make them feel even worse about their current state. Recent research has begun to address this question of psychological health and the effectiveness of interventions (e.g., Kerr, O’Donovan, & Pepping, 2015; Southwell & Gould, 2017), and more work should continue to address this topic.

Motivations. Many samples in the literature are extrinsically motivated—involving participants who volunteer in order to receive course credit, or students required to participate as part of the curriculum (Froh et al., 2008, 2009a, b). They are likely less motivated than those samples composed of individuals who have signed up specifically to engage in a study described as improving well-being or cultivating gratitude (e.g., Seligman et al., 2005). If people are interested in self-improvement, or in gratitude specifically, they may be more engaged in the intervention than those simply trying to get compensation. It seems likely that motivation may influence the effectiveness of the intervention. Writing in a gratitude journal half-heartedly will likely be less impactful than really engaging with gratitude. Some work has provided preliminary evidence that people who self-select into a study, knowing it centers on increasing happiness, do see stronger effects than those blind to the intervention’s purpose (Lyubomirsky et al., 2011), but this does not fully address the question of motivation, and in fact, presents a possible confounding placebo effect (such that if

people expect this study to improve wellbeing, it could do just that). This should be considered when designing future research.

Personality traits. Other personality traits may influence the effectiveness of gratitude interventions. For instance, someone who already experiences gratitude frequently, scoring high for a grateful disposition on the GQ-6, might benefit more or less from an intervention, depending on whether there is room for improvement, or if ceiling effects may limit greater improvement. If someone rarely feels gratitude, perhaps this intervention could change them more dramatically. As another example, someone who is very emotionally expressive may benefit differently when compared to someone who is rarely expressive. Research will have to consider potentially relevant personality traits in future studies.

Cultural makeup. Finally, there are countless questions regarding the cultural makeup of the sample. As previously noted, the vast majority of the literature has focused on American and Canadian samples. This severely limits our ability to generalize across cultures. The impact of gratitude interventions may differ in samples outside of western societies.

6 Suggestions for Future Research

Given the current state of the gratitude intervention literature, there are some clear suggestions for improving our understanding of the effectiveness of these practices.

Intervention design. More work should be done to investigate how the duration, intensity, and specific type of gratitude intervention may impact effectiveness. In addition to this, comparison conditions should be chosen wisely. Simply because gratitude journaling shows better outcomes than keeping a diary of hassles does not mean gratitude is life changing. Neutral comparison groups are perhaps best to use, as differences won't be muddied by multiple interpretations. Comparisons against other positive psychology interventions would also be useful, as the field would get a better understanding of whether or not gratitude is a uniquely powerful practice. So far, the literature is relatively inconclusive. Is gratitude better than optimism, performing acts of kindness, or practicing mindfulness, when it comes to positive outcomes for the self? Only with direct comparisons can we shed light on these matters.

Sample characteristics. There is a dearth of research investigating non-Western populations. Although we can speculate on whether or not gratitude might be beneficial in different cultures, we need to expand our reach and investigate non-Western, Educated, Industrialized, Rich, Democratic (WEIRD) samples. For instance, given the dual focus on both the individual's self-improvement goals and her experience of gratitude, are these practices more or less effective in collectivist societies at promoting well-being, when compared to individualistic societies?

A few studies have begun to address this issue and suggest gratitude interventions can be of benefit in Asian populations (Chan, 2010, 2011)—populations where social harmony and positive relationships are important for an interdependent self-concept (as opposed to individualistic societies that focus on the self as an independent entity;

Markus & Kitayama, 1991). If practicing gratitude makes a person feel better about her relationships and appreciate what she gets from the world around her, a collectivist background could mean bigger boosts in well-being, as these things are highly valued. Past work has indicated that for people in Japan, socially oriented or engaging emotions (which could include gratitude) are more strongly tied to feelings of well-being and general positive affect than individually-oriented or socially disengaging emotions, such as pride (Kitayama, Markus, & Kurokawa, 2000; Kitayama, Mesquita, & Karasawa, 2006). The opposite was true for individualistic Americans. These findings suggest that practices increasing gratitude could boost elements of well-being for collectivist populations.

Of interest, one paper did find that gratitude interventions appeared to be more effective for a US sample, compared to a South Korean sample (Layous, Lee, Choi, & Lyubomirsky, 2013). The authors speculated that this could be due to the experience of indebtedness. If someone tends to feel the negative experience of indebtedness, rather than or in addition to gratitude, when thinking about people who have helped him in the past, it is likely a gratitude intervention would have adverse or mixed effects for this individual. Perhaps they have feelings of guilt, worry about owing a favor, or concern with upsetting social harmony. It is possible that people in collectivist cultures tend to feel both gratitude and indebtedness, which would weaken the effectiveness of gratitude interventions, and this should be unpacked more in future studies. Additionally, if social harmony is culturally valued, and doing good things within relationships is a social norm, perhaps gratitude is less likely to be experienced in these societies. If a person thinks, "Of course she did something nice for me because that's what people do," she may not be having any real emotional experience in that moment. Expectations for kind deeds and social reciprocity could dampen the impact or extent of grateful feelings.

Finally, gratitude interventions are usually posed as self-improvement aids, and indeed the research focuses on personal outcomes in most analyses. This focus on the self might mean that those from individualistic societies could experience larger self-benefits, as it would be more natural for them to think of themselves as autonomous entities and put self-improvement goals ahead of other goals. Perhaps if gratitude letters were framed as relationship aids, people in collectivist societies would gain more from the experience. More research with appropriate comparison conditions must be done to draw firmer conclusions, and it would be important to compare cultures against one another to ascertain significant differences.

Individual differences. Something that seems potentially useful would be to learn about people's unique experiences with gratitude interventions. Investigators could ask people to report on their experiences during the different styles of interventions, in order to get a sense of individual differences and the variety of reactions to gratitude practices. How do things like motivation, personality, type of intervention, and culture all interact to impact outcomes? Qualitative data could provide additional information for researchers and practitioners to consider.

Interpersonal gratitude versus appreciation. Further work could also be done to explore the differences between interpersonal gratitude and appreciation. Are they equally beneficial, or might one lead to stronger effects for individuals? Do

they influence well-being via different pathways? As defined earlier, interpersonal gratitude involves an other-focused experience—recognizing what someone else has done to provide benefits for the self. In contrast, appreciation does not need this other-focus, but rather can be more about noticing and enjoying the little things in everyday life. Perhaps interpersonal gratitude is more important for relationships, and might improve well-being via this social dimension: stronger relationships leading to higher levels of well-being. The link between positive relationships and well-being is well documented in the literature, with the need to belong posited as a fundamental human need (Baumeister & Leary, 1995). Appreciation, on the other hand, might improve well-being more directly, or via an emotional dimension. That is, being more cognizant of small, positive daily occurrences could lead to more frequent experiences of grateful emotion, or positive affect more generally, thus leading to improvements on other measures of well-being. Both gratitude as a disposition and positive emotionality have been linked with measures of well-being (Diener, Sandvik, & Pavot, 1991; McCullough et al., 2001). Future research could try to investigate the pathways linking interventions with well-being, and try to determine the most effective means for self-improvement. Given that gratitude journals could incorporate both interpersonal gratitude and appreciation, whereas gratitude visits require the consideration of interpersonal gratitude, these two types of interventions could be compared against one another, to see if one may or may not be more effective than the other.

Relationship outcomes. In addition, intervention effects on relationships would be useful to look at as another outcome variable. Surprisingly, few gratitude intervention studies have included any measure of positive relationships, instead focusing on purely individual outcome variables. Gratitude's influence on interpersonal functioning has been studied in the literature more broadly, but not in the applied domain of intervention research, except in a few cases, using self-report measures of relationship quality or satisfaction (significant other: Martinez-Martí, Avia, & Hernandez-Lloreda, 2010; child-parent relationship: Rye et al., 2012; between teachers and students: Tricarico, 2012). Given the function of gratitude as an emotion motivating social bonding and relationship maintenance (e.g., Algoe, Haidt, & Gable, 2008; Bartlett et al., 2012), it would be important to know if cultivating an attitude of gratitude through the use of gratitude interventions could effectively lead to improvements in various types of relationships. To the author's knowledge, no intervention research to date looks at outcomes for the recipients of gratitude letters or for the relationship between letter-writer and receiver; both of these could be very interesting avenues to examine.

7 Conclusions

Gratitude interventions provide individuals with an easy, no-cost, independent strategy to boost well-being. Whereas things like therapy or gym memberships require payment and the seeking out of professional institutions, gratitude interventions can

be practiced for free, in the comfort of one's own home. Given this ease of access, they are excellent candidates for far-reaching impact. Based on almost two decades of research, the overall findings are positive. The practice of gratitude can lead to small boosts in aspects of our daily functioning such as positive affect, well-being, happiness, and life satisfaction, while decreasing depressive symptoms. However, the effects are small (rather than life changing), and limited. Although many people claim gratitude can help with physical health, exercise, and sleep, the findings in the literature are actually inconclusive. Moreover, there is not a lot of evidence that gratitude interventions are any better than other positive psychology interventions. Finally, the lack of research investigating gratitude in multicultural contexts leaves open questions as to its effectiveness for different populations. Future research must be done to present a more encompassing picture of the benefits of gratitude interventions beyond the traditional WEIRD samples. There is reason to believe they could be quite impactful for cultures that value the importance of relationships and social harmony, but empirical evidence is needed.

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Developing Savoring Interventions for Use in Multicultural Contexts: Bridging the East-West Divide



Jennifer L. Smith, Soyeon Kim and Fred B. Bryant

Oh, East is East and West is West and never the twain shall meet.
—Rudyard Kipling (1889), *The Ballad of East and West*

The West can teach the East how to get a living, but the East must eventually be asked to show the West how to live.
—Tehyi Hsieh (1948), *Chinese Epigrams Inside Out and Proverbs*

Abstract Savoring is the capacity to attend to positive experiences and intentionally engage in thoughts and behaviors to regulate positive feelings that arise during those experiences. Greater enjoyment can occur through an increase in savoring responses that amplify the duration and intensity of positive feelings or through a decrease in responses that dampen positive feelings. Savoring is associated with greater psychological well-being, and evidence supports the effectiveness of savoring interventions for increasing happiness and life satisfaction. However, most savoring interventions, and positive psychological interventions more broadly, have been developed from a Western perspective, and may not be optimal for use in other cultures. Indeed, research suggests that the cultural backgrounds of participants should be considered before implementing savoring interventions. Differences in collectivistic versus individualistic motivations, fear of happiness, dialectical thinking, and traditional Asian (Confucian) values versus traditional Western values may limit the applicability of Western-based savoring interventions in Eastern cultures. For instance, a savoring intervention developed in a Western culture and designed to amplify positive feelings might not be appropriate for recipients who adhere to traditional Asian values, such

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as emotional self-control and humility. Instead, when implemented in an Eastern culture, this type of savoring intervention might better be modified to reduce dampening rather than to increase amplifying in response to positive events. This chapter provides a theoretical and empirical overview of savoring, describes key differences in savoring between Western and Eastern cultures, and discusses the implications of East-West cultural distinctions for shaping interventions designed to enhance savoring in the two types of cultures. Synthesizing these conceptual distinctions, we present an integrative heuristic model that provides a conceptual lens through which researchers can adapt savoring interventions across Eastern and Western cultures.

Keywords Savoring · Cross-cultural · Psychological intervention · Emotion regulation · Collectivism

1 Introduction

Across cultures, people generally prefer to experience positive rather than negative emotions (Kuppens, Realo, & Diener, 2008); however, positive feelings are more desired and negative feelings are more undesired in individualistic Western cultures compared to collectivistic Eastern cultures (Eid & Diener, 2001). Given this greater desire to maximize positive feelings within Western cultures, it is perhaps unsurprising that positive psychological interventions, including savoring interventions, have been developed and tested predominantly in Western nations. Although the desire to be happy may be universal, cultural differences in the meaning of happiness and regulation of positive emotions should inform the development and adaptation of positive psychological interventions for use in Eastern cultures in order to maximize effectiveness. This chapter focuses on cross-cultural factors that researchers and practitioners should consider when implementing savoring interventions to enhance the well-being of people from Eastern cultures.

2 The East-West Cultural Distinction

The distinction between Eastern versus Western culture appears to have originated in the late 16th century, when the first Christian missionary, Father Matteo Ricci, arrived in China and introduced the European world map (Wallis, 1965). Highlighting geographical divisions, he noted that, from the European perspective, China was located in the Far East and, as a result, the Chinese referred to Father Ricci as “the Wise Man from the West” (Wallis, 1965, p. 38). Whilst others have criticized the artificiality of this Eurocentric East-West distinction (e.g., Browning & Lehti, 2010; Lillard, 1998), which crudely categorizes culture simply by hemisphere, exaggerates intra-cultural homogeneity, and ignores the fact that cultural variation reflects an underlying continuous spectrum rather than a simplistic dichotomy (Ryder, Alden, & Paulhus, 2000;

Tweed & Lehman, 2002), this long-standing cultural distinction continues to have an enduring influence on work in the social sciences. In particular, its benefit lies in its utility in identifying and understanding broad patterns of variation. As such, its potential value in guiding future work aimed at adapting across culture interventions that enhance savoring should continue to be recognized.

3 Overview of Savoring

Savoring is the capacity to attend to positive experiences and to intentionally engage in thoughts and behaviors to regulate positive feelings that arise from those experiences (Bryant, 2003; Bryant, Chadwick, & Kluwe, 2011; Bryant & Veroff, 2007). It is also distinct from pleasure and happiness, which are potential outcomes of savoring. In Western cultures, savoring is typically associated with a greater frequency, intensity, and duration of positive feelings (Bryant, 2003). However, depending on individual, situational, and cultural factors, savoring may involve amplifying or dampening positive emotions, as well as increasing or decreasing the duration of positive emotions (Kim & Bryant, 2017; Ma, Tamir, & Miyamoto, 2018; Miyamoto & Ma, 2011). Greater enjoyment can occur through either an *increase* in savoring responses that amplify the duration and intensity of positive feelings or a *decrease* in responses that dampen positive feelings.

3.1 Savoring Beliefs

Bryant and Veroff (2007) distinguished between two components of savoring: savoring beliefs and savoring strategies (or responses). Savoring beliefs refer to one's perceived ability to savor positive experiences when they occur (Bryant, 2003). Savoring beliefs encompass three different time orientations: (1) retrospectively savoring memories of past positive experiences (*reminiscence*); (2) savoring positive experiences as they unfold in the present (*savoring the moment*); and (3) prospectively savoring imagined future positive events (*anticipation*). Evidence also suggests that savoring abilities and efforts vary based on individual differences and situational factors. For instance, women tend to report higher savoring beliefs than men (Bryant, 2003; Bryant & Veroff, 2007).

Personality traits, such as extraversion, affect intensity, optimism, and wisdom, are also associated with greater savoring capability (Beaumont, 2011; Bryant, 2003), whereas neuroticism, hopelessness, and guilt are associated with lower savoring capability (Bryant, 2003). In addition, high self-esteem is associated with amplifying positive feelings, and low self-esteem is associated with dampening positive feelings (Wood, Heimpel, & Michela, 2003). Even when savoring abilities are high, however, people may decide not to savor in certain circumstances. The need to fulfill work or

familial commitments, for example, may take priority over spending time savoring the moment.

A great deal of research indicates that savoring beliefs are associated with higher levels of psychological well-being (Smith & Bryant, 2017). Greater savoring beliefs are associated with greater positive affect, happiness, life satisfaction, and perceived control (Bryant, 2003; Bryant & Veroff, 2007; Gentzler, Morey, Palmer, & Yi, 2013; Meehan, Durlak, & Bryant, 1993; Smith & Hollinger-Smith, 2015). Furthermore, older adults with greater savoring abilities tend to experience high life satisfaction, even when they are experiencing health challenges (Smith & Bryant, 2016). Savoring beliefs also are related to lower depressive symptoms and anxiety (Bryant, 2003), particularly during times of adversity (Bryant & Smith, 2015; Hou et al., 2016).

3.2 *Savoring Strategies*

Whilst savoring beliefs are more about an individual's *capability* to savor a positive experience, savoring strategies are the thought processes or behaviors that people may use to *regulate* the good feelings that positive experience may bring (e.g., Bryant & Veroff, 2007). In developing the Ways of Savoring Checklist (WOSC), Bryant and Veroff (2007) identified ten categories of cognitive and behavioral savoring strategies, which are outlined below:

- *Sharing with Others.* One strategy for amplifying positive emotions is to share positive experiences with others. For example, people can capitalize on positive outcomes by seeking out others with whom to experience or celebrate positive events, or to whom to tell stories about memorable past events or exciting future plans (Gable, Reis, Impett, & Asher, 2004; Langston, 1994). However, because Easterners worry more than Westerners that disclosing their positive emotions would make others jealous or envious, the former tend to capitalize on positive events less than do the latter (Choi, Oishi, Shin, & Suh, 2018).
- *Memory Building.* Taking time to intentionally construct a memory of a positive experience can enhance one's ability to savor the moment and to reminisce. The process of memorializing a positive experience (i.e., constructing a long-term memory) can lead people to notice details about the experience and associated feelings that they may have otherwise overlooked. However, Easterners may be less interested than Westerners in deliberately constructing a lasting memory of good feelings for later recall, given their general tendency not to prolong or amplify positive experience (Miyamoto & Ma, 2011). Moreover, the content of positive autobiographical memories may vary as a function of cultural differences in the nature of the self, with Easterners more likely to adopt an interdependent self-focus and Westerners more likely to adopt an independent self-focus (Conway, Wang, Hanyu, & Haque, 2005).
- *Self-Congratulation.* Recognizing and taking pride in one's accomplishments is a strategy for increasing one's savoring of personal milestones and achievements.

When this strategy is used to excess, however, self-congratulation may be perceived as bragging or boasting, which could have a negative impact on relationships with others (Kalokerinos, Greenaway, Pedder, & Margetts, 2014). Self-congratulation may be a more appropriate savoring response in Western cultures, which tend to emphasize competitive individualism (Markus & Kitayama, 1991) and self-enhancement (Ross, Heine, Wilson, & Sugimori, 2005) more than Eastern cultures.

- *Sensory-Perceptual Sharpening*. Focusing one's attention on specific details of a positive experience and on one's concurrent feelings, as well as blocking out distractions, can enable people to appreciate an experience more deeply, or in new ways. However, Easterners and Westerners may choose to sharpen their attentional focus on different aspects of positive stimuli. For instance, neurophysiological research indicates that Westerners favor salient, local visual information and, more often, attend to foreground objects, whereas Easterners prefer global information and, more often, attend to elements in the background (Lao, Vizioli, & Caldara, 2013).
- *Comparing*. Thinking about ways in which a positive experience is better than alternative experiences (actual or imagined) can increase positive feelings; however, considering ways in which the positive experience could have been better is likely to dampen positive feelings. Downward social comparisons (i.e., comparing one's outcomes to those of less fortunate others) can enhance appreciation of a positive experience, but may be more prevalent in Western versus Eastern cultures due to a generalized tendency toward greater self-enhancement among Westerners (Heine & Hamamura, 2007). In addition, counterfactual thinking, in which one imagines how a current event might have been different, may be less common in some Eastern cultures. For instance, because there is no sentence structure to indicate counterfactual thinking in Chinese, counterfactual thinking may be less common among Chinese individuals (Bloom, 1984).
- *Absorption*. Becoming more fully engrossed or engaged in an activity can help one intensify and prolong positive feelings during intermittent moments in which one is aware of enjoyment or satisfaction being derived from the activity (Csikszentmihályi, 1990). In Eastern cultures that are grounded in Confucian values, full absorption (or flow) may be tempered by the tendency to remain somewhat restrained or detached from ongoing *behavioral* activities while maintaining *emotional* engagement, in order to deepen positive feelings (Frijda & Sundararajan, 2007).
- *Behavioral Expression*. Expressing inner positive feelings through outward physical behaviors, such as smiling, clapping, jumping, or hugging, can enhance one's enjoyment of positive experiences, whereas suppressing behavioral displays, by not laughing at a funny video for example, can dampen enjoyment (Gross & Levenson, 1997). Behavioral expression may be a more appropriate savoring response in Western as opposed to Eastern cultures, given that greater individualism is positively associated with higher expressivity norms, especially for positive emotions (Matsumoto, Yoo, & Fontaine, 2008). Easterners may also restrain their public displays of positive emotion more than Westerners to avoid causing jealousy or envy in others (Choi et al., 2018).

- *Temporal Awareness*. Reminders of the fleetingness of positive experience can encourage savoring and amplify positive feelings (Kurtz, 2008). However, awareness of endings may also trigger sadness and bittersweet feelings (Larsen, McGraw, & Cacioppo, 2001). According to socioemotional selectivity theory (Carstensen, Isaacowitz, & Charles, 1999), the awareness of endings directs people's attention to emotionally meaningful goals. To the extent that endings and emotional goals have different meanings in Eastern and Western cultures, there is likely to be "considerable cultural variability in the types of stimuli that prime the attentional shift and the specific interpersonal goals that people pursue" (Carstensen et al., 1999, p. 177).
- *Counting Blessings*. Reflecting on ways in which one is grateful to experience a positive event can increase appreciation and amplify positive feelings (Emmons & McCullough, 2003). We can speculate that the specific blessings on which people reflect may vary across culture too. For example, Easterners may be more likely than Westerners to contemplate close personal relationships. Although enumerating blessings is different from giving thanks for them, expressing thanks appears to be a universal activity that is "accomplished differently in contrasting cultures, whose values may focus differently on the different components that constitute expressions of gratitude" (Eisenstein & Bodman, 1993, p. 74). Along these lines, Chinese children are more likely than their North American counterparts to express *connective gratitude*, which promotes social relationships (Wang, Wang, & Tudge, 2015).
- *Kill-Joy Thinking*. Focusing on negative aspects of positive experience, such as faults or imperfections, thinking of other things one should be doing, or thinking about ways in which one does not deserve the positive outcome, can dampen good feelings and reduce enjoyment (Quoidbach, Berry, Hansenne, & Mikolajczak, 2010). Although this thought pattern tends to be associated with depression in Western cultures (Beck, 1976), intentionally suppressing or dampening positive emotions may be culturally appropriate in East Asian cultures (Miyamoto & Ma, 2011). In addition, finding faults in oneself may be more prevalent among Easterners, given that Easterners do not strive to maintain an overly positive view of the self as much as Westerners (Heine & Hamamura, 2007).

As with savoring beliefs, there are also individual differences in the use of savoring strategies. Extraversion, for instance, is associated with greater use of Memory Building, Sharing with Others, Behavioral Expression, Self-Congratulation, and Counting Blessings—savoring strategies that amplify positive feelings (Bryant & Veroff, 2007). In addition, optimism is positively correlated with Counting Blessings, whereas pessimism is associated with greater Kill-Joy Thinking, Temporal Awareness, and Comparing (Bryant & Veroff, 2007). This latter pattern of associations suggests that optimism is related to amplifying positive feelings, and pessimism is related to dampening positive feelings.

Research in Western samples indicates that the relationship between savoring strategies and well-being depends on whether the particular strategy used amplifies or dampens positive emotions. Savoring strategies that amplify positive feelings

are associated with greater happiness, life satisfaction, and positive affect, whereas strategies that dampen positive feelings are associated with lower happiness, life satisfaction, and positive affect (Quoidbach et al., 2010; Szondy, Martos, Szabó-Bartha, & Pünkösty, 2014). In addition, having a wider repertoire of savoring strategies is related to greater happiness (Quoidbach et al., 2010).

3.3 *Savoring Interventions*

A growing body of research has examined the effectiveness of savoring-related interventions in increasing positive emotions and psychological well-being (e.g., Bryant, Smart, & King, 2005; Hurley & Kwon, 2012; Kurtz, 2008, 2015; Quoidbach, Wood, & Hansenne, 2009; Schueller, 2010; Smith & Bryant, 2018; Smith & Hanni, 2019; Smith, Harrison, Kurtz, & Bryant, 2014). Savoring interventions typically have three core characteristics. First, the intervention directs people to attend to a positive experience. Savoring interventions can involve reminiscing about past positive events, savoring ongoing positive moments, anticipating future positive events, or a mixture of different temporal orientations. Second, the savoring intervention increases people's awareness of their own positive feelings that arise from that positive experience. This type of intervention focuses on ongoing feelings experienced in the present moment, rather than on remembered or anticipated feelings. Third, the savoring intervention includes strategies or techniques for amplifying the positive feelings, including extending the duration, enhancing the intensity, or increasing the frequency of positive feelings. Savoring interventions typically involve the use of one or multiple savoring strategies to amplify positive emotions, such as focusing on positive aspects of an experience.

An example of a multi-strategy savoring intervention is a savoring skills training program for university students. In particular, Hurley and Kwon (2012) developed an intervention in which students received training on the 10 strategies from the Ways of Savoring Checklist (Bryant & Veroff, 2007). Participants in the savoring-intervention group and in the no-intervention control group recorded their use of savoring strategies for two weeks. Participants in the savoring-intervention group reported lower depression and negative affect compared to the control group; however, there was no difference between the groups on positive affect (Hurley & Kwon, 2012). These findings suggest that the savoring skills training reduced dampening but did not increase amplifying of positive feelings.

Savoring interventions that focus on one specific savoring strategy have also been effective at increasing positive feelings. For instance, participants who reminisced using cognitive imagery or personal memorabilia twice a day for one week reported an increased frequency of happy feelings compared to participants in a control condition (Bryant et al., 2005). In another study, taking a 20-minute walk, once a day for one week, while intentionally noticing and reflecting on all of the positive elements in one's surroundings led to an increase in happiness compared to control conditions (Bryant & Veroff, 2007). In addition, taking mindful photographs and reflecting upon

the beauty and meaning of the subject of the photograph produced more positive moods, compared to taking neutral photographs (Kurtz, 2015).

Savoring is associated with greater psychological well-being, and evidence supports the effectiveness of savoring interventions for increasing happiness and life satisfaction. A meta-analytic review found that savoring interventions had a positive overall effect on happiness and positive affect (Smith et al., 2014). Furthermore, savoring interventions in which participants engaged more frequently or in a greater “dosage” (i.e., frequency multiplied by the number of minutes per day of intervention exposure) resulted in larger effects. However, it is important to note that most savoring interventions, and positive psychological interventions more broadly, have been developed exclusively from a Western perspective, which may make these interventions less than optimal for use in Eastern cultures.

3.4 Summary

Savoring is the ability to intentionally regulate positive feelings in response to positive experiences. Evidence, based on Western samples, suggests that savoring interventions are effective at increasing participants’ positive emotions and well-being. However, individual characteristics and cultural factors may also impact savoring, in terms of both one’s perceived ability to savor positive experiences as well as the selection and implementation of savoring strategies. These factors need to be considered when designing and implementing savoring interventions for Eastern cultures.

4 Savoring and Cultural Considerations

4.1 Savoring Harmony

Despite the dominant focus on Western culture in the savoring literature, some theorists have nevertheless developed conceptual frameworks for understanding savoring processes from Eastern perspectives. For instance, Frijda and Sundararajan (2007) advanced a theory of savoring based on Chinese Confucian philosophy. A core aspect of Confucian thought is harmony, which refers to a sense of internal balance and integration of ideas or feelings. Within that context, savoring is the self-initiated “mental act or attitude of being sensitive to harmony and the activity to search for it” (Frijda & Sundararajan, 2007, p. 229). Accordingly, the awareness of one’s own feelings when in harmony is the target of savoring rather than more tangible components of the experience. For example, Chinese savoring highlights an awareness of and enjoyment of experiencing harmony during a meal, rather than simply taking pleasure in eating the food (Kubovy, 1999). The Chinese concept of savoring involves both self-reflexivity (i.e., meta-awareness of one’s feelings during a positive experi-

ence) as well as detachment (i.e., lack of full immersion in the immediate experience; Sundararajan, 2010). Frijda and Sundararajan (2007) also note that the Chinese concept of savoring consists of evaluation, awareness, and reflection processes.

There are also similarities and differences between Chinese and Western concepts of savoring. As described above, the Western notion of savoring refers to the ability “to attend to, appreciate, and enhance ... positive experiences in one’s life” (Bryant & Veroff, 2007, p. xi). In both cultures, savoring is intentional, and it involves an awareness of one’s feelings during a positive experience. However, a key difference between Eastern and Western conceptualizations of savoring is the emphasis placed on harmony within Chinese culture. In Western cultures, *self*-focused emotions, such as joy and pride, may be more predominant during savoring than *other*-focused emotions, such as feelings of connection and respect (Markus & Kitayama, 1991). In addition, the Western conceptualization of savoring focuses exclusively on the regulation of positive feelings during positive experiences, whereas the Chinese notion of savoring also encompasses positive feelings derived from negative experiences (Sundararajan & Averill, 2007).

4.2 *Fear of Happiness*

In Western cultures, there tends to be an emphasis on the pursuit of happiness and the belief that happiness is critical in life (Joshani & Weijers, 2014). However, Joshani and Weijers (2014) proposed that there may be individual and cross-cultural differences in fear of happiness. The concept of *fear of happiness* reflects an aversion toward pursuing, or expressing, happiness. Although fear of happiness may be found across cultures, it is more prominent in non-Western cultures. In addition, there are cross-cultural variations in both the types of happiness that people pursue or avoid (e.g., pleasure, life satisfaction, or personal happiness), as well as the reasons for fearing happiness. Joshani and Weijers (2014) identified three primary reasons why people may fear or avoid happiness: (1) pursuing happiness may bring about negative consequences; (2) being happy may make one a worse person; and (3) expressing happiness may negatively impact interpersonal social relationships.

Researchers have found that particular styles of savoring are associated with levels of fear of happiness. Joshani et al. (2014) conducted cross-cultural research on the relationship between savoring and fear of happiness across 14 nations, including Latin American, Middle Eastern, and South Asian countries, in order to validate the fear of happiness scale (Joshani, 2013). They found that people who are averse to happiness and believe happiness leads to negative consequences are more likely to dampen, rather than amplify, positive emotions. Across cultures, subjective well-being was negatively correlated with fear of happiness, which was positively associated with dampening, although East Asian samples, compared to Western samples, reported higher levels of fear of happiness (Joshani et al., 2014).

4.3 *Differences in Temporal Conceptions and Time Orientation Between East and West*

Cross-cultural theorists have also highlighted crucial distinctions between Eastern and Western conceptions of the structure and passage of time. For example, Westerners typically have a *linear* conception of time as flowing in a fixed sequence from past to present to the future. In contrast, Easterners more typically have a *circular* conception of time in which events unfold in cyclical patterns with every event linked to all other events—a difference in temporal perspectives that orients organization managers more toward future deadlines in the West versus more toward relational processes in the East (Chen & Miller, 2011).

Other work has focused on the related concept of time orientation. Time orientation refers to the relative degree to which one tends to focus perceptual attention on the past, the present, or the future (Kluckhohn & Strodtbeck, 1961). Supporting a present-orientation in both cultures, mindful awareness of the moment is a core element of Eastern Buddhism (Hanh, 1998), as is the desire to make the most of the moment (i.e., *carpe diem*) in pursuing happiness in Western culture (Sobol-Kwapinska, 2013). However, theorists have argued that Easterners generally tend to be more past-oriented than Westerners, whereas Westerners tend to be more future-oriented than Easterners (Doob, 1971; Yau, 1988). Indeed, in support of this, more recent research shows that Chinese undergraduates value past events more than future ones, whereas Canadian undergraduates value future events more than past ones (Guo, Ji, Spina, & Zhang, 2012). This theoretical perspective suggests that Easterners, compared to Westerners, are typically more interested in reminiscing about past positive events and less interested in anticipating future positive events.

These cross-cultural differences in time orientation may influence the effectiveness of savoring interventions that have been developed using Western populations when implemented in Eastern populations. In particular, it is expected that past-focused savoring interventions will produce stronger effects among Eastern participants than future-focused savoring interventions. For example, Western-based savoring interventions designed to enhance happiness through mental time travel may be more effective in Eastern cultures when they involve reminiscing about *past* positive experiences (e.g., Bryant et al., 2005) as opposed to anticipating possible *future* positive experiences (e.g., Quoidbach et al., 2009). Supporting this line of reasoning, a “Best Possible Selves” savoring intervention, in which people imagined and wrote about a future time when they had realized all their life dreams, produced larger increases in life satisfaction for Anglo Americans than for Asian Americans (Boehm, Lyubomirsky, & Sheldon, 2011).

4.4 Differences in Cultural Values Between East and West

Western cultures tend to emphasize individuality and rationality based on the tradition of Descartes, whereas East Asian cultures, where Confucianism as well as Buddhism defines an individual through interpersonal relationships, more strongly emphasize humanity, compassion, harmony, and justice (Kim & Park, 2008). In Western cultures, individualism appears more salient (Oyserman & Lee, 2008), whereas collectivism seems to be more salient in East Asian cultures. For example, in most East Asian countries, such as China, Japan, and Korea, an individual's last name comes before the first name, whereas in Western cultures, one's first name precedes the family name.

Traditional Asian norms, derived from Confucianism, emphasize propriety and harmony between self and others (Joshani, 2014). With regard to cultural norms, Eastern cultures more strongly value interdependence and connectedness of the self with others, whereas Western cultures more strongly value independence and the individual self (Markus & Kitayama, 1991). Universally, people favor positive emotions (Larsen, 2000), but emotional experience is also a product of culture (Uchida, Norasakkunkit, & Kitayama, 2004). For instance, research has shown that one's level of happiness and subjective well-being is associated with different self-related constructs across cultures. Along these lines, Kitayama, Markus, and Kurokawa (2000) examined cultural differences in the nature of "good feelings" and found that Japanese participants more strongly regarded calmness and friendliness as being good, whereas American participants more strongly reported pride and accomplishment as being good. From the Western perspective, subjective happiness is strongly related to competence and achievement, whereas in the Eastern view, personal happiness implies inter-relational values acquired from social harmony in relationships (Uchida et al., 2004).

Cultural values also influence the outward expression of positive emotions. For example, Matsumoto and colleagues (2008) examined the relationship between emotional expressions and cultural values (i.e., individualism versus collectivism) across cultures and found that people who live in collectivistic countries, compared to those who live in individualistic countries, are less likely to display positive emotions due to the different cultural norms regarding emotional expression. Likewise, Miyamoto and Ma (2011) found that Easterners are more likely to dampen positive emotions, while Westerners tend to amplify positive emotions. In fact, Westerners often amplify their positive emotions while expressing excitement or pride explicitly. On the other hand, overt expression of happiness or self-congratulation among Easterners may violate social norms of harmony and modesty (Safdar et al., 2009). In a related vein, Kim and Bryant (2017) found that Korean participants, traditionally influenced by norms reflecting Confucianism and collectivism, more strongly engaged in dampening rather than amplifying, because dampening positive emotions is more culturally appropriate in Korean culture.

As noted earlier, prior theory and research on savoring has been based largely on the perspectives of Western culture. Extending this prior work to Eastern culture,

Kim and Bryant (2017) examined the influence of gender and traditional Asian values on savoring strategies in Korea. Based on previous findings that Asian cultures encourage dampening rather than amplifying positive emotions (Miyamoto & Ma, 2011), the purpose of the study was to identify culturally normative ways of savoring in Korean culture and to determine whether Koreans' savoring responses varied based on gender and the degree to which individuals endorsed traditional Asian values. In Western samples, men, compared to women, are more likely to dampen and use a strategy of "Kill-joy Thinking" (Bryant & Veroff, 2007). Similarly, other research has found that men are less likely to seek out and express emotions, compared to women (Chaplin, 2015; Eagly & Wood, 1982).

Analyzing survey responses from 288 college students, Kim and Bryant (2017) found that Korean participants understood the Western concept of savoring beliefs and strategies, even though savoring is novel to Korean culture. Korean women, compared to Korean men, more strongly rejected Asian values and engaged in lower levels of dampening in response to positive emotions. This pattern of findings was attributed to Korean women's pursuit of empowerment through the rejection of traditional values that historically emphasize gender-role differentiation and support men's greater power (Kim & Bryant, 2017). These women, however, also endorsed dampening more than amplifying as a savoring response to positive feelings, as did Korean men. This latter pattern of findings highlights the underlying influence of culture on savoring strategies. Despite women's greater rejection of traditional Asian values, both male and female Korean students preferred to savor positive experiences in more culturally appropriate ways (i.e. dampening positive emotions) rather than engaging in Western-style savoring (i.e. amplifying positive emotions).

4.5 Summary

There are several areas of potential cultural differences that could have an impact on savoring and whether one amplifies or dampens positive feelings: (1) pursuit of harmony versus achievement, (2) preference for balance versus maximizing pleasure, (3) fear of happiness versus pursuit of happiness, (4) orientation toward others or self, (5) beliefs that life experiences proceed circularly or linearly, (6) past or future time orientation, and (7) cultural values, such as collectivism versus individualism.

5 Implications for Savoring in Multicultural Contexts

5.1 Consider Culture-Activity Fit

To summarize, people from Eastern cultures may dampen positive emotions for several reasons, including fear of the consequences of happiness as well as culturally-

specific values and norms. It is, therefore, important for researchers and practitioners to consider the cultural context in which savoring interventions will be administered as previous research has shown that the effectiveness of positive psychological interventions depends on the culture-activity fit (Layous, Lee, Choi, & Lyubomirsky, 2013; Lyubomirsky & Layous, 2013). An example in support of this conclusion is a study conducted by Layous et al. (2013) in which they randomly assigned university students from the United States and South Korea to write gratitude letters, to perform acts of kindness, or to complete a control activity. In both the US and South Korean samples, well-being increased for participants in the acts of kindness intervention; however, only US participants benefited from the gratitude letter intervention. Layous et al. attributed these effects to cultural differences in dialectic thinking (i.e., the notion that the world is constantly changing so that unhappiness often leads to happiness, and, in turn, happiness often leads to unhappiness; Peng & Nisbett, 1999), which is more prevalent in Eastern than Western culture. People from East Asian cultures have a tendency to experience greater emotional complexity, i.e., simultaneous occurrence of positive and negative emotions, compared to people from Western cultures (Bagozzi, Wong, & Yi, 1999; Spencer-Rodgers, Peng, & Wang, 2010). Gratitude writing, as an intervention in this study, may have elicited mixed emotions, such as a combination of gratitude and guilt, in the South Korean sample (Layous et al., 2013). As such, researchers and practitioners should carefully consider the types of emotions that positive activities may produce, keeping in mind that people from Eastern cultures are more inclined to experience mixed emotions. Savoring interventions that elicit predominantly positive emotions are likely to have a more positive influence on well-being.

5.2 *Reduce Fear of Happiness*

As noted above, fear of happiness also tends to be greater in Eastern cultures. This raises the question of whether reducing fear of happiness among Easterners would promote greater amplifying of positive emotions. Evidence suggests that interventions can be effective at reducing fear of happiness in multicultural contexts. Notably, Lambert, Passmore, and Joshanloo (2019) administered a semester-long Happiness 101 program that included a wide variety of positive psychological interventions (e.g., savoring, gratitude letter, best possible selves) to a multinational group of students. Participation in the Happiness 101 program led to decreases in fear of happiness that were maintained 3 months after completion of the program. Although Lambert et al.'s (2019) findings suggest that positive psychological interventions may be effective at reducing fear of happiness, the study's participants were predominantly from Middle Eastern and North African countries. As such, research needs to be extended to samples in Eastern cultures to see how generalizable these findings are.

Extending the work of Kim and Bryant (2017), another approach to adapting Western-based savoring interventions for Eastern cultures could be to focus these interventions on *reducing dampening* of positive emotions rather than on *increasing*

amplifying of positive emotions. For instance, savoring interventions could focus on increasing awareness of positive experiences as well as on identifying and countering dampening-related thoughts. There would be less emphasis during the intervention on learning and implementing savoring strategies to increase the intensity, frequency, and duration of positive feelings. Because of existing cultural norms, people in Eastern cultures may well find it easier to engage in less dampening than to engage in more amplifying.

5.3 *Emphasize Social Connection*

Savoring interventions that focus on interpersonal relationships, or connection with one's community, may be more effective or more culturally appropriate in Eastern cultures due to the greater emphasis on interdependence and harmony in these cultures (e.g., Markus & Kitayama, 1991). For instance, a positive psychological intervention in which people counted their own acts of kindness toward others for one week resulted in increased happiness in two Japanese samples (Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006). Similar to the effects of performing acts of kindness on well-being (Layous et al., 2013), counting acts of kindness may have contributed to greater happiness because Japanese participants did not feel the need to dampen positive feelings derived from helping others the way they might, in contrast, have dampened self-focused feelings of pride in response to personal achievement.

In a related vein, the basis of happiness varies across cultures that more strongly emphasize social relationships and obligations in collectivistic cultures (Lu & Gilmour, 2004). Westerners are more likely to feel pressure to pursue happiness, whereas Easterners are more likely to feel pressure to belong and maintain close interpersonal relationships with others (Suh, 2000). In addition, previous research has found that the association between the pursuit of happiness and well-being depends on whether the happiness seeker is from an individualistic or collectivistic culture (Ford et al., 2015). Specifically, in individualistic cultures, motivation to pursue happiness was unrelated to socially-based views of happiness and negatively related to well-being; however, in collectivistic cultures, motivation to pursue happiness was positively correlated with socially-based views of happiness and higher well-being in collectivistic cultures. This pattern of findings was attributed to differences in ways that people seek happiness: people from collectivistic cultures are more likely to seek happiness through social engagement (Ford et al., 2015).

Given the emphasis on social connection, one form of savoring that may be particularly applicable to Eastern cultures is relational savoring (e.g., Bond & Borelli, 2017; Borelli, Rasmussen, Burkhart, & Sbarra, 2015). Relational savoring refers to the process of savoring experiences that involve family, friends, or others who are emotionally close. In a Western sample of people in long-distance relationships, for example, reminiscing about a positive experience during which they felt protected, cherished, or accepted in their relationship led to greater positive affect (Borelli et al.,

2015). To date, research on relational savoring has not been extended to participants from Eastern nations. However, Western-based savoring interventions can be tailored for use in Eastern cultures by focusing participants on savoring positive experiences within relationships or communities.

5.4 Adapt to Changes in Cultural Values

One outcome of globalization and modernization is an increase in individualism across cultures (Ogihara, 2018). Nevertheless, the importance of interpersonal relationships and other traditional cultural values persist in Eastern cultures despite a simultaneous increase in individualism (e.g., Hamamura, 2012; Inglehart & Baker, 2000). The tension between increasing individualistic versus traditional collectivistic orientations may have a negative impact on well-being and relationships (Ogihara, 2017). In Japan, the perceived benefits of individualism, such as independence, are offset by the perceived costs of individualism for interpersonal relationships (Ogihara, Uchida, & Kusumi, 2014). Future researchers and practitioners should, therefore, consider the influence that changing cultural values and situational contexts may have on the effectiveness of savoring interventions.

Consider, for example, a savoring-related intervention in which Japanese employees who completed a positive psychological intervention (i.e., documenting three good things that happened at work each week and describing their feelings) once a week for 6 weeks became happier over time, compared to a control group who merely listed the factual details of their work activities and avoided writing about emotions (Chancellor, Layous, & Lyubomirsky, 2015). Behavioral measures revealed that participants in the positive intervention condition walked around more when they arrived at work, interacted face-to-face with their coworkers less, and ended their workday earlier. Chancellor et al. (2015) interpreted these findings to indicate that an increase in happiness contributed to greater engagement and productivity. While these results are promising, several questions remain unanswered. For example, did the happiness intervention cause the observed decrease in social interactions by increasing individualism? Given that individualism may be more salient in a Japanese workplace than in a Japanese home, does the effectiveness of this positive psychological intervention depend on the setting (i.e., home versus workplace)?

5.5 Summary

It is important to adapt savoring interventions to specific cultural contexts, including local norms and values. Depending on the target audience, strategies for tailoring savoring interventions for Eastern cultures could include activities to counter fear of happiness, focus on socially-based positive experiences, and incorporate cultural values.

6 Future Directions

The take-home message from this chapter, therefore, is that there is a strong need for the development of savoring interventions for use in Eastern cultures and that researchers and practitioners also need to be sensitive to differences within Eastern cultures as well as individual differences, such as age and gender, that may moderate the effects of savoring interventions. In addition, future research needs to be aware of international variation within both Eastern and Western cultures. The variable of time serves as an example. Within Western culture, the pace of life is slower in Mexico, Brazil, and El Salvador than in the United States, Canada, and Costa Rica (Levine & Norenzayan, 1999). Within Eastern culture, Chinese language has no past or future verb tenses but only present tense (Chen & Miller, 2011), whereas Korean and Japanese languages have past, present, and future tenses. Such within-group differences may have important implications in adapting savoring interventions across culture, including the way in which the information is presented.

To summarize our foregoing discussion, therefore, an integrative conceptual model that future researchers can use in adapting savoring interventions across Eastern and Western cultures is presented (see Fig. 1). This heuristic framework synthesizes the major East-West distinctions that have been highlighted as being relevant to the challenge of exporting savoring interventions originally developed in one culture into the other culture. Through this multidimensional conceptual lens, interventions are viewed with respect to five key East-West distinctions (Traditional Cultural Values, Self-Other Orientation, Beliefs about Experience, Orientation toward Happiness, and Primary Hedonic Goals), each of which involves cross-cultural variation in Time Orientation.

To illustrate the use of this conceptual framework in practice, consider the intervention discussed earlier in which a sample of American undergraduates received training in how to use strategies for savoring the moment to amplify positive feelings, tracked their use of these amplifying strategies to savor naturally-occurring positive events, and then completed outcome measures (Hurley & Kwon, 2012). Imagine that a researcher wishes to adapt this savoring intervention for use with a sample of college students in an Eastern culture.

Viewing this particular intervention through a multidimensional conceptual lens, the researcher notes that four of the savoring strategies (i.e., Sharing with Others, Self-Congratulation, Comparing, and Behavioral Expression) may clash to some degree with the traditional cultural values and self-other orientation of Easterners. In contrast, four other savoring strategies (i.e., Sensory-Perceptual Sharpening, Absorption, Temporal Awareness, and Counting Blessings) may be more compatible with Easterners' traditional cultural values and self-other orientation. More generally, the researcher also realizes that savoring strategies that amplify positive feelings may be inconsistent with Easterners' beliefs about experience, orientation toward happiness, and primary hedonic goals. These observations suggest that the researcher should restrict the intervention to include only the four savoring strategies that are more culturally appropriate for Easterners.

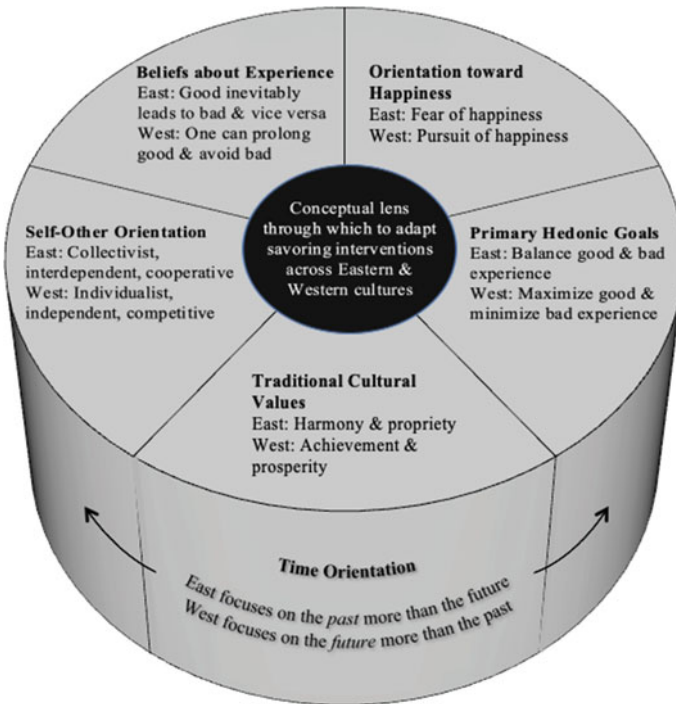


Fig. 1 Heuristic framework for conceptualizing adaptations required to maximize treatment efficacy in adapting savoring interventions across Eastern and Western cultures. Interventions are viewed with respect to five conceptual East-West distinctions (Traditional Cultural Values, Self-Other Orientation, Beliefs about Experience, Orientation toward Happiness, Primary Hedonic Goals), each of which interacts with cross-cultural variation in Time Orientation

Realizing that amplifying good feelings generally contradicts Easterners' approach to positive experience, the researcher might also decide to augment the savoring intervention by including training in how to decrease dampening in response to positive events. Incorporating the Time Orientation dimension that interacts with the other five conceptual domains in our heuristic model, if the original savoring intervention had focused on increasing positive feelings that occur when anticipating upcoming good events, then the researcher might modify the intervention to focus instead on increasing positive feelings that occur during ongoing good events or when recalling positive memories, based on Easterners' tendency to focus less on the future compared to Westerners.

7 Conclusion

There is currently a growing interest among Eastern researchers and practitioners in assessing the cross-cultural generalizability of positive interventions developed in Western cultures. We expect that Western researchers and practitioners will begin to reciprocate this interest, as a growing number of positive interventions are developed in Eastern cultures. It is our fondest hope that the conceptual framework we have presented will prove useful in future work that seeks to bridge the East-West divide by adapting interventions across culture to help people enhance the quality of their lives.

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Positive Psychological Interventions Aimed at Managing Territorial Behaviours Within the Organisational Context



Chantal Olckers and Llewellyn Ellardus Van Zyl

Abstract Psychological ownership, a psychological state where individuals perceive an object as theirs, has proven to result in positive outcomes and behaviours within the organisational context. However, feelings of ownership may result in increased territorial behaviour at work. Territoriality, a social behavioural construct, has been defined as behaviours or actions emanating from psychological ownership for the purpose of claiming, maintaining or protecting an individual's target of ownership. Very limited research exists regarding evidence-based positive psychological intervention strategies aimed at the management of territorial behaviours within organisational contexts. The aim of this chapter is to present the theoretical implications of territoriality as well as to provide evidence-based intervention strategies, from a positive psychology perspective, towards managing territorial behaviours within the organisational context.

Keywords Positive psychological interventions · Psychological ownership · Territoriality · Infringement · Possession

1 Introduction

People have an inherent need to own and psychologically attach themselves to targets of their possession (Van Zyl, Olckers, & van der Vaart, 2017; Olckers & van Zyl, 2016). People usually refer to these targets as 'mine', 'my' and/or 'ours' (Pierce, Kostova, & Dirks, 2003). This relation between people and their targets of possession or ownership (e.g. a project, a professional title, a work-laptop, a physical work-

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space) has significant meaning for the individual. These feelings of ownership lead to the expression of value, showing concern for and taking responsibility for the “things” that belong to them (Van Dyne & Pierce, 2004). Because these possessions are deeply rooted in the self-identity of the owner, it grows to be a function of the “extended self” (Jussila, Tarkiainen, Saestedt, & Hair, 2015). People thus use their possessions to define themselves: ‘I am what I have... What is mine is myself’ (Sartre, 1969).

This feeling of possession or ownership over targets, referred to as a state of psychological ownership, can be directed to numerous material as well as immaterial objects (e.g. a work team, a project or an idea) and has shown to have various positive individual, team and organisational level outcomes (Van Zyl, Olckers, et al., 2017). Psychological ownership develops more intensely from social contexts where the legal or formal ownership mechanisms (such as a patent, a receipt of purchase or a title deed) do not clearly exist (Brown, Crossley, & Robinson, 2014). Whereas legal ownership involves certainty and assurances as to the dynamics of ownership, psychological ownership develops out of uncertainty as it is subjected to various interpretations, perceptions and motivations amongst organisational members who may be competing for possession of these (im)material objects/resources (Menard, Warkentin, & Lowry, 2018). Consequently, this ever-increasing competition for limited resources at work could result in those experiencing high levels of psychological ownership to engage in territorial behaviours to communicate, protect or defend their ownership claims (Siu-Man & Xuebing, 2018). Further, variations in the social organisational context in which individuals’ function (such as moving from formal fixed offices, to shared offices spaces) could further influence these territorial behaviours and influence how individuals respond to ownership-driven behaviours.

Territorial behaviours refer to a pattern of attitudes and behaviours expressed in order to mark and defend possessions that an individual feel psychologically attached to. Specifically, it not only pertains to clearly demarcating what is subjectively perceived as “mine”, but also to clearly indicate that such is “not yours” (Brown & Zhu, 2016). Individuals exhibit such through either *claiming behaviours* (i.e. the marking or labelling of an object to communicate the boundaries of territory and clarifying who possesses psychological ownership over a target) or *anticipatory defences* (i.e. taking action to actively prevent others from successfully claiming or using the target of ownership) (Brown et al., 2014; Menard et al., 2018).

These types of territorial behaviour are evident in everyday life. A jacket thrown on a chair at a conference signals that the chair has been taken. Nameplates on office doors, degree certificates hanging from the walls, photos of relatives on desks indicates that the space has been occupied and belongs to someone (Brown & Zhu, 2016). Further, individuals decorate their homes and offices to express aspects of their identity and to claim living space (Dawkins, Tian, Newman, & Martin, 2015). Similarly, gangs use graffiti as markers not only to express their group’s identity, but to also communicate the boundaries of the area that they claim to others and, if necessary prevent others from accessing such.

Organisations, in particular, present many objects to which people are territorial. Central to employee’s experience of their work, is their workspace. Employees tend to not only mark but also defend even their temporary workspaces against others

who would like to intrude their space. A typical example of such is Chiat/Day who wanted to change their office design in the 1990s (Brown, 2009). The idea was to create a non-territorial communal office where it was expected of people not to sit at their assigned workspace, but to sit at a different space each day. A number of employees felt that their existing claims or territory has been threatened. This increase in territorial behaviour, if not properly managed, could have a negative effect on a manager's ability to effectively deal with such change.

Engaging in territorial behaviours aids individuals to increase a sense of security and control over objects, however this may have various negative consequences for organisations if not managed correctly. For example, when anticipatory defences (such as a password protecting important files on a shared drive without sharing such with others) are implemented, it may hinder other employees performing their duties. This in effect hampers the completion of task and delays the successful completion of projects. Similarly, if individuals aggressively stake claims to specific working spaces in open-office plans, it could negatively affect relationships at work. Although it is imperative to aid the development of psychological ownership at work, it is fundamentally important to manage territorial behaviours in order to ensure that the functioning of the organisational social system is not adversely affected.

Despite a considerable body of research existing related to the development of psychological ownership (c.f. Avey, Avolio, Crossley, & Luthans, 2009; Brown, 2009; Olckers, 2012), the management of territorial behaviours at work is non-existent. Further, specific evidence-based or empirically validated positive psychological interventions to address such is lacking in the literature. Therefore, the aim of this chapter is to present the theoretical implications of territoriality in organisations as well as to provide practical positive interventions that could be implemented to manage territorial behaviour in organisations.

2 Theoretical Background

2.1 *Psychological Ownership*

Pierce et al. (2003) describe psychological ownership as a cognitive-affective condition and defines it as “that state where an individual feels as though the target of ownership or a piece of that target is ‘theirs’ (that is ‘It is mine!’).”

The motivation for psychological ownership is rooted in three human needs: (a) efficacy and effectance; (b) self-identity; and (c) having a place to ‘dwell’ (i.e. belongingness) (Pierce, Kostova, & Dirks, 2001). Individuals associate ownership with certain rights and they come to believe that possessions provide control over the object that serve as a source of effectance (Jussila et al., 2015). The need to establish, maintain and transform self-identity through possessions or objects, are communicated in various ways ranging from direct proclamations of self-identification through to philosophical self-reflections through asking questions such as “Who am I?”, “Who

will I become?" and "Who was I?" (Olckers & Du Plessis, 2015). As one begins to understand the nature of the object, and how it relates to one's identity, the object starts to become part of the extended self (Pierce et al., 2003). Individuals also have a need for a favoured space and a permanent point of reference on which they can structure their daily lives (Jussila et al., 2015). Psychological ownership creates this space, not necessary in the literal sense, that provides a platform for experiences of safety and security to develop (Olckers & Du Plessis, 2012).

Psychological ownership emerges through various paths or routes. By exercising control over the target, by getting to know the target intimately and by investing themselves in the target, a sense of responsibility grows and possessive feelings develop (Olckers & Du Plessis, 2012). The amount of control an individual potentially exercises over an object increases the experience of it being part of the self and a feeling of ownership towards the target is fostered (Jussila et al., 2015). The more individuals associate themselves with a specific object, the more they come to know the object, the deeper the relationship between the object and the individuals, the stronger their feelings of ownership will be (Olckers & Du Plessis, 2012). People invest time and energy into the target resulting in the target becoming representations of the self (Olckers & van Zyl, 2018).

Organisational employees experiencing a sense of ownership may not only invest in and take responsibility for the objects which they feel they own, but they might even feel obliged to engage in territorial behaviour to protect their possessions (Brown et al., 2014). Since (psychological) ownership could result in territorial behaviour, it is important to have a closer look at the relation between psychological ownership and territoriality.

2.2 *Territorial Behaviour*

Where the focus of psychological ownership is on feelings of possession and attachment toward and object, territoriality focus more on the behaviour or actions that emanate from psychological ownership with the purpose to construct, communicate, maintain and restore territories around those objects to which one feels proprietary attachment toward (Brown, Lawrence, & Robinson, 2005). Territoriality is a social behaviour concept meaning that it is only in relation to other people that individuals mark and defend their claims. Although people feel attach to various types of objects, it is only those objects to which individuals feel a proprietary attachment that will result in territorial behaviour. Territoriality is about expressing ownership over an object by stating 'It is mine' as well as about communicating and maintaining one's relationship with that object relative to other individuals in the public sphere by stating 'It is mine, not yours' (Brown & Zhu, 2016). Territoriality is thus the behavioural expression of psychological ownership.

As previously mentioned, individuals engage primarily in two types of behaviour to construct, communicate, maintain, restore and defend their territories. Brown et al. (2005) indicated that individuals employ either *claiming behaviours* or *anticipatory*

defences to demarcate and defend their respective territories. These behaviours will be discussed in more detail.

2.2.1 Claiming Behaviours

Claiming behaviours refers to conscious efforts relating to the marking or labelling of targets of ownership to communicate the boundaries of a territory or to clarify who possess psychological ownership over the target (Brown et al., 2014). Claiming behaviours comprised out of *identity-oriented marking* and *control-oriented marking*.

Identity-oriented marking, also referred to as personalisation, involves marking organisational objects with symbols to reflect one's identity (i.e. marking all stationery with a nametag sticker) (Brown, 2009). These behaviours are motivated by a feeling of control as well as by creating a territorial boundary condition. Through clearly demarcating "property", it communicates to others that the particular workspace is, in fact, in that person's zone of control (Brunia & Hartjes-Gosselink, 2009). The purpose of identity-oriented marking is not only to construct and express one's identity to oneself, but also to others. These types of behaviours involves a clear demarcation of ownership in order to refute ownership claims by others (Brown et al., 2014). A variety of facets of an individual's identity can be expressed by means of identity-oriented marking (Brown & Zhu, 2016). For example, individual's display their qualifications on their walls to communicate their profession or their long-service awards to express their status. They even express matters in their personal lives by displaying their children's art, their hobbies or putting family photos on their desks or computer screens. People also tend to make use of identity-oriented marking to distinguish themselves from others, to maintain their self-esteem or professional worth (Snyder & Fromkin, 1980). Identity-oriented marking allows the individual the opportunity to express his or her identity which may foster a sense of attachment or belonging to the organisation and may even help people to adapt to their job better (Brown et al., 2005).

Control-oriented marking Whereas identity-oriented marking is used to express one's identity by marking an organisational object, control-oriented marking is used for the purpose of controlling access or use of the object (e.g. password protecting a specific folder/file on a shared network drive) (Brown et al., 2005). Control-oriented marking is used for marking organisational objects with symbols that are not personalised, but to communicating the boundaries of a territory to others. Control-oriented marking does not only communicate to others that a territory has been claimed, but it also wants to discourage others from accessing and using the territory (Brown & Zhu, 2016). Examples of control-oriented marking can include the following: a manager sharing office space with others might position his desk to differentiate his proprietary space from the other employees or somebody putting a sticky note with their name on it on a shared computer terminal (Brown et al., 2014; Brown & Zhu, 2016). Control-oriented marking also helps in organising the work environment by establishing meaning to work spaces, roles and other objects that may create potential

territories, which may facilitate task accomplishment and social cohesion (Brown et al., 2005). According to Brown et al. (2005) control-oriented marking also satisfy the individual's need to belong that could result in increased commitment and attachment to the target of ownership as well as with the environment within which the target is located.

2.2.2 Anticipatory Defences

Although individuals employ marking behaviours to communicate territorial boundaries, the social nature of such means that boundaries will be challenged and could result in conflict (Menard et al., 2018). Conflict may be exasperated by a lack of consensus as to the extent of the territorial boundaries and the extent towards which ownership of objects are (not) reflected (Pierce & Peck, 2018). When ownership is challenged, it is perceived as an infringement on the perceived physical or psychological rights/stakes which the "owner" of the object might have (Brown, 2009). Such an infringement refers to 'an individual's perception that someone, without permission, has attempted to claim, take, or use a physical or social entity that s/he believes belongs to him or her alone' (Brown, 2009, p. 46). These infringements are experienced as invasions of "sacred" personal space (Menard et al., 2018). Infringements can pertain to various aspects over which an individual may feel ownership such as work spaces, roles and ideas (Brown, 2009; Menard et al., 2018). Infringements are often associated with negative emotional responses since it threatens one's proprietary claim, violate one's ownership over an object and shows disrespect toward the claimant (Brown & Robinson, 2011).

Individuals will prevent or respond to infringements to defend their territories by means of *pro-active defences*, which occur before the infringement, and *reactionary defences* which occur after an infringement.

Pro-active defences Individuals will take actions to prevent others from infringing on their territory. These actions serve as anticipatory or "pro-active" defences before the infringement occurs and prevent others from being successful in their infringement attempts. The purpose of pro-active defending is the fear of potential infringement and the need to maintain ownership over the territory (Brown et al., 2005). Examples of pro-active defending include the following: locking of an office door to prevent someone from entering as well as a security guard blocking entrance to a building. Passwords on computers stop others from accessing one's files. People use anticipatory defences for the purpose of increasing their security and control over their targets of ownership.

Reactionary defences Infringements will still occur even though individuals employ claiming behaviours and has established pro-active defences to indicate their territory. As such, individuals will employ reactionary defences to protect their current claim (Brown, 2009). Reactionary defences are conscious actions taken after an infringement has occurred in order to reclaim ownership (Brown et al., 2005). The conscious exertions could manifest in various constructive or destructive means (Menard et al. 2018). An infringed individual might emotionally express dissatisfac-

tion when their possessions are threatened, or their work space has been violated in order to restore his or her claim. Violations could evoke feelings ranging from anger and fear to grief over the loss of a possession or territorial space (Brown & Robinson, 2011). The affected individual might employ other overt means to re-establish ownership after an infringement such as glare at the infringer, yell at them or even report them to a superior. Displaying reactionary defending behaviours may discourage future infringements (Brown & Robinson, 2011). Further, individuals may even engage in counter-infringement behaviours through claiming ownership of the infringer's property or work space.

From the above discussion it is clear that various factors could result in territorial behaviour. Identity-oriented marking is motivated by the individual's need to express their identity in the target. Control-orientated marking is facilitated by the fact that individuals want to communicate to others that an object is no longer available and that they have already claimed the object as their own. Pro-active defences occurs when individuals that take actions to prevent others from infringing their territory whereas reactionary defences is initiated by people's reclaim of their territory (Brown, 2009). These types of behaviours are initiated in order to regain control, keep or take ownership and could result in various positive and negative outcomes for the individual, his/her team and the organisation as will be discussed.

2.3 Consequences of Territorial Behaviour

Positive consequences Territorial behaviours might result in several positive consequences at work. Being territorial over a physical space/workspace for example might provoke feelings of belongingness to social groups (such a work teams, informal cliques etc.) which may lead to reduced turnover and increased performance. Displaying territorial behaviours by means of marking for example communicate to others territorial boundaries which might not only reduce organisational conflict but also result in an even distribution of organisation resources (Brown et al., 2005). The loss of important objects (e.g. a physical work space) that might result in conflict might be prevented by anticipatory defences. Infringement of the territorial boundary might be discouraged in future by reactionary defences that will also reduce conflict (Brown, 2009). Allowing for identity-marking, personalising one's workspace thus is associated with increased levels of commitment (Brown, 2009).

Negative consequences Territoriality may, however, also result in potential negative consequences for not only the individual, but for the team and the organisation as well which will be discussed accordingly.

Individual consequences If people become too preoccupied with the marking and defending of their territorial boundaries, they may not focus on the tasks that they have to perform and the achievement of broader organisational goals. They tend to spend too much time and energy on the marking and defending of their territory. Highly territorial individuals might even isolate themselves from others in the organisation by not sharing their knowledge and ideas, cooperate with others

or want to share resources (Brown et al., 2014). Individuals might stake personal claims to shared organisational resources in order to counter balance feelings of infringements. Individuals might engage in territorial behaviours because control over organisational resources or an object might assist them in gaining influence and strategic advantage in their organisation. If territoriality is embedded and widespread in the organisation, individuals might tend to be hesitant to venture into certain areas, take on certain roles or even co-operate with certain colleagues.

In the case of an organisation following an open-plan non-territorial office policy, Brunia and Hartjes-Gosselink (2009) found in their study that some individuals felt a loss of control over their work environment. Specifically, individuals felt that a significant personal “right” has been removed as they were not afforded any privacy nor the opportunity to work in silence if needed. Some employees even experience a decrease in humanisation in the organisation and that the organisation seem to care more about business and less about their employees. If employees, on the one hand, are not satisfied with their work environment, it can lead to an increase in emotional costs and might have an effect on productivity.

When employees feel that their possessions are being threatened or their space is being violated, they can experience negative emotions such as fear and anger. This may result in irrational behaviour and the making of poor decisions (Brown, 2009). To reclaim their infringed upon territory and to re-establish their territorial control, the territory holder might glare, yell or even complain to their superior.

Team consequences Organisations expect from employees to cooperate with one another and to share organisational resources for the betterment of the organisation. If employees are unwilling to do so or if they prevent or respond to infringements to defend their territories, it creates competition amongst employees to protect their possessions at the expense of sharing and cooperation (Brown et al., 2014). Other employees might perceive this display of territorial behaviour as self-interested and not being a team player suggesting a lack of trust. If employees tend to be very territorial, it can create an uncomfortable work environment because other employees might be constantly afraid that they might infringe another’s territory (Brown, 2009).

In the case of organisation restructuring and mergers where employees are expected to work together in new departments with new colleagues, employees will most probably experience process conflict—clashing over the allocation of roles, responsibilities, relationships as well as resources. Previously established territorial boundaries might be threatened and even meaningless. To re-establish their territories relation to their new roles, work spaces and relationships, employees will be most likely to engage in control-oriented marking (Brown, 2009) that might result in increased conflict over boundaries.

Organisational consequences Although individuals might perceive personalisation as a way to establish their identity in the workplace, the organisation might perceive personalisation as office clutter, harming the corporate image or identity of the organisation (Brunia & Hartjes-Gosselink, 2009). Furthermore, due to cost saving, organisations might opt for open-plan, collaborative work-spaces where no fixed individual work-places are allocated and a clean-desk policy is the reality of the day. This difference in perception can result in tension between the individual who

requires privacy and territory, and the organisation that require a corporate image and a non-territorial office environment. Employees might also not be that committed any more, if they feel their territories have been invaded or threatened resulting in a decrease in work performance. Organisations thus have to be careful when developing their policies regarding workspace personification because it can frustrate some of the employees.

The study of territorial behaviour in organisations may enhance our understanding of power and politics in organisations. Although territorial behaviour as well as power both involve control of an object, the motivations for territorial behaviour seem to be far more varied than simply the need for influence and strategic advantage: the need for personal efficacy might be much more than the ability to influence others, the formulating and expression of one's identity and the need for having a place to belong might stimulate territorial behaviours but may be totally unconnected to power and influence in the organisation. Organisation politics can occur without the construction or defence of territorial boundaries. For example, occupying a particular seat during meetings in a boardroom may result in experiencing a sense of emotional loss if the seat is taken by someone else simply because the individual feel that the seat belongs to him or her. The individual might not even attach any material or strategic value to the seat. Territoriality can thus assist in providing an explanation to some forms of political behaviour in organisations.

Territorial behaviours in the organisations could most probably be managed through the structured and systematic implementation of positive psychological interventions (PPI).

3 Positive Psychological Interventions

Territoriality is a natural human instinct which occurs as a result of an innate fear of loss and the associative desire for self-preservation (Van Zyl, van der Vaart, & Stemmet, 2017). Individuals could develop territorial behaviours because of fear of punishment and excessive need to obey rules and regulations (Avey et al., 2009) which negatively affects performance of the individuals involved, the teams they function in as well as the organisation which they belong to (Olckers & van Zyl, 2016; Van Zyl, van der Vaart, et al., 2017). Reasonable mechanisms need to be developed and implemented in order to not only manage the negative consequences of territorial behaviours at work but also to develop a harmonious social organisational climate (Brown et al., 2014; Olckers and van Zyl, in review). A contemporary means through which to establish such a harmonious working environment is through addressing territorial behaviours through positive psychological interventions (Van Zyl, van der Vaart, et al., 2017).

Positive psychological interventions (PPI) include any type of method, approach or activity that can aid in the development of positive emotions, behaviours and cognitions of employees (Bolier & Abello, 2014). Feather, Carr, Reising, and Garletts (2016) expand on the definition by stating that PPIs is about a dynamic process to

change the behaviour of the individual by optimising their work-related potential by means of an intervention strategy that is self-paced, interactive and personally tailored. Albeit the focus on the enhancement of positive, behaviours states and traits, it also aims to address psychopathology (on an individual level) and performance related distractors such as territoriality (on a team and organisational level) through the positively framed intervention methods (Van Zyl & Rothmann, 2014; Van Zyl & Stander, 2014). These types of interventions could assist organisations and managers in addressing the territorial behaviours of their employees.

A number of evidence-based positive psychological intervention strategies are presented below in order to not only aid in managing claiming behaviours but also to inhibit the occurrence of anticipatory defending. Specifically, general practices will be discussed, followed by specific PPIs strategies aimed at managing claiming and defending behaviours.

3.1 General Positive Psychological Interventions Aimed at Managing Territorial Behaviours

3.1.1 Measuring Territoriality

A positive psychological intervention aiming at the management of territoriality is to measure the territorial behaviours of employees. A self-report measure (The Organisational Territoriality Scale, Brown, 2009) that capture the behaviours closely associated with each of the four types of territoriality (identity-oriented marking, control-oriented marking, anticipatory defences and reactionary defences) could be implemented. This measure could be used to determine the frequency with which employees engaged in the various types of territorial behaviour towards their workspace for example over the last year. Several positive psychological interventions as suggested in Tables 1 and 2, could be implemented to manage typical claiming and anticipatory defending behaviours. The impact of these interventions could be determined by measuring these behaviours again after a certain period of time, four months for example to determine the impact of the intervention. This measure captures both the positive (constructive) and negative (destructive) consequences of territoriality. The use of such a measure can not only assist in recording and categorising the various ways that employees express and defend their territorial claims, but can also help in understanding the impact of territorial behaviours on others. Understanding the behaviours of employees can assist managers developing strategies to effectively manage territoriality. In a follow-up study, Brown et al. (2014) adapted their originally developed measure to be applicable to various types of territories (not only workspaces but roles, ideas and tools as well) to reflect the underlying behaviours used to claim and defend territories. This measure comprises three claiming and three anticipatory defending items.

Table 1 PPIs for managing claiming behaviours

PPI technique		
Individual level	Team/group level	Organisational level
Request continuous, constructive performance feedback	Facilitate appreciative team feedback	Leaders providing appreciative feedback through recognition and incentive programmes
Develop a clear work-related identity through personalising the work-environment	Co-constructing a positive team identity, centred around the psychological strengths of the team	Implementing total reward processes and practices
Avoid social comparison at work	Provide opportunities for autonomy and control over the team-based work spaces	Provide autonomous freedom to organise work spaces in shared offices to allow for the differentiation between own and other spaces
Implement job and resource crafting behaviours to optimise scarce resources		Implement career pathing and growth initiatives for employees at all stratified levels
		Develop leader emotional intelligence in order to effectively, and empathically manage the manifestation of “negative” marking behaviours
		Craft and continuously communicate a clear employee value proposition

3.1.2 Following an Appreciative Inquiry Approach

Instead of following a problem-solving approach (identify the problem, analyse the causes, crating possible solutions and follow a plan of action) to manage territorial behaviours, organisations could rather adopt appreciative inquiry as a means through which to manage such. Cooperrider and Whitney (2006) defined appreciative inquiry as “the cooperative, co-evolutionary search for the best in people, their organizations and communities, and the world around them. It involves systematic discovery of what gives “life” to an organization or community when it is most effective, and most capable in economic, ecological, and human terms” (p. 276). This approach is not about ignoring problems, it is a matter of approaching problems from a constructive, positive possibility perspective.

Appreciative inquiry facilitates collective investigation into what works best within organisational contexts in order to imagine what other processes or functions “could be like “(Cooperrider & Whitney, 2006). The focus is on collectively co-constructing a desired positive future which is commonly shared amongst all

Table 2 PPIs for managing anticipatory defending

PPI technique		
Individual level	Team/group level	Organisational level
Clarifying boundary conditions and expectations with managers and team members	Empower and encourage team members rather than withholding support	Develop leaders in order to identify the emergence of anticipatory defending behaviours
Build positive, mutually beneficial relationships with clients, the team and management	Ensure that a clear understanding exists of each team member's role and function within the team	Create a clear vision with values which all employees can relate too
Find and contract a mentor or coach Negotiate job variety and enrichment activities with line managers	Aid team members to understand their unique strengths and how it contributes to team functioning	Establish clear job descriptions, and work-roles
	Link clear consequences to undesirable behaviours	Develop flat or matrix organisational structures
Constructively, and appreciatively express concerns		
	Develop a clear psychological contract between team members around team-functioning	Utilise appreciative inquiry to co-construct or design work-spaces
		Implement a peer strengths-based coaching programme
	Focus on reinforcing positive experiences at work and evaluate failures, rather than punishing such	Encourage a healthy work-life balance
		Invite constructive and appreciative feedback in the decision-making process
		Set employees up for success through providing the optimal amount of job resources needed in order to perform work-related tasks
		Create systems where knowledge and information sharing is encouraged
		Ensure that clear career paths are co-constructed between managers and employees

(continued)

Table 2 (continued)

PPI technique		
Individual level	Team/group level	Organisational level
		Twice yearly, assess the psychological safety climate of the different departments
		Ensure that employees are aware of their contribution to the overall organisation’s strategy
		Create meaningful work-experiences and allow for employees to re-craft their work
		Praise both effort and failures

stakeholders and thus does not require incentives, coercion or persuasion (Hung et al., 2018). Specifically, appreciative inquiry is based on the fundamental principle that the questions asked and the words used within organisations shapes its focus, direction, values and culture (Cooperrider, 2018; Stavros, Torres, & Cooperrider, 2018). Focusing on the negative aspects of organisational functioning, such as territorial behaviours, may result in increased attention on such which in turn negatively affects performance (Cooperrider, 2018). However, framing inquiries in a positive manner translates challenges into opportunities, weaknesses into strengths, and threats into results (Cole & Stavros, in this book).

According to Cooperrider (2018) this positive paradigm to organisational development is built upon five core tenets or principles: (a) the constructionist principle (which assumes that what individuals believe to be true, dictates behaviours and shapes relationships), (b) the simultaneity principle (which argues that by asking questions, by investigating matters in organisations, one does not only gather information but one simultaneously changes the system), (c) the poetic principle (which assumes that organisational lives are the function of shared narratives and stories which are shared between employees on a daily basis. These stories communicates more than just content, but rather meaning, intent and purpose), (d) the anticipatory principle (which argues that what is done today is guided by a shared understanding of the future. Employees reactions are guided by their anticipation of what could happen in the future), and (e) the positive principle (which assumes that change can only take place if it is fuelled by positive emotions, social bonding, creativity and the employment of individual strengths at work).

Building on these five principles (Grieten et al., 2018), appreciative inquiry is focused on discovering the best possible “organisation” through a structured cyclical process with four phases (Also known as the 4 D’s approach):

1. *Discovery*: In this phase, the focus is on discovering which individual, team or organisational processes works extremely well within the current organisation.

2. *Dream*: Here, the focus is on envisioning the best possible organisation and which processes would or could work well in the future. The focus is on designing the “perfect” or “best possible” organisation.
3. *Design*: This phase is characterised by developing plans, priorities and actions which could lead the organisation from the current state to the desired state.
4. *Destiny or Deployment*: In the final phase the focus is on the execution of the design in order to ensure effective transition from current to future states.

This will be illustrated by means of an example. If the organisation plan to change from traditional offices to open floor plan cubicles to save money, an appreciative interview could be conducted to establish how employees feel about the idea before it is actually implemented. During the appreciative interview employees could be asked how they would envision such a change and how do they think such a change should be redesigned or implemented. The purpose of such an interview is to determine what employee’s value and what gives ‘life’ to them in their organisation to function at their best. If such a change has already been implemented due to either cost saving or perhaps due to a merger several strategies could be implemented. First, organisational documentation could be analysed to get an understanding of the change process and the history of the organisation. Second, in the case where organisations for example have decided on implementing an open plan working environment, the behaviour of the employees could be observed—how the building was designed and how the people reacted to it. Third, informal discussions as for example during coffee breaks or at the copying machine as well as formal discussion such as interviews could provide insight into peoples’ experiences of the change (Brunia & Hartjes-Gosselink, 2009; Stavros et al., 2018). Following an appreciative inquiry interview approach, employees should be encouraged to come up with ideas or solutions of how to deal with such a change. Focus groups could be held to determine the benefits and drawbacks of the current work environment and to propose solutions. Focus groups could also be used for example to establish what form of marking would be acceptable in the organisation, what appropriate behaviour is expected of all or what ground rules could be established when sharing the working environment.

3.1.3 Design of the Physical Work Space

People do have an inherit need to, on the hand be included or being part of the group, but on the other hand to maintain their individuality (Hogg & Terry, 2000). The marking and defending of a work space will satisfy an employees’ need for a place and will increase their sense of belonging while maintaining their individuality. Marking of one’s workspace for example with pictures of family or objects that are related to positive memories, make the work environment more visually stimulating and pleasing to inhabit (Brown & Zhu, 2016).

Appreciative inquiry wants to determine what is best for the organisation as well as for the people working in the organisation (Cooperrider & Whitney, 2006). Organisations could allow for departments to co-construct cohabitating or “shared” work

spaces which represents their shared identities. Through implementing the 4 D's approach, a team can dream up an office which is conducive to performance, that represents both individual uniqueness but also culminates in a shared identity. First, individuals can reflect upon what works well within the current office environment, which elements contribute to a sense of shared identity and belongingness (Discovery). Next, individuals could share what they believe the perfect office could look like both in the physical (tangible) and non-tangible sense. Here the focus is on constructing the "perfect" work space in terms of design, outline, personalisation, working hours, flexible work-spaces etc. (Dream). Hereafter, the viability of the "perfect office" needs to be established and a gap analysis needs to be made between what currently works well and the desired end state. From this practical solutions and operational objectives need to be determined in order to close the gap between the desired and current state (Design). Finally, the plans need to be implemented and the effectiveness thereof tracked.

Through following such an approach, employees are able to exert control over their work spaces and allows them to personalise and construct a working environment which is conducive to their collective functioning (Stavros et al., 2018). Exerting control over in this manner allows for employees to construct an environment which is not just 'comfortable' and a mere expression of themselves, but allows for employees to feel comfortable and at "home" within the organisation.

3.1.4 Appreciative Discussions to Manage Conflict

Allowing for territorial marking might in the beginning increase conflict, but might in the long run reduce process conflict. Others will be aware of the boundaries and the proprietary nature of the territory and that will prevent them from infringing on the territories of others. Marking may help to structure the work environment that might have a positive impact on productivity. Allowing organisational members to establish, communicate and maintain their territories might reduce conflict in the organisation (Brown et al., 2014). It is thus important that workplace managers monitor employee's territorial behaviour closely and stay attuned of potential problems arising from for example the sharing of workspaces. Although an organisation might consider developing policies on workplace personalisation, it might be more beneficial to monitor individual reactions towards infringement (Wollman, Kelly, & Bordens, 1994). It is thus important for managers in organisations to be cognisant of property rights in their organisation and that the positive aspects of ownership are respected and supported.

Another positive intervention that could be implemented to manage relationship conflict due to infringement is to 'map' the interaction patterns to understand the dynamic nature of interpersonal interactions. The purpose of mapping is to get an understanding of people's behaviours or actions. Mapping is a way to represent conflict graphically by placing the various parties in relation to the problem and to graphically convey the relations between them. For example, if conflict is experience due to 'shared' workspaces, the perceptions, needs and fears of the different

parties could be mapped. This may help in explaining some of the misunderstandings and misperceptions between the parties. Mapping these interactions might assist in strengthening relationships between people but also help people in reframing their roles in a conflict. If managers map relationship dynamics, it might assist them in avoiding behaviours that could cause conflict to get out of control. Mapping thus reveals the ways people contribute to creating the problems they want to solve (Edmondson & McLain-Smith, 2006).

Again, appreciative inquiry could also be employed to not resolve but reframe conflict as an opportunity to develop an ideal work relationship with managers, team members and fellow employees (Cooperrider, 2018; Shelton & Darling, 2004). The 4D process could again be implemented to reframe conflict. First, those in conflict could determine what is currently working in the relationship, what the benefits are for continued partnerships, to explore things which parties to the conflict agree upon and to reflect upon the areas of mutual strengths (Shelton & Darling, 2004). The aim is to deal with the negative emotions experienced as part of the conflict and to try and understand the problem from the perspective of the other party (Discovery phase). Second, parties to the conflict could tangibly envision the ideal working relationship (i.e. what does the relationship look and feel like) and to determine the underlying desires of all afflicted parties. The aim here would be to move away from territorial behaviours to constructing what the perfect working relationship could look like. Specific focus should be placed upon the behaviours of each conflicting party and what are both striving for (Dream phase). Third, the aim is to determine what from the previous phase is feasible and to generate ideas on how to achieve these in an active and constructive manner. Here the focus should be on balancing the nature of the relationship, with the importance of the goal which needs to be achieved through initiating conciliatory gestures (Design phase). Finally, when implementing these behaviours or actions, the focus should be on sustaining the positive relationship. Improvements in managing territoriality should actively be rewarded and praised. As job resources are usually a point of contention, it is imperative that parties are able to discuss the lack of shared resources openly and to address such immediately before it escalates onto larger problems later (Destiny phase) (Shelton & Darling, 2004).

3.1.5 Create a Trusting Environment

According to Brown et al. (2014), a high trusting work environment might reduce the occurrence of territorial behaviours. They further suggest that organisations as well as managers need to be aware and need to learn to recognise aspects related to ownership and territoriality. Before instilling feelings of ownership in colleagues, a trusting or psychologically safe environment should be established (Olivier & Rothmann, 2007). This may limit the presence of claiming and defending behaviours that can complement ownership when trust levels are low. These types of behaviours that might impede teamwork could be early identified by trained managers and they might assist in addressing the various needs of both the individual and the team before the effects of territoriality can have a negative impact on the social environment. In

order for productive discussions of relationship conflicts to take place, opportunities should be created where employees can explicitly express their interests and concerns. People need to see the strengths and weaknesses of each viewpoint in order to build trust. Building a climate of trust will allow people to recognise that everyone is trying their best to work through issues, even though they are not perfect (Edmondson & McLain-Smith, 2006).

3.2 Positive Psychological Interventions Aimed at Managing Claiming Behaviours

Organisations should aim to cultivate the positive outcomes of claiming behaviours and managing the negative or extreme consequences thereof. As argued by Brown et al. (2014), aiding individuals to mark their proverbial territories at work, aid in tying their identities to work related tasks, their respective functions within the system and aids in fostering organisational commitment. Demarking both the objective or perceived (“psychological”) boundaries of tasks, functions and work-processes decrease counter-productive behaviours at work and increase in-role performance (Olckers & van Zyl, 2016; Van Zyl, Olckers, et al. 2017; Van Zyl, van der Vaart, et al. 2017). Traditionally, organisations aided in managing the negative consequences or outcomes of marking behaviours through correctively focused measures such as implementing new policies and procedures, implementing disciplinary procedures and even suspensions/dismissals (Wilson, 2018). Although corrective actions are important, it could damage relationships and have long term negative performance related consequences. As such, a pro-active, positive approach is required to not only manage the negative consequences of marking behaviours, but also to facilitate a positive organisational climate. Table 1 summarises evidence-based positive psychological intervention practices which could aid in managing marking behaviours.

3.3 Positive Psychological Organisational Interventions Aimed at Managing Anticipatory Defending

As anticipatory defences revolve around a tightly coupled system of person-situation transactions aimed at the conservation of resources (Van Zyl, Olckers, et al. 2017; Van Zyl, van der Vaart, et al. 2017), it is imperative to manage how employees feel, in order to effectively manage how they act at work (Brown et al., 2014). In order to efficiently manage the negative consequences of anticipatory defending behaviours, an interact interplay between the individuals feelings, the teams’ expectations and the management of organisational resources need to be considered. Managing how individuals feel towards the content/nature of the work as well as towards the operational functioning of the organisation, could result in more positive experiences at work.

Table 2 provides an overview of the positive psychological intervention strategies which could be employed in order to manage defending behaviours at work.

4 Conclusion and Future Directions

Van Zyl, Olckers, et al. (2017) argued that there is an increasing need for the development, implementation and validation of interventions aimed at cultivating the promotive and managing the preventative mechanics (territoriality) of psychological ownership at work. Research has shown that cultivating a culture where psychological ownership is optimised and territoriality is effectively managed, remains a structural and systemic challenge. This chapter built on the work of Van Zyl, Olckers, et al. (2017) in order to provide practitioners and organisations with practical suggestions for interventions which could be implemented in order to manage territorial behaviours at work. It is recommended that future research implement and evaluate the effectiveness of these evidence-based positive psychological intervention strategies in order to determine its effectiveness.

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The Open Case as a Setting for Addressing Challenges in Small Groups: Post-graduate Computer Science Students' Perspectives



Renate Motschnig and Llewellyn Ellardus Van Zyl

Abstract The Open Case is a collaborative, small group intervention which draws from the person-centred approach's "intensive group experience". It focuses on the identification and management of challenging job- or personal situations through a guided process of reflection and engagement within a small group setting and has been proven to be successful in various professional and academic contexts. The purpose of this chapter is to examine students' experience of the Open Case setting when introduced as part of a Master level course on communication for computer science students, as well as the effect thereof on their professional- and private lives. Specific focus will also be given to international students' reflections during this intervention. Methodologically, students' written self-reflections and online reactions are analysed via qualitative content analysis and systematically discussed. An outlook on further research and applications of the Open Case setting in contexts such as management learning, online communication, evoking motivation for change, and social inclusion of diverse people conclude the chapter.

Keywords Open case · Person-centred communication · Small groups · Social skills · Experiential learning · Co-actualization · Multi-cultural · Qualitative content analysis

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1 Introduction

1.1 Problem Statement

Rapid innovation and transformation with in the information and communication technology sector (ICT) demands that employees be highly performing, agile and able to manage the extreme job and time related demands associated with the successful completion of new projects. However, research has shown that the completion rate of “new” projects or innovative initiatives is comparatively lower than in other sectors (Hastie & Wojewoda, 2015). Research has suggested that over 70% of such projects fail to be completed within the first 12 months (Wright & Capps, 2010). Of such, only 31% are completed on time and within budget (Nawi, Rahman, & Ibrahim, 2011; Wright & Capps, 2010). Research indicates that people-issues, like insufficient managerial support, inter-personal conflict, unclear objectives and a lack of communication, range among the most prominent reasons for compromised or failed projects (Diedericks & Rothmann, 2014; Hastie & Wojewoda, 2015; Standish-group, 2018). Collings, Mellahi and Cascio (2017) argued that individuals within the ICT sector are ill-prepared during their formal tertiary education to manage these “people related demands”.

Computer science curricula, that train members and leaders of ICT projects, focus on technical competency development and scientific issues and tend to neglect training in communication and people skills (Collings et al., 2017). ICT graduates are therefore technically competent to perform work-related tasks, however too often inept to manage the social or people-related demands at work (Lighthouse & Rezanian, 2018). As such, computer science curricula at top-tier international universities have started to include at least one course devoted to developing people skills and communication competence, even though a single module could hardly accommodate all the necessary social competencies required to efficiently manage social demands. As such, it is crucial to design and present these communication courses to be as effective as possible, with sustainable positive influence on participants’ capacity to communicate constructively in order to transfer these skills into the work-domain. Effective transfer of these skills to work-related settings after university could significantly increase the chance of projects to be completed on time, to specification and within budget (Nicholas & Steyn, 2017; Lighthouse & Rezanian, 2018).

Innovative methodologies therefore need to be developed and implemented during ICT students’ tertiary education in communication in order to enhance collaboration and sharing. One such methodology is the Open Case setting (Motschnig & Ryback, 2016). The Open Case setting was developed by Motschnig and Ryback (2016), as a collaborative, small group intervention which draws from Rogers’ (1961) Person-Centred Approach’s “intensive group experience”. It focuses on the identification and management of challenging job- or personal situations. The Open Case calls one to explore these experiences through a guided process of reflection and engagement within a small group setting and has been proven to be successful in enhancing the professional, inter-personal, and cross-cultural communication skills across various

professional and academic contexts (iCom-team, 2014; Motschnig & Ryback, 2016). As such, the Open Case setting has been introduced as a core component of ICT students' communication training at numerous universities in Central Europe (e.g. University in Vienna, Austria, and the Masaryk University in Brno, Czech Republic).

In this context, the research reported in this article is targeted at the central question on whether the Open Case setting adds value to courses on Person-Centred Communication and, as a consequence, the training of computer scientists in the area of communication. Moreover, since several open-case sessions conducted so far included participants from different cultural and national origins, we're particularly interested in the influence that these sessions leave on such diverse participants.

1.2 Literature Review

People tend to grow, if provided the proper atmosphere and conditions (Motschnig, 2016; Van Zyl & Stander, 2013). Rogers (1957, 1961) proposed and researched three core conditions, congruence (or realness), acceptance (or respect), and empathic understanding, known to facilitate significant learning and growth. Building upon the wisdom of these core conditions, the Open Case is a workshop setting for collaboratively exploring experiences, perspectives, and solution strategies regarding real cases (challenge, problem, difficult decision, dilemma, etc.) from participants. While drawing upon some established settings such as open space (Owen, 2008), dialogue groups (Isaacs, 1999), person-centered encounter or self-experience groups (Lago & McMillan, 1999; Rogers, 1970), it is characterised by a set of unique features. Most important, its goal is to facilitate openness, respect and understanding (Rogers, 1957) within, between and across cultures by *collaboratively elaborating a particular case* proposed by a participant and experienced as relevant by a number of peers. This collaborative process is supported by a guideline based on the principles of active listening and facilitative sharing (Motschnig & Ryback, 2016). Personal viewpoints, emotions and its associative meanings/implications can openly be shared and reflected through a process of active dialoguing (Isaacs, 1999). These sessions are typically facilitated by experienced person-centred consultants/practitioners who lives values of authenticity, unconditional positive regard and empathy (Motschnig & Ryback, 2016).

If facilitated appropriately, the Open Case setting could aid individuals and teams to improve their dialoguing capacity and problem-solving abilities through moving from what is already known to states of improved collective understanding (Motschnig & Ryback, 2016) through an approach similar to social constructionism. The Open Case setting provides a unique platform through which new attitudes or solutions to complex problems can be co-formed.

In a nutshell, the Open Case employs small teams (3–7) and rather than brainstorming for new ideas, it emphasizes participants' personal reactions and experiences in approaching some real case of genuine interest to the participants. The Open Case setting was developed as part of the EU-project iCom (constructive inter-

national Communication in the context of ICT, www.icomproject.eu) and applied during iCom's practice-research workshops with industry (iCom-Team, 2014). The Open Case process (Motschnig & Ryback, 2016) has been successively applied and reflected during international scientific conferences and academic courses on communication. It is described in more detail in Sect. 2 below.

1.3 Main Research Question

Given the introduction of the Open Case setting in various post-graduate computer- and service science masters programmes in Europe, the purpose of this chapter is to investigate the respective students' experience of the Open Case setting as part of a module on Person-Centred Communication. Investigating their experiences could systematically shed light on the potential function of the Open Case setting as a means to facilitate the development of person-centred communication skills in academic settings. Secondly, international students' perspectives on the Open Case setting will also be explored. This focus on nationally or culturally diverse participants is particularly relevant, since ICT-projects often cross-national borders.

To Answer the Research Question, the Following Three Specific Sub-questions Seem Relevant:

- What do students reflect about their Open Case experience in their self-evaluation and online-reactions that they submit as (part of) their outcome of their course experience?
- What do students consider as their take away from participating in the Open Case setting?
- How do international students experience and fare with Open Case and which role does it have for them within the course on Person-Centered Communication?

2 Research Design

2.1 Research Approach

A multi-study explorative, inductive qualitative content analytic research design drawing from the person-centred paradigm was employed to investigate the main research question of this chapter. Computer science master students' written reflections on their experiences of the Open Case setting at the end of the course as well as online reactions were collated, and content analytically analysed and categories formed (Mayring, 2014). Two studies were conceptualised to address the research questions. *Study 1* took place within a largely localised cultural context during the summer of 2017. 18 students from the Czech Republic and Slovakia participated in the study. One international student from Russia took part in this study. Given the

unique views of the international students in Study 1, **Study 2** examined international students' experiences of the Open Case Setting during the 2017 and 2018 summer term. Here, four international students' personal reflections on the Open Case setting submitted within two consecutive course instances were captured and analysed.

In order to explore, amongst others, how international students experience Open Case in relationship to the majorities, namely Czech or Slovak students, we decided to start the analysis with the category system identified in Study 1 and add additional categories to Study 2 when appropriate.

2.2 The Open Case Setting Intervention

Open Case Setting Intervention is aimed at facilitating socially significant learning, broadening participants' perspectives and problem-solving capacities, improving communication and listening, and, finally, connecting people within and across cultures by sharing experiences in a trustful atmosphere (iCom-Team, 2014).

To start the process, the facilitator suggests a procedure on "mining" cases and splitting up into small groups, depending on participants' interests. Participants are asked directly to suggest cases—issues, that matter to them personally, or they are invited to form small teams of two to four people to share ideas regarding potential cases. Case providers (a person who shared their problematic case and is actively listened to be peers, following a specific process guideline) are selected to share their cases in the group. Thereafter, cases are collected, given a short identifying phrase, and noted on a flipchart. Before (often better than after) small groups are formed, the handout with the Open Case guideline (see Table 1) is distributed and explained.

Participants can ask questions as needed. Then, cases (i.e. personal stories of interpersonal challenges or situations encountered in the context of IT projects which these participants experience) to be worked through are selected by the groups and every participant makes his/her own decision which case and respective small group to join. Then, each small group should find a place where they can sit in a circle and the noise distraction from other groups, etc. is minimal. Participants are informed how much time they have, 35 min being an absolute minimum, and an hour or slightly more being a decent time slot most of the time. In order to maximize participants' learning from the whole experience, the facilitator ends the workshop with a reflective phase in the large group.

2.3 Research Method of Study 1

Participants. 18 Master students of SSME (Service Science Management and Engineering), a specialization of the computer science masters curriculum at the Masaryk University in Brno, Czech Republic, participated in the first study. 13 of them were male, 5 were female, most of them working part-time besides their studies, typically

Table 1 Handout holding the steps of the Open Case procedure (Motschnig & Ryback, 2016)

<p>OPEN- CASE</p> <p><i>Handout 1st session</i></p> <p>The goal of this session is to present and collaboratively elaborate the case(s).</p> <p>All confirm confidentiality in group!</p> <p>You may want to use the following items to guide you through the session.</p> <p>-----</p> <ol style="list-style-type: none"> 1. Find persons who hold the following functions: <ul style="list-style-type: none"> • Case-provider • Moderator • Interested peers 2. Case-provider describes his/her case and proposes 1-3 questions of interest. Case-provider may want to express his/her personal feelings about the case, what moves them in the case. The case is given a name and, if appropriate, a symbol/image/metaphor. 3. Peers reflect their understanding by trying to capture – in their own words – the essential meaning of what the case-provider has revealed. Peers may ask questions regarding what has been said. It is essential that peers stay with the case-provider and try to understand his/her message. (e.g. You said you felt stressed, so do you still feel stressed now?) 4. Peers may ask whatever is of interest to them in the context of the case.(e.g. Did you already talk to the department head?) Peers may share their reactions to the case. 5. All try to identify the currents or “forces” at work in the given case. <ul style="list-style-type: none"> • Forces immediately related to the case (within the person and the system) • Forces from/to the environment <p>Can you name some of the forces and/or draw a diagram?</p> 6. Based on what happened in this session, the case-provider reflects his/her feelings and meanings about the situation. In particular he/she identifies any significant, highly important events in the case, others listen actively. <p>Optional: Before going into a short break, teams briefly share the names & essence of the cases. If peers want to switch to different teams, they may do so.</p>
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in their twenties with a few in the thirties. There was one female international student from Russia, the others were of Czech or Slovak origin, approximately in equal shares. These two nations are known to have similar, though by far not identical cultural orientations. All students gave their consent that an anonymized version of their written materials from the course could be used for the purpose of research.

The intervention in context. The open case setting as introduced to students within their course on Person Centred Communication. “Person-Centered Communication” (PCC) is a lab course with a maximum of 20 participants held in three blocks, each lasting 1.5 days. It is an elective course in the Masters Study of Computer Science at the Masaryk University in Brno, Czech Republic.

General course goals comprised participants' acquisition of personal experience, skills, and background knowledge in situations of professional and everyday communication (such as listening, articulating, speaking in a group, conflict resolution, decision making, etc.). Participants were expected to build a learning community around the concern for better communication in general and with a focus on teamwork and team leadership, as these are core to computer science professionals.

Consistent with an experiential learning style pertinent in the Person-Centered Approach, the strategy in the course design was to let students experience a flexible mix selection of didactical scenarios under the premise of unfolding a facilitative, safe climate in the class in which they would learn significantly. The face-to-face sessions started with discussing the reaction sheets posted as a reflection from the last block and sketching a tentative agenda for the unit on the whiteboard that the group could follow, adapt, or leave according to the present flow of needs, wants, and meaning. Care was taken to mix short theory inputs with reflection, exercises, group experience and, in the second and third block, an invitation to engage in Open Case sessions—the focal research interest in this chapter.

Online reflection and self-evaluation. In order to allow for continuing reflection and sharing between sessions, students were encouraged to submit free-text online reaction sheets after each unit (Motschnig-Pitrik, 2005, 2014a, 2014b). These could be read by all participants and the facilitator who briefly addressed them in the beginning of each unit and let her and the whole group be influenced by them. In this way, students could co-create the course. At the end of the course, students were invited to submit an online self-evaluation in which they were expected to reflect on the ways they learned, contributed to the course, and identified what was their most important take-away and experience from the course. The self-evaluation was shared with the instructor only and there was some latency of one to three weeks between the immediate experience of Open Case and turning in the self-evaluation. Since the latter was deemed to provide a more balanced account of the phenomenon, it was selected to form the basis for the derivation of categories for the content analysis as described below.

Procedure of data collection and—analysis. A qualitative content analytic was employed to explore the self-evaluations and online reactions (after the 2nd and 3rd block of 'lectures') of 18 students who participated in the course. The best practice guideline of Creswell (2013) for content analysis was employed to explore the muted textual data extracted from the self-evaluations. First, all self-evaluations were read and sentences which referred to the open case experience were marked and copied into a Microsoft Excel™ worksheet for further analyses. If different sentences addressed different aspects of the open case experience, they were put into separate fields as to ease the association of categories for analysis. Second, one researcher clustered and categorized statements with similar meaning to construct preliminary categories. Preliminary categories were slightly generalized to better capture the similar statements/experiences. For example, 'different opinions' was generalized to "different perspectives" and "useful to talk to other people" became "sharing is beneficial". Two statements were found that seemed not to warrant a separate category and thus were subsumed under the category 'other'. If multiple categories

were addressed in one field or sentence, both were associated with the respective field. The second researcher reviewed the preliminary categories and refined such through further exploration. Where incongruences or different perspectives on the classification of the statements between the first and second researcher occurred, they were noted as comments in the text, shared, and subsequently reconciled during a dialogue over skype such that, finally, consensus was reached.

Third, the preliminary categories extracted from clustering similar statements were used as the initial category system for categorizing students' statements from their reactions sheets. Recall, that those were written immediately or only a few days after the course experience. Interestingly, all categories derived from students' self-evaluation also fitted for categorizing most of the statements in students' reactions sheets. However, some statements in the reaction sheets were found to address more subtle and specific issues, such as hoping to be helpful, or the intensity of the open case. These statements were added to the category 'other' and increased its overall count of statements. Emerging new categories would be added to the list of categories and the self-evaluation checked again for statements that potentially would fit into the newly discovered categories. This procedure was also intended to increase the reliability of the category system as the documents were systematically re-read after new perspectives had appeared in the reaction sheets.

2.4 Research Method in Study 2

In order to respond to the third research sub-question: "How do international students experience and fare with Open Case and which role does it have for them within the course on Person-Centred Communication?" a second qualitative content analysis was conducted.

Participants

Given the unique experiences of the international student in Study 1, the second study was aimed at specifically sampling international students' experiences of the Open Case Setting. All international students of the most recent course instances (summer term 2017 and 2018) were selected to be included in the second study. In sum, there were four international students in the two most recent course instances of Person-Centred Communication. Two of them were male, stemming from India and the Dominican Republic, respectively, and two were female, one coming from Russia, the other from Norway, all of them in their early to mid-twenties to early thirties. It is important to note that three international students were in a group with five participants from the local population (Czech/Slovak).

Procedure of data collection and—analysis. Since we were interested how international students experienced the Open Case setting as part of the course on Person Centred Communication, one of the authors who was also the facilitator of the course, read all reactions and self-evaluations of the four international students and subsequently identified all statements that explicitly or implicitly addressed the Open

Case setting. Thereupon she associated the statements with the categories identified in study 1 and would add new categories when appropriate. The same guidelines were employed as in Study 1. As a subsequent measure to enhance credibility and transferability, an independent co-coding process took place whereby the second author categorized the same data. Limited incongruencies were found between raters and resolved through dialogue mediated by skype.

In contrast to Study 1, only limited data pertaining to the Open Case Setting could be extracted from the self-reflections and online reactions of Study 2's participants. Participants formulated responses and feedback in a generic, implicit fashion with limited explicit mention of specific elements of the module, or Open Case setting.

Before discussing the findings of study 2, important context information is given for more accurate understanding: All international students were truly engaged and active throughout the course. In the course instance of 2018, all three international students had provided cases and two of them (one male and one female) even twice, such that five of the eight cases elaborated in that course were contributed by international students! Considering that, it was surprising that only few statements, precisely six, in the international students' documents explicitly included the word "open case" or "case". Rather, vast parts of the international students' reflections were formulated in a generic way, referring to the course as a whole as something they had never experienced before. Only rarely did they single out a particular element like Open Case or encounter group. Therefore in the content analysis it was necessary to also consider generic or implicit statements and estimate their applicability for the Open Case setting from the context and the actual course experience.

3 Findings

The data of Study 1 and Study 2 was analyzed, and findings presented in separate sections. The findings of the content analysis are presented in order of the frequency of their occurrence. Direct quotations of participants were labelled as S (when drawn from self-reflections) or R (when drawn from online-reactions).

3.1 Study 1's Findings

From the data obtained for Study 1, 11 categories associated with the experiences of the Open Case setting could be extracted from both the reaction sheets as well as the final self-evaluations. Since the frequency of the appearance of some category gives an indication on how many students mentioned that category, the counts reflect an asset of the whole group experience and hence are considered relevant in the characterization of the perception of open case by participants. Table 2 provides an overview of the results of Study 1's content analysis.

Table 2 Categories and their respective counts in students' self-evaluation and reaction sheets

Category (post hoc)	Count self-evaluation (N ₁)	Count reactions (N ₂)
The Open Case as significant experience	9	9
Sharing personal stories is beneficial	6	5
Transformative learning through others' experiences	6	6
Significant experience from self-disclosure (Case Providers)	5	4
Preference of a small group composition	5	15
The Open Case Setting provides a platform for openness	5	6
Showing empathy and understanding	4	3
Feeling grateful for and inspired by the experience	4	5
Development of new skills and abilities	4	5
Establishing interpersonal connectedness	2	2
Critical of the Open Case Setting	0	1

3.1.1 Study 1: Characterization of Feature-Categories in the Self-evaluation

The Open Case as significant experience (N₁ = 9; N₂ = 9)

The findings suggest that participants experienced the open case setting as a personally significant experience which had a lasting, formative effect on their lives. This category denotes experiences or events that were perceived as highly meaningful by participants. These events stand out from others through their subjectively perceived depth, meaning, emotion, or value.

Referring to (aspects of) the open case sessions as personally significant experiences was the most frequent characterization found in students' self-evaluations. Table 3 provides supportive quotations in relation to this category.

Sharing personal stories is beneficial (N₁ = 6; N₂ = 5)

The second most frequently occurring category pertains to sharing personal stories as being beneficial for personal growth. Specifically, participants indicated that sharing personal stories aided in managing the proverbial emotional load and aided in developing an understanding that various challenging experiences are shared phenomena. The category further denotes participants' positive attitudes and experiences associated with openness, transparency and showing vulnerability. Some participants indicated that through sharing their personal stories with others, that others are expe-

riencing the same and that they are not proverbially alone in these experiences. Table 4 provides examples of quotations extracted from self-evaluations and reactions.

Transformative learning through others’ experiences ($N_1 = 6; N_2 = 6$)

The third most frequently occurring category pertained to experiences of transformative learning, whereby participants learned from and grew through others’ challenges and experiences shared during the Open Case setting. Participants indicated that being exposed to different perspectives on similar personal challenges aided in developing new insights into dealing with own problems in the future. Specifically, it expanded their frame of reference. Table 5 provides examples of such presented by participants.

Significant experience from self-disclosure (Case Providers) ($N_1 = 5; N_2 = 4$)

The fourth most frequently occurring category pertained to the positive experiences of case providers associated with systematic self-disclosure during case presenta-

Table 3 Category 1—The Open Case as a significant experience

Participant	Supportive quotation
Participant 1S	“I guess the most significant experiences were the open cases, where couple of students opened themselves really and shared their personal problems. Meanwhile the rest of the group was trying first to clearly understand their situation and then very carefully come up with some advices”
Participant 2S	“All open-cases were very intensive, strong, deep. I think it made the group really close and then open. It brought us together”
Participant 3S	“I will definitely remember how refreshed, positive, and satisfied I felt after sharing my open case”

Table 4 Category 2—Sharing is beneficial

Participant	Supportive quotation
Participant 4S	“I’m introvert and I don’t really like to share these kind of stuff, but discuss it with others is most of the time beneficial I must say”
Participant 5S	“The most important takeaway is probably the concept and principles of active listening and also a feeling that any problem I have which I have perceived as unique to me [is] actually shared by many people and it might be useful to talk with other people about my problems
Participant 6S	“I noticed, that it was quite good for me to present my ideas in slightly different way to different people”
Participant 5R	“Through sharing my problem I learned that I am not alone with this problem and that these kind of feelings are not that special so it brought little more peace to my mind”

Table 5 Category 3—Transformative learning through exposure of different perspectives

Participant	Supportive quotation
Participant 7S	“I learned a lot about people’s views on some issues they face and this experience is very valuable to me”
Participant 8S	“I liked that I could see many different views and opinions, which I would never [have] realized if I didn’t attend this course”
Participant 9S	“There were about twenty of us and it was amazing how different could be people’s views. Sometimes they were completely opposite and it is perfect”
Participant 4R	“In the first place I’m taking with me from the second block becoming increasingly aware of the importance of the feeling of “I’m not alone in this” and the fact that similar things happen also to other people”
Participant 5R	“I would also like to thank for the opportunity to be the case-provider. It was a great experience and more over it really did help me. Thanks to questions and similar experiences from classmates, I could sort my ideas and feelings”

tions. Participants who acted as case providers (five participants had provided cases) indicated that sharing personal experiences or “stories” were positive and significant experiences which resulted in various practical, cognitive and emotional benefits. Case providers indicated that sharing personal stories increased their own understanding of the problem and resulted in more personal insight. Table 6 provides examples of quotations in support thereof.

Table 6 Category 4—Significant experienced of self-disclosure by Case Providers

Participant	Supportive quotation
Participant 10S	“I contributed mainly in two ways. One was by sharing my experiences and knowledge, participating in group dialogues, and providing two open cases. [...] I will definitely remember how refreshed, positive, and satisfied I felt after sharing my open case”
Participant 11S	“... and open case [...] were most useful practices for me. Even though I do not consider myself as most talkative or extrovert person I’ve tried to share my most significant experiences which bothered me”
Participant 6R	“I am glad that I shared my thoughts and concerns about my self-estimation problems. Open case format gave me a nice “framework” how to understand a problem quickly to a certain depth [...]. I learned that I am not alone with this problem and that these kind of feelings are not that special so it brought little more peace to my mind”
Participant 15R	“Most intensive experience for me was open case discussion where I shared my problems. It was very interesting to see how others are able to use some formal approach to understand and discuss some problem in an effective way”
Participant 17R	“I am not sure how much it affected others but it definitely showed them that everyone can “open” to the group and nobody will judge them”

Preference of small group composition ($N_1 = 5$; $N_2 = 15$)

Predominantly, the findings showed participants’ preference for small group compositions during the Open Case setting. Within the larger groups, participants - especially those more reserved—felt that their voices were not heard or being ‘dominated’ by discussions of their more extroverted counterparts. In the smaller group sessions, participants could freely share their thoughts, feelings and experiences. Table 7 provides extracts from participants pertaining to their preference for small group interactions.

The Open Case Setting provides a platform for openness ($N_1 = 5$; $N_2 = 6$)

Another predominant category relates to the extent towards which the Open Case Setting provided a platform through which individuals could openly discuss, and share personal stories without judgement or prejudice. Participants indicated that the Open Case Setting provided for an opportunity for others to share experiences, problems or challenging situations which would not normally be shared. It created an environment where individuals could openly talk about, share and relate to the

Table 7 Category 5—Preference for the smaller group composition

Participant	Supportive quotation
Participant 12S	“... there was a lot of time spent with topics not relevant for me and in large groups, meaning only the most extrovert people were talking. On the other hand, I enjoyed dialogs and open cases in small groups”
Participant 13S	“Being very shy and strong introvert, I have only contributed to the dialogs in these small groups”
Participant 14S	“I think that in small teams I spoke and elaborated more that in class as whole”
Participant 1R	“I like smaller groups, I can be more open. But I also feel that we know each other better and better and we can be more open. Sometimes the topics are quite strong and deep, I appreciate that and I thank to the people that share such things. Then I also feel I can share more and be more open
Participant 2S	“I think working in smaller groups was better and made the class more enjoyable. I felt more present and heard especially due to less people having to say their thoughts at once. I am naturally more susceptible to suspend my thought instead of bursting them out and smaller groups gave me more opportunities to articulate my ideas”
Participant 3S	“In this block I liked that, in part, we worked in small groups. [...] The main benefit was that small group work made the seminar more dynamic and effective, because we elaborated the problem in a small group and subsequently [...] we also recalled the theme’s essence quickly in the whole large group. This way of leading the course is most attractive for me and I can imagine that the coming block could look similarly”

personal stories of others. Table 8 provides extracts from participants in support of this category.

Showing empathy and understanding (N₁ = 4; N₂ = 3)

The findings showed that some participants valued their own (and others) empathic reactions to and understanding of the personal problems or challenging experiences shared by case providers. Empathy and understanding were present during the small group encounters. Table 9 highlights supporting quotations for this category.

Feeling grateful for and inspired by the experience (N₁ = 4; N₂ = 5)

Several participants expressed gratitude for the opportunity to participate in the Open Case Setting. Participants expressed gratitude relating to the openness of the case providers, the personal growth and learning which took place during the experience and the new skills which they developed. Table 10 provides extracts in support of this category.

Table 8 Category 6—A platform for openness

Participant	Supportive quotation
Participant 1S	“Being able to communicate with other people in very open way was most interesting for me, because I was able to hear different opinions or even different discussion and argumentation techniques regardless of topic”
Participant 16S	“...I guess the most significant experiences were the open cases, where couple of students opened themselves really and shared their personal problems”
Participant 17S	“What I liked most in this course was the work in small groups where the discussions were more open”

Table 9 Category 7—Showing empathy and understanding

Participant	Supportive quotation
Participant 13S	“I think that, especially in open cases, we were sensibly empathic to the case providers or at least we tried hard to be”
Participant 14S	“I was also surprised by [the] amount of empathy of other people, when we had some activity within smaller groups”
Participant 7S	“I was never the case provider and I am not sure, whether I could do it, but I really appreciate that someone did”
Participant 18R	[During the open cases, a] “couple of students opened themselves really and shared their personal problems. Meanwhile the rest of the group was trying first to clearly understand their situation and then very carefully come up with some advices”

Table 10 Category 8—Gratefulness for and inspired by the Open Case setting experience

Participant	Supportive quotation
Participant 7S	“Also [my] experience with open case was something really new, unusual, and different for me. I was never the case provider and I am not sure, whether I could do it, but I really appreciate that someone did”
Participant 18S	“On the whole, I’m taking with me the splendid experience that I could be part of this group and I think that every such experience moves one forward”
Participant 9R	“... I hope I will take this motivation with me for my future learning ...”

Development of new skills and abilities ($N_1 = 4; N_2 = 5$)

A few participants indicated that new skills and abilities (such as active listening) were learned which could aid in enhancing communication between parties, build positive relationships with others and to identify and solve problems more efficiently. Table 11 provides extracts in support of this category.

Establishing interpersonal connectedness ($N_1 = 2; N_2 = 2$)

Two participants indicated that the Open Case setting aided in the development of interpersonal connectedness. The findings suggest that these students found that as a result of the Open Case setting, the group was able to “grow closer together” and to form deeper relationships. Table 12 provides supportive quotations for this category.

Table 11 Category 9—Development of new skills and abilities

Participant	Supportive quotation
Participant 8S	“It’s really interesting and curious for me how people can effectively and with pleasure communicate with themselves and others once they learn the right skills”
Participant 18S	“The most important are those things that I really want to try in practice or I have already tried such as active listening and then those moments when I realized: that is something”
Participant 6R	Open case format gave me a nice “framework” how to understand a problem quickly to a certain depth [...]

Table 12 Category 10—Establishing interpersonal connectedness

Participant	Supportive quotation
Participant 15S	“I think it was really nice that people shared their private problems with us in open cases but also in group discussion/dialog, I think it was really significant for us as a group to become more close”
Participant 14R	“All open-cases were very intensive, strong, deep. I think it made the group really close and then open. It brought us together”

Critical of the Open Case Setting ($N_1 = 0$; $N_2 = 1$)

One participant reflected critically upon the experience. The participant remarked: “The fact that I really had very hard times to hold back and not openly say what I thought, was the main reason why I didn’t like the activity.”

3.2 Study 2’s Findings

The category scheme from Study 1 was used as the primary typology for the categorisation of muted textual data obtained for participants in Study 2. Additional categories were extracted where data could not be categorised into the original typology. The findings showed that international students shared similar experiences as their local-cultural peers in Study 1. However, some deviations did occur.

Table 13 provides an indication of the prevalence of international students’ experiences of the Open Case setting in relation to the experiences of those who participated in Study 1.

In contrast to Study 1, the findings showed that none of the international students explicitly stated that the Open Case setting was a significant experience. None of the participants in Study 2 indicated a preference for small group compositions.

Table 13 Presence (✓) or no mention (–) of categories identified in study 1 by four international students participating in one of two consecutive course instances

Category (from study 1)	Student A	Student B	Student C	Student D
The Open Case as significant experience	–	–	–	–
Sharing personal stories is beneficial	✓	✓	✓	✓
Transformative learning through others’ experiences	✓	✓	✓	✓
Significant experience from self-disclosure (Case Providers)	✓	✓	✓	–
Preference of a small group composition	–	–	–	–
Preference for the large (encounter) group	✓	implicit	✓	–
The Open Case Setting provides a platform for openness	✓	✓	✓	✓
Showing empathy and understanding	✓	–	✓	✓
Feeling grateful for and inspired by the experience	✓	✓	✓	✓
Development of new skills and abilities	✓	–	–	–
Establishing interpersonal connectedness	✓	✓	✓	✓
Critical of the Open Case Setting	–	–	–	–
Understanding across cultures	✓	✓	✓	–

Likewise, none of the international students of Study 2 were critical of the Open Case Setting. Further, only one student indicated that he/she developed new skills or abilities during the Open Case Setting.

In coherence with the findings of Study 1, all international students shared the sentiments of the local students in that *sharing personal stories was beneficial* for personal growth and development [“Sitting together and sharing the thoughts which bothers you in the midst of people who do not judge you is bliss” Student B]. Further, all participants in Study 2 mentioned experiences of *transformative learning* through actively listening to and engaging with the personal stories of others [“We as a group, learnt a lot from one another when we shared our thoughts and troubles, being nice to each other without judging one another. The diversity in the group ranging from our age, ethnicity was a great helping factor to understand how things do change over time” Student B]. Similarly, acting as a *case provider and sharing a personal problem was a significant experience* for participants in Study 2 [“It felt good to be so open and share personal things, because often I shut down and don’t show my emotions at all if I don’t feel comfortable in a situation” Student A]. Further, all international participants indicated that the *Open Case Setting provided a platform for openness* [“In [the open case] I felt safe and comfortable to share” Student D], and *felt grateful and inspired by the experience* [“I would like to heartily thank all participants for their openness, free sharing views and ideas brought into our dialogues” Student B]. All international participants felt that the Open Case setting aided them to *interpersonally connect with other participants* [“We started doing some activities and sharing things between us, and for me personally this class helped me to know and meet new people, cause as an exchange student in my first semester I didn’t have the chance to meet a lot of people, but as we shared a lot of experiences and talked about things that had happened in our lives we made a kind of connection (well, this is how I felt it)” Student C], and to develop *empathy and understanding of others’ problems* [“Also empathic understanding was present and I feel like I really connected with most of the people in the course (mostly the ones that I got to talk to during pair exercises)” Student D].

The international participants differed between each other and the participants in Study 1, only in respect of their *preference for the large (encounter groups)* rather than the small group composition. [“I found the encounter groups the most significant experiences during the course, because I felt like people were really sharing things that are very important and emotional to them” Student A] and that it aided them to develop an *understanding of others across the different cultures* [“The most important thing for me was to connect with people from different cultures. I feel that connecting on an emotional level and feeling accepted with different people in general helps decrease any prejudices and makes it easier to overcome differences in views and values” Student C & “I very appreciated talking about cultural differences. For me it is really rare to talk with some foreigners and a fortiori in such a confident atmosphere. And not only the hand-to-hand contact and talking but also sharing experiences with other nationalities” Student B].

4 Discussion

The purpose of this chapter is to examine ICT students' experience of the Open Case setting when introduced as part of a Master level course on communication for computer science students, as well as the effect thereof on their professional- and private lives. Specific focus will also be given to international students' reflections during this intervention. A multi-study explorative, inductive qualitative content analytic research design was employed to analyse data obtained through participants' written self-reflections as well as online reactions on their experiences of the Open Case setting. The results from Study 1 showed that individuals from the local cultural context (Study 1) experienced: (a) the Open Case setting as a significant experience, (b) sharing personal stories is beneficial to personal growth and development, (c) Transformative learning through others experiences, (d) Case providers found personal self-disclosure to be cathartic, (e) A preference for small group compositions, (f) the Open Case Setting as a valuable platform for openness, (g) empathy and understanding for others problems, (h) being grateful for and inspired by the Open Case Setting, (i) developed new skills and abilities, and (j) interpersonal connectedness to their fellow students. Study 2 found that international students shared similar experiences to their local student peers, however did not specifically indicate that the Open Case was a significant experience, nor showed preferences for the small group interactions. Participants from Study 2 did, however, indicate that the Open Case Setting aided them in developing an understanding of other cultures.

From the findings of *Study 1* it is evident that students tend to take with them the awareness that sharing in a trustful, open atmosphere can be an effective means to move forward in solving their personal problems. Moreover, they strengthen their appreciation and skill of active listening and keeping back judgment and early advices. The Open Case Setting provided a means through which individuals could share and collectively explore solutions to complex personal problems. Through active engagement, individuals experienced that sharing personal stories with the group could aid them in not only alleviating the emotional burden associated with the problem, but also provide unique insights as to how these situations could be resolved. Further, individuals who participated in the Open Case Setting, developed an understanding that various personal problems are shared experiences.

Drawing from the collective wisdom of the group, even participants who did not share personal problems experienced transformative learning. Participants indicated that they could learn from and grow through the experiences and challenges which others presented with. In other scenarios, participants felt that being exposed to different perspectives on similar problems aided in developing unique insights into how similar problems could be approached in the future. Research shows that transformative learning experiences aids individuals to expand their current world view or perspective through developing a deeper understanding of the self, an active revision of personal believe systems and changes in behaviour (Cranton, 2006). The Open Case setting could therefore be employed as a means to contribute to the personal- and social development of participants through expanding their world-views.

Similarly, Case Providers (i.e. those individuals whom shared personal stories, challenges or problems with the group) found the systematic self-disclosure of their problems to the group, cathartic. Through sharing their personal stories, case providers reported that new insights into their problems were developed and that the emotional load associated with these problems were unbundled. Through sharing and through active reflection from the group, case providers were able to increase their own understanding of the problems and develop more self-insight in the process. This is in line with one of the fundamental principles of person-centered groups (Rogers, 1970) and talk-therapies: self-disclosure leads to the alleviation of negative emotions associated with the perceived problem (Trotter, 2015). When individuals are afforded the opportunity to share personal experiences in group-based therapy or development sessions it aids in normalising the experience, builds positive self-worth and develops stronger connections between participants (Farber & Sohn, 2001). It also aids in increasing self-understanding and self-awareness as well as enhances self-reported personal improvement over time (Farber & Hall, 2002; Kelly, 2000). It is therefore not surprising that in the Open Case setting, where Case providers share their personal stories, similar experiences were reported.

Participants also indicated that sharing was more beneficial in smaller groups as it created a sense of enhanced intimacy. Smaller groups provided more psychological safety, as opposed to the larger (encounter) groups. In the smaller groups, individuals could freely express, share and reflect upon their own and others experiences without the fear of repercussions. Research shows that smaller group engagements or therapy is more effective than larger groups in that each participant has an opportunity to express themselves and to be heard (Foulkes, 2018). Smaller groups provide for increased opportunities to learn with and from other members and their experiences, whereas larger groups bear a larger risk to proverbially drown out the voices of the less expressive or self-assured (Burlingame, Fuhriman, & Johnson, 2004). Further, the social multiplier effect (i.e. the extent towards which high levels of experience of one individual can have spill over effects onto the group) has also been shown to be more present in smaller groups than in larger ones. As such, the learnings of more experienced individuals could be more efficiently transferred to the group in these smaller settings (Golberstein, Eisenberg, & Downs, 2016). These smaller groups also provide a platform through which participants could openly discuss and share personal stories, problems and issues in a psychologically safe environment. Participants indicated that the Open Case Setting created a safe platform through which others could share relatively 'private' information, in an open and constructive manner. This occurred as a result of the established respectful, open and empathic climate by the facilitator and is a necessary precondition for significant, transformative learning to occur (Rogers, 1961; Motschnig and Nykl, 2014).

Further, participants indicated that their personal stories were welcomed by empathic understanding by others. Through active listening, genuine sharing, non-judgemental communication and concerted efforts to understand, participants in the One Case Setting developed and showed genuine empathy for those who shared their cases. Similarly, the participants' predominant feelings of gratefulness for the experience signals that they take with them something they considered significantly

constructive. Their consequent positive feeling might be interpreted as a sign of personal- and social growth (Rogers, 1961; Motschnig and Ryback, 2016).

Participants also indicated that new skills and abilities were learned through the Open Case setting which could potentially lead to improvements in interpersonal communication, more efficient conflict management skills, and the ability to establish positive relationships with others as the development of group-based problem-solving abilities. Specifically, some individuals indicated that the Open Case setting added them in “Growing closer together” as a group and to connect to others in a more straightforward way.

Although positive experiences were predominantly reported, one individual did indicate frustration with the Open Case setting intervention. This indicates that the Open Case setting may not be applicable to every individual, in every scenario. It is therefore important to appreciate personal differences when an Open Case setting intervention is implemented and to individually manage the personal preferences of participants as part of the process.

The international participants of **Study 2** presented with similar experiences as those who participated in Study 1. Albeit a large overlap, the international students did not explicitly mention that the Open Case setting was a significant experience, nor that they preferred the smaller group settings. Here, participants were less likely to single out the specific impact of Open Case in their reflections. Intriguingly, however, some international students, unlike students of the Czech/Slovak majority, liked the large group most, potentially due to its larger scope and thus potential to reach out to colleagues. Another explanation of international students’ feeling attracted to encounter the whole group might be the fact that it is the less shy, the more outgoing students who decide to study in a different country and thus appreciate the greater richness of perspectives voiced in the large group. More research on this phenomenon needs to be done to confirm or disconfirm this observation and its consequences for working across nations and cultures.

Whilst controlling for individual differences and some deviations in personal preferences, the only major difference between Study 1 and Study 2 was that international students indicated that the Open Case setting aided them to develop an understanding of others across the different cultures. The Open Case setting aided these individuals to challenge and overcome the distance that they may have felt when just superficially relating to their host cultures. It aided them in establishing deeper relationships and to connect with individuals from the host culture on a person-to-person level. Although the same was not explicitly mentioned by the participants of Study 1, it is presumed that individuals from Study 2 were more sensitive to the cultural differences between them and the local group as they are new to the established cultural contexts and patterns. As such, the cultural connecting value and potential of the intervention should be more extensively investigated in future studies.

5 Future Directions

Albeit various limitations are present in the current study due to sample size, the nature of the post hoc analysis, the specific academic context and the quality of some self-reflections, the Open Case setting does prove to be a valuable experience for computer science students. Notwithstanding the generic methodological improvements associated with the current design, future research should focus on evaluating the effectiveness of the Open Case setting from a mixed-method longitudinal perspective, where self-reported experiences are quantified and tracked over time.

Several specific areas are suggested for future research:

1. The application of the Open Case setting in networked management learning should be explored;
2. The effect within and across organizations should be evaluated
3. Future studies should aim to develop an online version of the Open Case setting to evaluate the effectiveness within virtual and globally distributed teams
4. The Open Case setting could further be used to explore the connection between the Person-Centered Approach and positive psychology
5. The connection with motivational interviewing and application for cultural integration should be investigated
6. The effect of the Open Case setting on ICT-related project completion/success should be evaluated.

6 Conclusion

The results of this study show the value which computer science -students attached to the Open Case setting as part of a masters course on person-centered communication. Students found the Open Case setting as personally meaningful, it aided in facilitating personal growth and development, transformed their perceptions, and helped to develop a deeper, empathic understanding of the problems of others. The Open Case setting was also seen as a powerful tool to aid in the construction of personal relationships (across cultures). The intervention is valuable vehicle to aid individuals to grow and develop through transformative learning practices. It could aid students to develop better relationships amongst themselves, to explore problems from different perspectives and to develop new skills and abilities to effectively cross-cultural boundaries.

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A Framework for Assessing and Developing Self-regulatory Positive Psychological Career Attributes for Sustained Employability



Melinde Coetzee

Abstract The present chapter extends the positive psychology literature by positioning the concept of employability as a self-regulatory positive psychological construct that helps explain the agency-side (self-regulation) of individuals in navigating their career management within specific contexts. The chapter elaborates on positive psychological employability capabilities that are known to facilitate the self-empowering career behaviours necessary for the agility needed to proactively deal with the employment challenges posed by a more volatile employment context. The chapter further explores the utility of a measure of employability (i.e. the EAS—employability attributes scale 2.0: Coetzee, 2018) in helping individuals as prospective workers to craft sustainable work through raising an awareness of their employability attributes as important positive psychological resources in their career management. The chapter presents research results on the reliability and validity of the employability attributes scale, EAS 2.0, and outlines how the scale can be applied as a career counselling intervention framework for assessing individuals' agency in managing their employability. The chapter proposes a structured employability counselling interview guide. Used jointly with the EAS 2.0, the interview guide serves as a positive psychological narrative mechanism in facilitating individuals' capacity for sustaining their employability. Guidelines for career counselling intervention for self-regulated employability are outlined in the chapter.

Keywords Employability attributes · Self-regulatory employability · Positive psychological resources · Employability attributes scale · Employability attributes assessment and counselling · Self-determination theory

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1 Introduction

Sustaining employability in the rapidly evolving contemporary and fast emerging uncertain future employment structures is becoming increasingly complex. The concept of workforce employability remains of research interest as organisations strive to succeed and sustain a competitive business edge while facing the radical changes and transformation dictated by Industry 4.0 (Finch, Peacock, Levallet, & Foster, 2016; Pinto & Ramalheira, 2017; PWC, 2018). Attracting and retaining agile employable talent with unique attributes and skills that contribute to business success will remain a strategic focus for future workplaces (PWC, 2018). The employability of workers is defined by both individual (self-regulatory/agency-side) and contextual (structure-side) factors (Kovalenko & Mortelmans, 2016). In the fourth industrial and technology/information-driven digital revolutionary society (Industry 4.0), employment relationships are more flexible, careers are not guaranteed, career paths are unstable, and job requirements are constantly changing (Pinto & Ramalheira, 2017; PWC, 2018). Workers are to assume greater responsibility of their careers through taking agency for remaining agile in adapting to shifting employment contexts (Kovalenko & Mortelmans, 2016). Contextual factors such as Industry 4.0 and its increasingly flexible and shifting employment markets, clamor for the notion of a career being defined by the individual rather than the employer or institution. The career is crafted through individuals' unique repertoire of skills, capabilities, experiences and networks which potentially enable sustained employability (PWC, 2018).

The shift in careers and employment calls for an understanding of the psychological (self-regulatory/agency-side) factors that help individuals to become agile in sustaining their employability in a fast-paced evolutionary digital world. Psychological approaches to employability emphasise self-regulatory or autonomous behaviour (i.e. agency) as important for sustained employability (De Cuyper, Raeder, Van der Heijden, & Wittekind, 2012; Van der Heijde, 2014; Vanhercke, De Cuyper, Peeters, & De Witte, 2014). Self-regulated, autonomous behaviour has been associated with various positive outcomes such as creative learning and engagement, greater energy and vitality, prosocial mindset, positive interpersonal relationships, higher wellbeing and performance, and employability (Potgieter, 2014; Van der Heijde, 2014; Weinstein, Przybylski, & Ryan, 2012). The agentic nature of self-regulation involves intrinsic motivational processes that steer the allocation of personal resources with regard to the attainment of important goals (Van der Heijde, 2014). In this regard, positive psychology directs increased attention to the importance of cultivating individuals' awareness of the functionality of their personal strengths and capabilities (i.e. personal resources) in achieving positive career-life outcomes (Marx, 2016; Potgieter, 2014; Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2007; Van der Heijde, 2014).

The present chapter extends the positive psychology literature by positioning the concept of employability as a self-regulatory positive psychological construct that helps explain the agency-side of individuals in navigating their employability. The objective of the chapter is to elaborate on positive psychological employability capa-

bilities that are known to facilitate the self-empowering career behaviours necessary for the agility needed to proactively deal with the employment challenges posed by a more volatile employment context. The chapter further explores the utility of a measure of employability (i.e. the employability attributes scale 2.0: Coetzee, 2018) in helping individuals as prospective workers to craft sustainable work through raising an awareness of their employability attributes as important positive psychological resources in their career management. The chapter presents research results on the reliability and validity of the employability attributes scale, EAS 2.0 (Coetzee, 2018) and outlines how the scale can be applied as a framework for assessing individuals' agency in managing their employability. The chapter proposes a structured employability counselling interview guide that could be used jointly with the EAS 2.0 as a positive psychological narrative mechanism in facilitating individuals' capacity for sustaining their employability.

2 Trends in Research on the Psychological Aspect of Employability

The chapter addresses an important gap in research on the psychological aspect of employability. Psychological approaches to the study of employability focuses on the micro-level (i.e. the agency-side of the individual) as opposed to approaches that focus on the contextual (i.e. structure-side) of employability. The latter involves the meso-level (i.e. a focus on the view of the organisation or employer) and macro-level (i.e. a focus on the view of society, government and labour market: Vanhercke et al., 2014). To date, psychological approaches to the concept of employability tend to be dominated by the (1) competence-based, (2) dispositional, and (3) perceived employability approaches (De Cuyper et al., 2012; Rothwell, Herbert, & Rothwell, 2008; Vanhercke et al., 2014). Table 1 summarises the key elements highlighted by these three psychological approaches to employability. All three approaches account for individuals' perception about the interaction between personal and structural factors in managing employability (Vanhercke et al., 2014).

The competence-based approach emphasises abilities while the dispositional approach emphasises proactive attitudes of the employed in sustaining employability (i.e. current job/career). The perceived employability approach focuses on the employability of different groups, including labour market entrants (i.e. graduate students), the employed and unemployed across career stages, while accounting for individuals' general feelings of perceived control over their careers (Rothwell et al., 2008; Vanhercke et al., 2014). However, these three approaches do not explain the link between intrinsic motivational and self-regulatory processes and individuals' agency in employability navigation. Although well-researched measures have been developed by the proponents of the employability approaches, the research literature does not offer practical guidelines on how to utilise the assessment of the employ-

Table 1 Chological approaches to employability

Psychological approach	Conceptualisation of employability	Key elements	Psychological attributes measured
Competence-based approach (Van der Heijde & Van der Heijden, 2006)	The continuous fulfilling, acquiring or creating of work through the optimal use of competences (Van der Heijde & Van der Heijden, 2006, p. 453)	Self-evaluation of personal abilities, capacities and skills that promote employment opportunities Focus: Individuals evaluate their employability abilities	Occupational expertise, anticipation and optimization, personal flexibility, corporate sense, balance
Dispositional approach (Fugate & Kinicki, 2008)	A constellation of individual differences that predispose employees to proactively adapt to their work and career environments (Fugate & Kinicki, 2008, p. 504)	Self-evaluation of proactive attitudes related to the career and work in general Focus: Individuals evaluate their motivational attitudes with regard to their employability	Openness to changes at work, work and career resilience, work and career proactivity, career motivation, work identity
Perceived employability approach (Rothwell et al., 2008; Vanhercke et al., 2014)	The perceived ability to attain sustainable employment appropriate to one’s qualification level (Rothwell et al., 2008, p. 2) The perceived ability to be employed (i.e. maintain current employment or obtain new employment) (Vanhercke et al., 2014, p. 594)	Self-evaluation of possibilities of obtaining and maintaining employment Focus: Individuals evaluate their labour market position	Perceptions of university status, state of external labour market, value of study field, employment demand, belief in self
Self-regulatory approach (Coetzee, 2018; Van der Heijde, 2014)	How to function as effectively, efficiently and healthily as possible within a given (un)employment context (now and in the future) (Van der Heijde, 2014, p. 8)	Self-evaluation of self-regulatory processes and capabilities in navigating one’s employability Focus: Individuals evaluate their employability agency through an assessment and development of positive psychological career attributes	Career agility, career self-management potency, cultural ingenuity, emotional acuity, proactive career resilience, career agency, career sociability

ability competences, dispositional attitudes and perceived employability in career counselling interventions.

More recently, the self-regulatory approach to employability emerged to assess the positive psychological career attributes that help individuals develop the agency in navigating their employability in uncertain employment contexts (Coetzee, 2018; De Cuyper, Peeters, & De Witte, 2014; Van der Heijde, 2014). However, limited research is available on explaining how self-regulation helps develop agency in sustaining employability (Van der Heijde, 2014). The present chapter addresses this gap in research by exploring employability as a process of self-regulation and by evaluating how positive psychological career attributes contribute to individuals' self-regulated employability agency. In this regard, the chapter makes a unique contribution to the employability literature by positioning the concept within the positive psychology literature. Moreover, the chapter offers guidelines for practice on the utilisation of the EAS 2.0 (Coetzee, 2018) assessment results in career counselling interventions for sustained employability.

3 Employability as a Process of Self-regulation

Self-regulation or the ability to flexibly apply as many different resources and skills necessary to achieve a goal, is perceived as manageable proactive agentic behaviour (Porath & Bateman, 2006; Van der Heijde, 2014). The notion of self-regulation presupposes that individuals have the intrinsic motivation to prosper, grow and create employment opportunities; employability becomes an important goal toward which individuals steer the allocation of personal resources (Beukes, 2010; Du Toit, 2018; Nielsen, 2017; Sokol & Müller, 2007; Van der Heijde, 2014). Sustaining one's employability involves self-regulatory processes that enable individuals to guide their goal-directed activities over time and across changing circumstances. Self-regulation supports individuals in attaining results such as meaningful employment (Porath & Bateman, 2006; Van der Heijde, 2014). Such self-regulatory processes involve goal-setting, monitoring one's achievement of such goals and bringing about change in one's circumstances through continuous self-evaluation, adjustment, development and growth, and demonstrating proactive agentic behaviour (Coetzee, Roythorne-Jacobs, & Mensele, 2016).

Seen through the theoretical lens of self-determination theory (SDT: Deci & Ryan, 1985), individuals are understood as both volitional and agent of their own future and employability; their behaviour in managing their employability is self-regulated, self-determined and self-motivated. In managing their employability, they choose behaviours which serve their basic psychological needs for autonomy, competence and relatedness (Ryan & Deci, 2000; Shuck, Zigarmi, & Owen, 2015). Fulfilling the need for autonomy (i.e. personal agency and behaviour which reflects core personal values), competence (i.e. feeling one possesses the need knowledge, skills and resources to meet environmental challenges and requirements), and relatedness (i.e.

feeling connected to something greater than oneself, and feeling valued by others) promotes a sense of individual wellbeing and satisfaction (Shuck et al., 2015).

Positive psychological attributes facilitate individuals' self-regulatory processes toward crafting sustainable economic means of living or employment (Du Toit, 2018). As shown in Table 1, the competence-based approach to employability (Van der Heijde & Van der Heijden, 2006) emphasises apart from occupational expertise and corporate sense, positive psychological attributes such as personal flexibility, anticipation and optimisation. The dispositional approach (Fugate & Kinicki, 2008) emphasises openness to change at work, work and career resilience, work and career proactivity, and career motivation. The self-regulatory approach to employability (Coetzee, 2018; Van der Heijde, 2014) builds on the basic premise of the competence-based and dispositional approaches that positive employability attributes and positive motivational attitudes towards work and the career generally promote employability through proactive career self-management behaviours. Drawing from SDT, self-regulatory proactive career behaviours directed toward navigating one's employability are driven by the psychological needs for autonomy, competence and relatedness. The development and demonstration of positive psychological career-related attributes help create the conditions that satisfy the fundamental needs for autonomy, competence and relatedness through proactive employability management.

As shown in Fig. 1, in this chapter, seven positive psychological attributes of self-regulatory employability are reviewed. The attributes describe specific agentic career-related attitudes, skills and behaviours required for sustaining employability: career agility, career self-management potency, cultural ingenuity, emotional acuity, proactive career resilience, career agency and career sociability. Drawing from SDT, the seven employability attributes relate to the three psychological needs of autonomy, competence and relatedness (see Fig. 1):

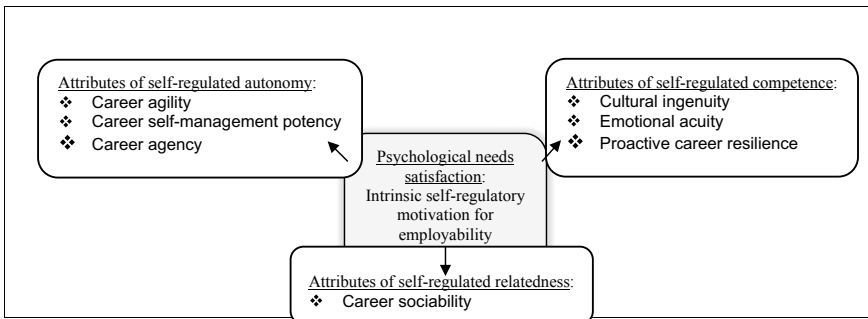


Fig. 1 Self-regulatory employability attributes (author's own diagram)

4 Employability Attributes of Self-regulated Autonomy

Self-regulated autonomy refers to desire to self-organise experience and behaviour, and engage in activities congruent with one's sense of self (Deci & Ryan, 2000). In the employability context one demonstrates personal agency (autonomy) by being self-directed in managing one's career and setting and implementing goals that help one achieve better person-environment congruence (Coetzee & Engelbrecht, 2018).

Career agility: The attribute of career agility describes individuals' adeptness in moving quickly and with ease through the challenges posed by uncertain and volatile career or employment contexts (Coetzee, 2018). Individuals adopt an entrepreneurial alertness toward the career-life that predisposes them toward being innovative, proactive and intrinsically motivated to achieve important goals (Bezuidenhout, 2011; Uy, Chan, Sam, Ho, & Chernyshenko, 2015). Their energy is focused on continuous life-long learning, keeping up to date with new job/career requirements, being curious about new ways of engaging with the job or career, setting challenging targets and being willing to take risks to discover original solutions (Coetzee, 2018). Career agility presupposes agentic self-regulation in tolerating ambiguity in unstructured and uncertain situations and viewing challenges as an opportunity to craft new or alternative forms of employment by generating new ideas and better ways of doing things or crafting a career-life (Bezuidenhout, 2011; Bezuidenhout & Coetzee, 2010; Coetzee, 2018).

Career self-management potency: The attribute of career self-management potency describes individuals' inherent capacity or potentiality to grow and develop, and achieve effective results in managing the career (Coetzee, 2018). Self-regulatory processes that facilitate employability involve having clear career goals and action plans, and regularly reflecting on these; knowledge and insight regarding one's career aspirations, and the required skills for being successful in a job or career, and actively seeking information about jobs and careers; through networking (Bezuidenhout, 2011; Bezuidenhout & Coetzee, 2010; De Vos & Soens, 2008; Wesarat, Sharif, & Majid, 2014).

Career agency: The attribute of career agency describes the attitude of taking responsibility for one's employability and career as a social agent actively involved in and in interaction with one's social surroundings (De Souza, 2014; Du Toit, 2018). Individuals view themselves as autonomous agents of their career success and failures; they take responsibility for their decisions, prefer to make their own decisions, and believe that when they achieve something it is because of their own efforts (Coetzee, 2018). Career agency is seen to facilitate optimism and hope in finding employment (Du Toit, 2018).

5 Employability Attributes of Self-regulated Competence

Competence or effectance refers to the propensity to have an effect on the environment and attain valued outcomes in it (Deci & Ryan, 2000). One feels capable of, and confident about actions and behaviour that help one achieve specific career outcomes (i.e. employability) and gain mastery over conditions affecting one's career success and employability (Coetzee & Engelbrecht, 2018).

Cultural ingenuity: The attribute of cultural ingenuity describes individuals' skills and resourcefulness in interfacing with diverse groups of people in the culturally varied employment and career context. Cultural ingenuity presupposes self-efficacy in initiating and maintaining relationships with people from different cultures, communicating with ease interculturally, having insight regarding the customs, values and beliefs of other cultures, and astutely adapting to different social situations (Abbe, Gulick, & Herman, 2007; Bezuidenhout, 2011; Coetzee, 2018). Cross-cultural competence is general seen to advance employability in multi-cultural social contexts (Bezuidenhout, 2011; Ledwith & Seymour, 2001).

Emotional acuity: The attribute of emotional acuity describes individuals' perceptiveness of their own and others' emotions and moods and a smartness in managing these (Coetzee, 2018). Acuity in perceiving emotions involve understanding clearly why one feel a certain way, knowing what to do to be in a good mood, how to easily control one's emotions and disarm emotionally explosive emotions (Bezuidenhout, 2011; Bezuidenhout & Coetzee, 2010). Emotional literacy has been known to facilitate experiences of career success and adaptability (Cartwright & Pappas, 2008; Coetzee & Harry, 2014; Emmerling & Cherniss, 2003). Well-developed emotional acuity enables individuals to demonstrate employability competencies more easily (Beukes, 2010).

Proactive career resilience: The attribute of proactive career resilience describes individuals' confidence in adapting with relative ease to changes in the career environment; anticipating and capitalizing on such changes to further their career, and successfully carrying out their career plans by persevering even in the face of difficult circumstances (Coetzee, 2018). Individuals generally have positive expectations about future events; they are proactive in anticipating changes, demonstrate self-initiative in searching for and identifying new opportunities that benefit the career-life (Bezuidenhout & Coetzee, 2010; Chiaburu, Baker, & Pitariu, 2006; Fugate & Kinicki, 2008; Van der Heijde & Van der Heijden, 2006). Proactivity and career resilience are generally associated with career satisfaction and success (Bezuidenhout, 2011; Wesarat et al., 2014).

6 Employability Attributes of Self-regulated Relatedness

Relatedness refers to the need to feel one belongs and is connected with others (Deci & Ryan, 2000). Career sociability reflects the need for relatedness, that is,

developing supportive, satisfying social relationships that help one advance in one's career (Bezuidenhout, 2011).

Career sociability: The attribute of career sociability describes individuals' openness toward creating and utilising social networks to find new job opportunities (Coetzee, 2018). Career sociable individuals regularly seek feedback from others about their strengths and weaknesses to advance in their careers (Bezuidenhout, 2011; Bezuidenhout & Coetzee, 2010). Successful networking generally positively influences career outcomes such as increased job opportunities, promotions, commitment and career satisfaction (Forret & Sullivan, 2002; McCallum, Forret, & Wolff, 2014; Wolff & Moser, 2010).

The seven positive psychological employability attributes are measured by means of the employability attributes scale version EAS 2.0 (Coetzee, 2018) which is an adapted version of the original EAS (Bezuidenhout & Coetzee, 2010). The present study sought to explore the construct validity and reliability of the EAS 2.0 and evaluate its practical application as a framework for counselling individuals on their capability to manage and sustain their employability. The next section reports the results of the study.

7 Method

7.1 *Participants and Procedure*

The participants were a stratified random sample ($N = 755$) of South African undergraduate, full-time employed, distance education adult learners enrolled for further higher education studies in the economic and management sciences field. Females represented 61% and males 39% of the sample. The sample was predominantly represented by 86% Black African adult learners (Whites: 7%; Coloured: 4%; Indian: 3%). In terms of age, the sample was represented by adult learners aged between 18 and 25 years (40%); 26 and 30 years (24%); 31 and 40 years (24%), and those older than 50 years (12%).

Ethics clearance and permission to conduct the research was granted by the management and research ethics committee of the South African higher education institution that participated in the study. Participants were invited to participate in the research voluntarily with the right to withdraw at any time they feel so. They were assured of the anonymity and confidentiality of their responses and that their data would be utilised for research purposes only.

7.2 *Measure*

The revised version of the employability attributes scale (EAS 2.0) developed by Coetzee (2018) was applied to measure the participants' self-evaluation of their employability attributes. The EAS 2.0 is a 51 item scale which utilises a 6-point likert-type scale (1 = never true for me; 6 = always true for me) to measure respondents' self-evaluation of the following seven employability attributes: (1) career agility (13 items; e.g. "I regularly keep up with the latest development concerning my type of job or career"); (2) career self-management potency (7 items; e.g. "I have clearly formulated career goals and action plans on how to achieve them"); (3) cultural ingenuity (7 items; e.g. "I can easily initiate and maintain relationships with people from different cultures"); (4) emotional acuity (7 items; e.g. "I can easily understand why I feel a certain way"); (5) proactive career resilience (8 items; e.g. "I am able to persevere even in the face of difficult career circumstances"); (6) career agency (5 items; e.g. "I am responsible for my own successes and failures in my career"); and (7) career sociability (4 items; e.g. "I have built a network of friendships with people that can advance my career"). The present study yielded acceptable internal consistency reliability and construct validity of the EAS 2.0. The overall EAS 2.0 obtained a Cronbach alpha coefficient of 0.97.

7.3 *Statistical Analysis*

The cross-sectional and self-report nature of the research design necessitated preliminary statistical analysis which involved testing for common method bias. The Harman's single-factor test was applied whereby all items of the EAS 2.0 were loaded into a factor analysis to check whether one single general factor emerged and accounted for the majority of the covariance (i.e. >50%; Tehseen et al., 2017). The Harman's single-factor test showed that the covariance between the subscale variables were less than 19%, indicating that common method bias was not a serious threat to the findings. The poor data fit of the one factor confirmatory factor analysis (CFA) reported in Table 3 also corroborated the lack of presence of common method bias: Chi-square = 6655.85; df = 1224; SRMR = 0.06; RMSEA = 0.08; CFI = 0.73. Two CFA multi-factor measurement models were then compared and the standardised path loadings (Table 5-Appendix) were analysed to assess construct validity of the best fit measurement model. The CALIS procedure (SAS, 2013) with maximum likelihood estimation for the covariance structure analysis was applied. The Levenberg-Marquardt optimisation procedure was applied to optimize the multi-factor CFA models.

Table 2 Descriptive statistics, internal consistency reliability and bivariate correlations between the employability attributes scale 2.0 subscales

Variable	Mean	SD	1	2	3	4	5	6	7
1 Career agility	4.82	0.80	(0.92)						
2 Career self-management potency	4.76	0.91	0.68***	(0.87)					
3 Cultural ingenuity	4.34	0.97	0.62***	0.60***	(0.86)				
4 Emotional acuity	4.57	0.99	0.70***	0.59***	0.63***	(0.84)			
5 Proactive career resilience	4.52	0.88	0.80***	0.69***	0.67***	0.68***	(0.87)		
6 Career agency	5.10	0.77	0.62***	0.52***	0.49***	0.60***	0.60***	(0.76)	
7 Career sociability	3.97	1.16	0.55***	0.62***	0.58***	0.45***	0.56***	0.35***	(0.77)

Note N = 755; Correlations are all significant at $p < 0.0001$. Cronbach's alpha coefficient shown in brackets

Table 3 Testing the measurement model: Results of the confirmatory factor analysis and chi-square comparison test

Models	Chi-square	df	SRMR	RMSEA	CFI	AIC
One factor CFA model	6655.85***	1224	0.06	0.08	0.73	6859.85
Multi-factor CFA model 1	4153.63***	1203	0.05	0.06	0.85	4399.63
Optimised multi-factor CFA model 2	2849.39***	1175	0.04	0.05	0.92	3151.39
Multi-factor CFA model 3	2995.28***	1189	0.04	0.05	0.91	3269.28

Note N = 755; *** $p \leq 0.0001$ (***) = extremely significant)

7.4 Results

Inter-subscale (bivariate) correlations (shown in Table 2) of the EAS 2.0 subscales ranged between $r \geq 0.35$ (moderate practical effect) to $r \leq 0.80$ (large practical effect), $p \leq 0.0001$.

Table 3 reports the results of the one factor CFA and two CFA multi-factor measurement models (i.e. the items of each of the seven factors loading onto their respective factor constructs). The optimised Model 2 of the CFA multi-factor model was shown to be the best fit measurement model: Chi-square = 2849.39; df = 1175; SRMR = 0.04; SRMEA = 0.05; CFI = 0.92 and AIC (lowest) = 3151.39. In the third CFA multi-factor measurement model, the items of each of the seven factors loaded onto their respective factor constructs, and each of the seven factor constructs loaded onto the overall scale construct (employability attributes). Again, the model fit statistics of model 3 showed acceptable model fit, which pointed to the construct validity of the EAS 2.0.

Next, the standardised path loadings of the CFA model 3 were analysed to assess construct validity of the EAS 2.0. Table 5 (see **Appendix** of Chapter) shows that the items of each subscale loaded significantly onto the respective factor (subscale): >0.50 ($p < 0.001$) and each of the seven factors loaded significantly onto the overall employability attributes construct: >0.80 ($p < 0.001$). The path coefficients provided evidence of the convergent validity of the subscales.

8 Discussion

This chapter explored the construct validity and reliability of the EAS 2.0 for the purpose of evaluating its practical application as a framework for counselling individuals on their capability to manage and sustain their employability. Overall, the

empirical study provided evidence of the reliability and construct validity of the EAS 2.0, implying that it can be considered for application in career counselling intervention design. The EAS 2.0 (Coetzee, 2018) is a construct-driven tool for counselling adults in the early adulthood, middle adulthood and late adulthood on developing the necessary confidence in their agency to navigate and self-regulate their employability. The study results showed that as a reliable and valid assessment instrument, the EAS 2.0 can be considered as an organising framework for counselling interventions focused on coaching individuals toward self-regulatory employability. The positive psychological career-related constructs measured by the EAS 2.0 are regarded as important to help clients become aware of how the attitudes, skills and behaviours assessed by the EAS 2.0 may help them to navigate their employability and fulfill their psychological needs for autonomy, competence and relatedness.

Career counselling intervention uses qualitative and quantitative assessments to enhance client's self-knowledge and activate exploration including the application of the newly gained knowledge in the client's career or employability management (Coetzee et al., 2016; McMahon & Watson, 2012). When evaluating the utility of quantitative measuring instruments such as the EAS 2.0 in the career counselling intervention context, career counsellors generally consider the reliability and validity of such instruments (Coetzee et al., 2016; Swanson & D'Achiardi, 2005). The practical career counselling guidelines provided in this chapter also considered the consequential and exploration validity of the EAS 2.0 in career counselling interventions for self-regulatory employability. Consequential validity refers to an evaluation of the consequences of the scale use such as its utility in facilitating or limiting greater self-exploration and self-understanding. Exploration validity involves an evaluation of the power of the scale to prompt and set in motion career exploration activities, including instrumental behaviours such as actually engaging in the measured behaviours after the counselling intervention (Swanson & D'Achiardi, 2005). Generally, assessment in the career context should stimulate a self-exploration process; it is less about the instrument used and more about the counselling intervention process in which it is used (McMahon & Watson, 2012).

8.1 Counselling for Self-regulatory Employability

In intervention design, career counsellors should consider that the EAS 2.0 as a counselling framework measures multidimensional constructs of psychological needs fulfillment (see Figs. 1 and 2). In the employability context, clients come to counselling for assistance in enhancing their employability and making a career decision. Clients generally discontinue counselling when they have accomplished that goal (Swanson & D'Achiardi, 2005). Employability as a target outcome of the career counselling intervention may only occur until well after the completion of counselling or other supportive interventions. Based on the guidelines of Swanson and D'Achiardi, (2005), assessing enhanced employability after the counselling intervention should occur at long-term follow-up intervals. Career counsellors could consider planning

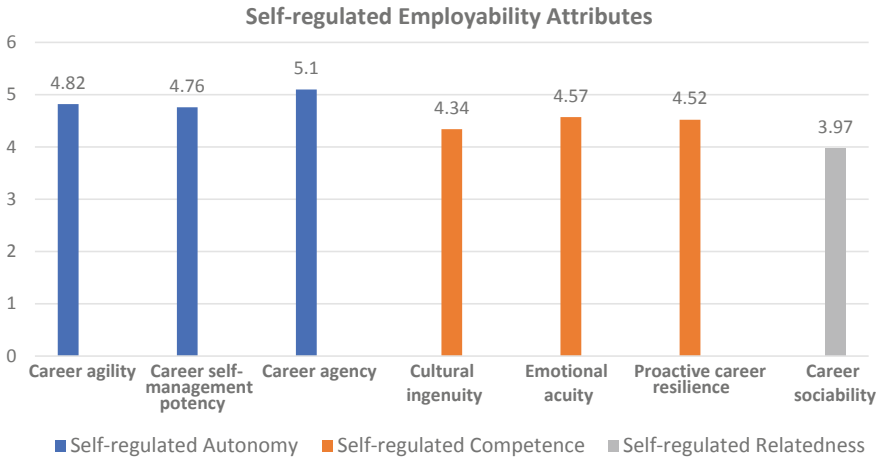


Fig. 2 Example: Client EAS 2.0 profile scores (Age: 32 years)

jointly with the client intermediary outcomes in terms of enhanced employability because it relates to clients' ultimate capability in navigating their employability. Career counselling intervention for employability should also consider the differing needs of clients across the various life-stages. Younger clients (<25–30 years) with little life and work experience may need more supportive interventions than clients in the middle and late adulthood stages. Similarly, interventions for engendering self-regulatory employability in multi-cultural contexts for diverse populations should be taken into account. Research shows that individuals from different socio-cultural contexts have differing perceptions of employability and the role of individuals in searching for and retaining employment (Du Toit, 2018). Idiosyncratic and socio-cultural contexts of clients should be considered and interventions should be appropriate and relevant to the specific client and client context (Coetzee et al., 2016).

8.2 The EAS 2.0 as a Framework for Developing Self-regulatory Employability: Intervention Process Guidelines

The EAS 2.0 provides clients with scores on each of the seven employability attributes (see Fig. 2). The scores provide an employability attributes profile at a certain point of time which can be explored in the intervention process for further development. The EAS 2.0 provides an opportunity for counsellors to translate the quantitative information provided by the assessment into a qualitative understanding that supplements clients' self-insight and understanding of the importance of employability as

an aspect of psychological needs fulfilment. A carefully crafted integrative intervention process should enable clients to evaluate the role of the various employability attributes in fulfilling the psychological needs of autonomy, competence and relatedness. Following the guidelines of McMahon and Watson (2012), counsellors should see the client as active agents in the construction of their careers and employability.

A narrative approach (i.e. crafting a story around the EAS 2.0 scores and profile) in the counselling intervention is recommended. Story crafting stimulates client self-exploration of and self-reflection on their employability and how various life experiences contributed to psychological needs fulfilment. The client develops a connectedness between the EAS 2.0 assessment and meaningful stories about how self-regulated (agentic) behaviour influenced (i.e. enabled or thwarted) the achievement of important career goals. A counselling process that integrates quantitative assessment with narrative processes encourages clients as active social actors (agents) to be proactive in constructing future stories (McMahon & Watson, 2012). Table 4 provides an outline of an integrative structured story crafting interview process around the EAS 2.0 scores of the client. The questions were self-developed by the author for the self-regulatory employability assessment context. The type of questions outlined in Table 4 is based on research conducted by McMahon and Watson (2012). Their research provides evidence of how this type of narrative questioning helps clients engage in meaningful and coherent story crafting.

As shown in Table 4, career counsellors should take heed that the EAS 2.0 is a self-assessment instrument and that clients' self-perception of the employability attributes may be overestimated for highly confident clients and underestimated for clients with weak self-efficacy and low self-esteem beliefs. This observation is made in accordance with research showing that individuals' self-efficacy and self-esteem beliefs tend to influence their self-evaluations in assessment (Swanson & D'Achiardi, 2005). It is therefore recommended that counsellors use as a starting point qualitative assessment techniques (i.e., a diagnostic interview) to gain an estimate of the reasons for extreme high or low scores on the EAS 2.0. This starting point elicits stories about how life experiences influenced self-evaluation about self-regulatory capability. The additional interview questions by the counsellor help to encourage the client's active role in the intervention process; the counsellor listens to understand the meaning of employability in the client's life and how employability relates to the fulfillment of the psychological needs for autonomy, competence and relatedness. Instead of telling or predicting by the counsellor, the intervention process facilitates a co-construction of the client's future story about the navigation possibility of employability. Building on the guidelines of McMahon and Watson (2012) on story crafting, the EAS 2.0 scores are scaffolded in the context of clients' past and present experiences; clients can conceptualise their employability navigation in the context of their past and present actions, behaviour and experiences. As suggested by McMahon and Watson (2012), the intervention process is individualised for the client; the client has informed choice to engage in the process; and the counsellor supports the client through the process by creating a safe and respectful reflective space.

Table 4 Integrative structured story crafting interview for self-regulatory employability navigation

The following questions invite clients to reflect on their EAS 2.0 scores and craft employability navigation stories		Purpose
1	How can I help you in navigating your employability?	Sets the agenda for the discussion. Client tells the story of his/her current employability/career-related problem and the solution they already have in mind for the problem
2	What are your employability attributes scores (1 = very low; 6 = very high)?	Crafts a story about the EAS 2.0 assessment scores. Elicits insight in the assessment purpose and EAS 2.0 framework for managing and sustaining employability
3	How would you explain the role of each of the employability attributes in navigating your employability?	Crafts a story about past and present life experiences in navigating employability. Elicits degree of importance of psychological needs for autonomy, competence and relatedness
4	How would you explain the highest and lowest scores on these attributes?	Crafts a story about self-efficacy beliefs and areas for development in managing goals of employability. Elicits attitudes and behaviour that enable or thwart psychological need fulfillment
5	What are your earliest recollections in successfully crafting/obtaining employment?	Crafts a story of self-efficacy in self-regulation capability in past and present experiences. Elicits insight in degree of self-regulated employability
6	What link do you see between your scores on the employability attributes and your current employability/employment situation?	Crafts a story about self-regulation capability and beliefs. Elicits insight in degree of agency in employability navigation. Elicits attitudes/behaviour contributing to current problem regarding employability. Elicits solution in achieving employability goals
7	What personal qualities and attributes have you identified in your reflection so far that are important for you in your employability navigation?	Crafts a story of self-appreciation and self-efficacy in self-regulation capability. Elicits insight in degree of self-regulated autonomy, competence and relatedness and current employability problem
8	Based on your reflection in the previous questions, what personal qualities and attributes can you further develop that may help you achieve your current and future employability goals?	Crafts an integrative future story. Elicits insight in degree of self-regulated autonomy, competence and relatedness; elicits solution for addressing current employability problem and moving forward as an agent of employability
9	Based on your reflection on your current employability situation, what support or resources may be helpful for you to improve and sustain your employability now and in future?	Crafts an integrative future story. Elicits solutions for current and future support in sustaining self-regulated employability

9 Limitations and Recommendations for Future Research

Future research should address some of the limitations of the current study on the reliability and validity of the EAS 2.0 as a framework for assessing and counselling on self-regulated employability. The study on the EAS 2.0 was limited to a sample of full-time employed distance education undergraduate students in the South African context. The sample represented mostly Black African adult learners pursuing further studies in the economic and management sciences field of occupations. The sample also represented predominantly young adults in the early, exploration career-life stage (18–30 years: 64%) and older adults in the establishment career-life stage (24%). These characteristics limit the possibility of generalising the findings to other populations, age groups (e.g. adults in the maintenance/middle career-life stages) and different occupational contexts. The psychometric properties and utility of the EAS 2.0 across various career-life stages and in different occupational and geographical contexts should be explored, including its construct validity for diverse groups of populations. The predictive validity of the EAS 2.0 in terms of other career- and employability related constructs should also be further explored.

The practical application of the integrative structured story crafting interview for self-regulatory employability navigation in the counselling intervention context should also be further explored. It is further recommended that career counsellors get formal training in the EAS 2.0 and in narrative story crafting interview techniques. Formal training may extend insight in the utility of the EAS 2.0 in developing clients' self-regulatory psychological attributes for employability over the lifespan.

10 Conclusion

The present chapter positioned the concept of employability as a self-regulatory positive psychological construct that helps explain the agency-side of individuals in navigating their employability. The chapter offered the EAS 2.0 as a reliable and valid assessment framework for counselling clients on their self-regulatory employability. The integrative career counselling approach proposed in the chapter advances positive psychological theory and intervention practice for developing clients' employability attributes. Intervention sessions with the EAS 2.0 (with its supporting structured story crafting interview), may especially be beneficial to young adults in the early career-life stage. Young adults generally have limited life-work experience and by cultivating positive self-regulatory psychological attributes, they may become more enterprising in getting established in a meaningful career. A well-developed repertoire of the seven attributes outlined in this chapter, may help them sustain their employability over the lifespan, even amid the challenges of uncertain employment contexts. Supplementing EAS 2.0 assessment with the integrative structured story crafting interview process for self-regulatory employability navigation would result

in a richer and meaningful understanding about assessment results in relation to clients' agency in their employability management.

Appendix

See Table 5.

Table 5 Standardised path coefficients of CFA model 3

Path: Factor → Items			Estimate	Standard error	t
Career agility	51	I continuously seek out improved ways of doing things	0.74	0.02	40.00
	53	I regularly keep up with the latest development concerning my type of job or career	0.67	0.02	31.22
	52	I pay a great deal of attention to regularly develop myself	0.69	0.02	33.13
	56	I am generally willing to consider new ideas	0.69	0.02	33.20
	37	I enjoy discovering original solutions to tasks	0.69	0.02	33.10
	38	It is essential to regularly seek out new ways of doing things in my career	0.68	0.21	32.05
	54	I am curious about new things	0.55	0.03	20.35
	50	I spend a lot of time enhancing my knowledge and skills to benefit my career	0.73	0.02	38.56
	40	I generally set challenging targets for myself	0.71	0.02	36.14
	55	I feel changes at work or in my studies have positive implications	0.60	0.02	24.06
	36	I tend to think about how things can be done differently	0.68	0.02	32.08

(continued)

Table 5 (continued)

Path: Factor → Items			Estimate	Standard error	t
	39	I am generally willing to take risks	0.61	0.02	25.10
	27	I generally persist in a difficult task and do not easily give up	0.64	0.02	27.95
Career self-management potency	8	I know what I want to accomplish in my career	0.73	0.02	36.78
	7	I know what I must do to make a success of my career	0.74	0.02	38.19
	2	I know what skills I need to be successful in my career	0.68	0.02	31.41
	6	I have clearly formulated career goals and action plans on how to achieve them	0.78	0.02	45.57
	1	I regularly reflect on what my career aspirations are	0.63	0.02	26.21
	3	I regularly seek information regarding what a specific career involves	0.66	0.02	28.88
	9	I can easily establish and maintain interpersonal relationships	0.61	0.03	24.30
Cultural ingenuity	15	I understand the values and beliefs of other cultures	0.68	0.02	29.07
	16	I can easily initiate and maintain relationships with people from different cultures	0.71	0.02	33.50
	14	I am confident in my ability to communicate interculturally	0.74	0.02	39.95
	13	I know the customs of other cultures	0.65	0.02	26.13
	17	I enjoy working with people from different cultures	0.65	0.02	26.33
	18	I change my non-verbal behaviour in different cultural circumstances	0.57	0.03	20.99
	10	I find it easy to adapt to different social situations	0.63	0.02	25.54
Emotional acuity	32	I know what to do to be in a good mood	0.70	0.02	32.85

(continued)

Table 5 (continued)

Path: Factor → Items			Estimate	Standard error	t
	31	I can easily understand why I feel a certain way	0.61	0.03	23.66
	33	I find it easy to cheer someone up who is sad	0.64	0.02	26.43
	34	I know how to control my own emotions	0.65	0.02	26.52
	35	I find it easy to disarm an emotionally explosive situation	0.70	0.02	32.76
	29	It is easy for me to identify the emotions of others	0.64	0.02	25.76
	28	I generally know what emotions I am feeling	0.61	0.03	23.14
Proactive career resilience	25	When I attempt something I am usually successful	0.58	0.03	22.63
	46	I anticipate and take advantage of changes in my career environment	0.68	0.02	32.20
	45	I adapt easily to changes in my environment	0.70	0.02	34.31
	26	I am confident that I can successfully carry out my plans	0.67	0.02	30.55
	48	I am able to persevere even in the face of difficult career circumstances	0.72	0.02	36.95
	47	I am able to adapt to changing circumstances in my career	0.68	0.02	32.09
	44	I continuously look into new business or career opportunities	0.63	0.02	26.90
	49	I can generally identify a good opportunity before other people can	0.70	0.02	34.12
Career agency	24	When I achieve something, it is because of my own effort	0.59	0.03	20.31
	30	When I am in a good mood I am better able to persist with challenges	0.57	0.03	19.36

(continued)

Table 5 (continued)

Path: Factor → Items			Estimate	Standard error	t
	23	I am responsible for my own successes and failures in my career	0.54	0.03	16.98
	43	I like to make my own decisions	0.58	0.03	20.20
	22	I take responsibility for my decisions	0.68	0.03	27.08
Career sociability	4	I regularly ask others' opinions regarding my strengths and weaknesses	0.57	0.03	18.75
	5	I actively seek feedback from others to make progress in my career	0.65	0.03	23.42
	11	I have built a network of friendships with people that can advance my career	0.68	0.03	25.34
	12	I can use my networks to find new job opportunities	0.58	0.03	19.21
Path: Factors → Overall EAS construct			Estimate	Standard error	t
Employability attributes	13 items	Career agility	0.94	0.01	100.37
Employability attributes	7 items	Career self-management potency	0.84	0.02	53.47
Employability attributes	7 items	Cultural ingenuity	0.86	0.02	51.51
Employability attributes	7 items	Emotional acuity	0.86	0.02	54.75
Employability attributes	8 items	Proactive career resilience	0.96	0.01	103.79
Employability attributes	5 items	Career agency	0.82	0.02	36.02
Employability attributes	4 items	Career sociability	0.80	0.03	29.42

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Measuring Flourishing @ Work Interventions: The Development and Validation of the Flourishing-at-Work Scale



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Abstract This study aimed to validate a scale that could be used to measure the effectiveness of interventions aimed at enhancing flourishing at work. A cross-sectional survey design was used, with a stratified random sample of 779 employees in a company in the fast-moving consumer goods industry. The Flourishing-at-Work Scale and Job Demands-Resources Scale were administered. The results supported a 10-factor model of flourishing at work, including a general flourishing factor. The 10 factors included positive affect, low negative affect, and job satisfaction (three factors that represent dimensions of emotional well-being), autonomy, competence, relatedness, engagement, meaningful work, and learning (which can be regarded as dimensions of psychological well-being), and social well-being. The reliabilities of the overall scale and the 10 subscales were acceptable. The results showed that specific types of flourishing (or the lack thereof) explained variance in covariates (overload, negative work-home interaction, and advancement) over and above the variance already explained by the global quantity of flourishing. The Flourishing-at-Work Scale can be used as a valid and reliable tool to measure the impact of interventions developing a flourishing workforce.

Keywords Flourishing · Work · Psychological well-being · Emotional well-being · Social well-being

1 Introduction

Despite more than three decades of scholarly debate on talent shortages, talent development, and talent-organization fit, there have been little theory development and

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empirical research that offer grounded explanations of these concerns (Tatoglu, Glaisster, & Demirbag, 2016). Given that direct costs associated with replacing top talent range from 60 to 100% of such an employee's annual salary (Deery & Jago, 2015), it is not surprising that retaining such an individual is not only crucial for organizational success, but should also be a key research imperative (Saridakis & Cooper, 2016). Despite growing debate on its importance, academic empirical research that validates strategies for talent retention is limited (Ahuja, 2016), yet abundant, in the popular press. Those talent-retention strategies that have been suggested are 'evidence-based' and marketed as 'the be-all and end-all' of talent-retention interventions, yet have little or no power to theoretically explain their effectiveness (for example, Csikszentmihalyi & Robinson, 2014). Furthermore, these strategies are unidimensional and static/linear and do not incorporate environmental factors in their designs; nor do they provide evidence of their multi- or cross-cultural relevance (Conger & Fulmer, 2003). Additionally, current empirical designs fail to incorporate multidimensional systemic perspectives on working individuals' emotional, psychological, or social functions.

Multidimensional approaches to the assessment and development of people are essential positioning tools to attract, motivate, and retain talent in multicultural contexts (Rothmann, Diedericks, & Swart, 2013). If organizations invest in the development or well-being of people, these people are more likely to be engaged, feel empowered, show higher levels of job satisfaction, take responsibility for their own performance, and as a result have a stronger emotional connection with, and are less likely to leave the organization (Mendes & Stander, 2011; Stander & Rothmann, 2010). Investing in the assessment and development of people's well-being seems to be an equally important factor in retaining top talent (Seligman, 2011). Research shows that investing in the development of the emotional, psychological, and social well-being of employees at work tends to result in more innovative work behaviors, higher levels of individual work performance, lower levels of absenteeism/presenteeism, and an increased efficiency in navigating stressful working environments (Ariza-Montes, Molina-Sánchez, Ramirez-Sobrino, & Giorg, 2018). Furthermore, flourishing people (compared with languishing people) are more motivated and healthier and produce better business results (Seligman, 2011). Therefore, it is crucial to develop methods to establish and maintain a flourishing workforce.

Assessing and developing a flourishing workforce require a multidimensional (Kozlowski, Chao, Grand, Braun, & Kuljanin, 2016), holistic approach (Rothmann, 2013). Viewing talent retention as a complex phenomenon that results from interaction among various subsystems and approaching it holistically will be more effective than one-dimensional models targeting specific elements of talent retention. Crafting a talent retention initiative should focus on aiding individuals to flourish at work. Although flourishing is a crystallized concept in positive psychological literature, it has enjoyed limited attention in work-related contexts (Ariza-Montes et al., 2018; Rothmann, 2013).

Ariza-Montes et al. (2018) indicate that, despite the concept's popularity in clinical contexts, academic studies on how flourishing at work can be assessed and developed are rather scarce. They (2018) argue that, until 2014, "only a single study addressing

the subject [could be] identified within the literature” (p. 331). At the time of this publication, a PsychINFO search revealed that, from 2014, 282 academic articles had been published that employed flourishing at work as a search term; yet no mutually acceptable idea, model, paradigm, or approach around flourishing at work exists. From the literature, it is apparent that only one attempt to develop a framework for flourishing at work exists (cf. Rothmann, 2013).

Rothmann (2013) proposed a model for *flourishing at work* that highlights the work-related components/antecedents underpinning the emotional, psychological, and social well-being of employees at work. From this perspective, flourishing at work is defined as working within the optimal range of employees functioning in an organizational context as feeling good (emotional well-being), functioning well (psychological well-being), and fitting in (social well-being) (Rothmann, 2013). Flourishing at work is presented as a multidimensional approach to understanding and developing optimal functioning of employees in work-related contexts. This approach, as opposed to popular unidimensional organizational development models such as the Dual Process Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) or social learning models (Rosenthal & Zimmerman, 2014), aims to understand behavior and develop employees in their contextual environments. However, even though Rothmann’s (2013) approach is the only work-related model for flourishing, it has not been empirically tested. Furthermore, a validated high-quality measurement instrument to assess such a model is non-existent. If Rothmann’s (2013) framework can be validly and reliably measured, it could aid researchers and practitioners to effectively develop, implement, and validate positive psychological interventions aimed at developing a flourishing workforce.

As such, the purpose of this study was to validate a short psychometric instrument that could be used to measure the effectiveness of interventions aimed at enhancing flourishing at work. Specifically, the focus was on (a) providing a theoretical overview of the fundamental principles underpinning Rothmann’s framework (2013) and (b) developing and empirically investigating the construct and discriminant validity and internal consistency (reliability) of the Flourishing-at-Work Scale (FAWS).

2 Literature Review

2.1 Flourishing

Flourishing refers to high levels of well-being, while languishing refers to the absence of well-being (Diener et al., 2010; Huppert & So, 2013; Keyes, 2002; Seligman, 2011). Over the last few decades, various approaches to flourishing have been developed. These approaches are, for example, subjective well-being (Diener, 1984; Diener, Suh, Lucas, & Smith, 1999), psychological well-being (Ryff, 1989), and social well-being (Keyes, 1998). The term ‘subjective well-being’ has mainly been used to refer to satisfaction with life (and life domains) and affective experiences

(Diener et al., 1999). However, Keyes and Annas (2009) point out that the concept of subjective well-being includes more than satisfaction and affective experiences (referred to as emotional well-being). It also includes subjective experiences of psychological and social well-being.

According to Seligman (2011), flourishing consists of five dimensions, namely, positive emotions, engagement, meaning, accomplishment, and positive relations. Huppert and So (2013) developed a framework of flourishing based on three dimensions: positive characteristics, functioning, and appraisal. Diener, Tay, and Oishi (2013) tested a model of flourishing that included competence, self-acceptance, meaning, relatedness, optimism, giving, and engagement. Noble and McGrath (2015) suggested PROSPER as a new framework for positive education. Keyes (2007) defined flourishing as a pattern of positive feelings and positive functioning in life. Languishing, which is opposite to flourishing, refers to the absence of mental health.

The frameworks mentioned above provide valuable insight into flourishing in life. Notably, there is also substantial overlap among the dimensions included in the different frameworks. Criticism against multidimensional well-being models includes that the selection of dimensions is arbitrary and not based on theoretical considerations (Taris & Schaufeli, 2015). However, the Mental Health Continuum (MHC; Keyes, 2005, 2007) represents a parsimonious model of mental health that integrates most of the dimensions of flourishing.

2.2 Flourishing in Work Contexts

Based on the approach of Keyes (2002), flourishing in the work context can be defined as a pattern of positive feelings and functioning (Noble & McGrath, 2015; Rothmann, 2013). Researchers (for example, Porath, Spreitzer, Gibson, & Garnett, 2012; Rothmann, 2013; Seligman, 2011) have suggested several criteria for a model of well-being at work: (a) A multidimensional model of well-being is necessary. Such a model should contain indicators of feeling and functioning well (Keyes and Annas, 2009). For example, employee satisfaction indicates whether an individual feels well, while work engagement indicates whether the individual functions well. (b) Dimensions of well-being should be considered in relation to the specific context, that is, the work setting. The advantage of studying well-being as a work-specific rather than a context-free phenomenon is that its relationships with work-related antecedents and outcomes are likely to be more explicit because they refer to the same life domain (Taris and Schaufeli, 2015). (c) Well-being dimensions should have a state-like rather than a dispositional nature. (d) Each element of flourishing should contribute to well-being in work contexts. (e) Each facet of the flourishing model should be defined and measured independently of the others. (f) Many people should pursue the facet for its sake.

Based on a literature review and an empirical study, and in line with the need for a multidimensional model that could be used as a framework for developing positive psychological flourishing-at-work interventions, Rothmann (2013) concluded that

well-being in work contexts consists of 10 dimensions that represent aspects of emotional, psychological, and social well-being.

2.3 Emotional Well-Being

Emotional well-being is a dimension of subjective well-being that consists of perceptions of satisfaction with life (or its domains), and positive and negative affect balance. Satisfaction entails a long-term assessment of one's life or its domains (for example, one's job). Positive and negative affect involve reflections of pleasant and unpleasant affect in one's immediate experience (Keyes, 2013). The concept of emotional well-being is similar to what Rojas and Veenhoven (2013) describe as overall happiness (that is, the degree to which individuals judge their entire lives as favorable). Overall happiness consists of an affective component (which reflects the extent to which needs are satisfied) and a cognitive component (which reflects the degree to which individuals perceive their wants to be met). In the work context, emotional well-being (or overall happiness) could refer to three dimensions, namely, job satisfaction, positive affect, and negative affect (Rothmann, 2013).

The concept of satisfaction is based on cognitive theories, which hold that happiness is a product of human thinking (Rojas & Veenhoven, 2013). People make appraisals of how well work meets standards. They might compare the reality of what they experience at work with standards of a good work life. Comparisons can be made based on lifetime (that is, doing better or worse than before), social grounds (that is, doing better or worse than other people), or fairness and equity (Rojas & Veenhoven, 2013). The standards used for comparisons are regarded as socially constructed and affected by culture. These standards are presumed to be variable rather than fixed. Consequently, people might judge their work lives by what they think can realistically be. Therefore, job satisfaction relates to employees' perception of all aspects of their current jobs in terms of what they think can be. The realization of wants determines job satisfaction (Cropanzano & Wright, 2001).

According to affect theory (Schwarz & Strack, 1991), feeling well is a reflection of how people feel generally. In this regard, the evaluation of work life is regulated by the most salient affective experiences (Rojas & Veenhoven, 2013). Positive affect refers to pleasant responses to work events, such as joy, gratitude, serenity, hope, pride, and amusement. Negative affect refers to unpleasant emotions because of negative responses to events, such as anger, sadness, anxiety, boredom, frustration, and guilt. Positive and negative affect are linked to need gratification. Feeling well results from the sum of pleasures and pains weighted by duration and intensity. However, Diener, Pavot, and Sandvik (1991) showed that the frequency rather than the intensity of positive versus negative affect had a strong effect on the feeling well dimension. Individuals compute an affect balance, probably automatically, and this balance is reflected in mood. According to Rojas and Veenhoven (2013), mood, contrary to emotion, is an affective reaction that is not linked to specific objects. Affective experiences seem to be linked to the gratification of human needs, which is

rooted in human nature. Positive and negative affect have behavioral consequences: negative mood might urge caution, while positive mood might broaden the thought-action repertoire (Fredrickson, 2006).

2.4 Psychological Well-Being

Psychological well-being in work contexts includes autonomy, competence, relatedness, meaningful work, engagement (consisting of absorption, vitality, and dedication), and learning (Rothmann, 2013).

Psychological well-being of individuals at work can be explained by self-determination theory (SDT; Deci & Ryan, 1985). According to SDT (Deci & Ryan, 2011), the extent of satisfaction of three psychological needs of people, namely, autonomy, competence, and relatedness, allows observers to understand whether people will be subjectively well (Deci & Ryan, 2008). According to the models of Ryff and Singer (1998) and Keyes (2005), these psychological needs cover three elements of psychological well-being (that is, autonomy, environmental mastery, and positive relations). Autonomy is the desire to feel in control, to (subjectively) experience freedom and choice when carrying out an activity, to take ownership of individual behavior, and to be able to exercise decisiveness (Deci & Ryan, 2000, 2008). The need for competence refers to individuals' inherent desire to feel effective in interacting with the environment (Deci & Ryan, 2000). The need for relatedness refers to the innate need of individuals to feel connected to others, to love and care for others, and to be loved and cared for (Deci & Ryan, 2011).

Learning is an essential facet of psychological well-being in work contexts because it focuses on individual development and continuous improvement (Porath et al., 2012). Learning refers to "the sense that one is acquiring and can apply knowledge and skills to one's work" (Spreitzer, Lam, & Fritz, 2010, p. 132). Learning is a significant component of well-being, focusing on individual development and improvement (Spreitzer, Porath, & Gibson, 2012). Ongoing personal growth and development of knowledge are critical for positive individual functioning (Ryff & Singer, 2006). Individuals with a high learning orientation believe that they can shape their skills. Furthermore, they focus on developing the ability to achieve future tasks (Porath et al., 2012). People with a learning orientation are likely to pursue self-development because they are interested in increasing competence and are motivated by growth and development needs.

Various models of flourishing highlight the benefits of meaning and purpose to human functioning (Huppert & So, 2013; Kahn & Heaphy, 2014; May, Gilson, & Harter, 2004; Ryff & Singer, 1998; Seligman, 2011; Steger, Kashdan, Sullivan, & Lorentz, 2008). Meaning relates to the significance of individuals' experiences, while purpose might be sought under circumstances of adversity (Steger, 2009). According to Steger, Dik, and Duffy (2012), the positive valence of meaningful work has "a eudaimonic (growth- and purpose-oriented) rather than hedonic focus" (p. 2). Steger et al. (2012) conceptualized meaningful work in terms of three dimensions: (a) *psy-*

chological meaningfulness in work, that is, the subjective experience that one's work is significant and matters; (b) *meaning-making through work*, that is, the idea that work is a vital source of meaning in one's life and assists *people in understanding their selves and the world around them*; and (c) *greater-good motivations*, that is, the desire to make a difference and to have a broader impact on others.

The contribution of engagement to flourishing is evident in the models of Seligman (2011), Diener et al. (2013), and Huppert and So (2013). Kahn (1990) also refers to engagement as the connection of employees to their work roles. Rothbard and Patil (2012, p. 59) define engagement as "... an employee's psychological presence in a role". The engagement construct has its roots in the concept of authenticity, which results in individuals investing personal energies in role behaviors and expressing their selves in roles. Work engagement is comprised of three dimensions, namely, a physical component (being physically involved in a task and showing energy), a cognitive component (being alert at work and experiencing absorption and involvement), and an emotional component (being connected to the job/others while working and showing dedication and commitment) (Kahn & Heaphy, 2014; Schaufeli, 2014).

2.5 Social Well-Being

Social well-being is a component of flourishing in Keyes's (2005) model. Keyes (1998, p. 122) explains that social well-being refers to "the appraisal of one's circumstance and functioning in society". According to Keyes (2013), social well-being is a public experience that is focused on social tasks that individuals encounter in social structures in which they find themselves (for example, organizations). The rationale for including social well-being in a model of flourishing is that individuals are embedded in social structures in organizations and communities and that they face various social tasks and challenges (Keyes, 1998, pp. 122–123). Social well-being is regarded as significant because of the association between mental health and connectedness. According to Son and Wilson (2012), the concept of social well-being is inspired by Durkheim's (1951) findings that mental illnesses can be attributed to isolation (egoism) and anomie (lack of regulation). Anomie is harmful because it makes people believe that they do not matter, that others do not notice them, that they are unimportant to others, and that they cannot rely on others to provide support (Piliavin & Siegl, 2007).

Keyes's (2005) conceptualization of social well-being in societies includes five elements: social integration, social acceptance, social contribution, social actualization, and social coherence. *Social integration* entails the evaluation of the quality of one's relation to the community. Specifically, social integration refers to the extent to which people feel they have something in common with others as well as the degree to which they feel they belong to their community. The roots of social integration are in the conceptions of social cohesion (Durkheim, 1951), and cultural estrangement and social isolation (Seeman, 1991). According to Durkheim (1951),

social coordination and well-being reflect individuals' connections to others through norms and indicate their fondness for society. Seeman (1991) regards estrangement as the rejection of society, while social isolation refers to the breakdown of personal relationships that provide meaning and support. *Social acceptance* entails that individuals trust others, think that others are capable of kindness, and believe that people can be hard-working. Such individuals are socially accepting, hold favorable views of human nature, and feel comfortable with others. *Social contribution* refers to the evaluation of one's social value. It includes the belief that one is a vital member of a community, with something of value to contribute to the community. *Social actualization* pertains to a belief in the evolution of society and the sense that society has potential, which is being realized through institutions and its citizens. People who are socially well envision that they, as well as others, are beneficiaries of social growth. *Social coherence* refers to the perception of the quality, organization, and operation of the social world. Socially coherent individuals are well and care about the kind of world in which they find themselves and, in addition, feel that they can understand what is happening around them.

Social well-being of employees is also applicable to organizations as communities (Rothmann, 2013). Based on Keyes's (2005) model, the five dimensions can be defined as follows: (a) *social integration* indicates whether employees experience a sense of relatedness, comfort, and support from the organization; (b) *social acceptance* refers to a positive attitude to, and acceptance of, diversity in people in the organization; (c) *social contribution* relates to whether individuals believe that their daily activities add value to the organization and others; (d) social actualization (growth) indicates whether individuals believe in the potential of other individuals, groups, and organizations; and (e) *social coherence* indicates whether employees find their organizations and social lives meaningful and comprehensible.

2.6 Flourishing, Job Demands, and Resources

The *Job Demands-Resources Model* (JD-R; Demerouti et al., 2001) assumes that every occupation may have demands and resources associated with well-being. On the one hand, job demands should be inversely related to flourishing (Bakker & Sanz-Vergel, 2013; Demerouti, Bakker, & Gevers, 2015). On the other hand, job resources should be positively related to flourishing (Bakker and Demerouti, 2018; Rothmann, 2013). Theoretical substantiation of the importance of resources and well-being of individuals comes from the Conservation of Resources Theory (Hobfoll, 1998). Overload and negative work-home interaction are regarded as job demands, while advancement is considered a job resource.

If individuals experience too much cognitive, emotional, or physical overload, they will feel unable to cope (Schaufeli & Bakker, 2004). Therefore, overload is negatively related to flourishing (Basson, 2015). With increased competitiveness and globalization of organizations, there is a growing tendency to expect employees to manage greater workloads and spend more time at work. Stress from the work domain

might spill over to the home domain. Negative work-home interaction is defined as a time-based and/or strain-based form of conflict characterized by the interference of the demands of a work role with the demands of home roles, for example, home demands, family time, and family events (Geurts et al., 2005; Rothmann & Baumann, 2014). Negative work-home interaction is significant for an individual's psychological well-being (Clarke, Koch, & Hill, 2004). It is inversely related to experiences of job satisfaction (Hyman, Baldry, Scholarios, & Bunzel, 2003), psychological meaningfulness at work (Rothmann and Baumann, 2014), work engagement (Shankar & Jyotsna Bhatnagar, 2010), and relatedness satisfaction.

If individuals experience advancement (a resource consisting of training, career opportunities, and promotion opportunities), they will be more inclined to flourish (Diedericks, 2012). Advancement refers to training and development opportunities, as well as possibilities of future career progression (Rothmann, Mostert, & Strydom, 2006). Through training and development, employees are given the opportunity to expand their physical, emotional, and cognitive skills, contributing to a sense of personal achievement and increased self-worth (Satterfield and Hughes, 2007). Individuals engaging in training and development activities are also more likely to report gains in self-efficacy and sense of autonomy (Hammond & Feinstein, 2006). A career represents the collective effects of a person's experiences throughout his or her working life. Having sufficient opportunity to advance in one's career, either through training and development or career progression, is critical to employee flourishing. De Villiers (2009) found that employees' perceptions of a lack of opportunity for further career advancement were a major source of emotional distress, particularly in today's uncertain and unstable workplace.

3 The Present Study

Confirmatory factor analysis (CFA) has become the omnipresent test of factor structures in psychological measurement. Through its integration in latent variable modeling, CFA has provided ways to test the fit of data with a theoretical model, to investigate measurement and structural invariance of models for different groups in a sample, and to study the relations among constructs corrected for measurement errors (Morin, Marsh, & Nagengast, 2013). In CFA, measures that fail to meet the recommended goodness-of-fit guidelines are regarded as worthless. However, few psychological measures consistently comply with these benchmarks (Howard, Gagné, Morin, & Forest, 2018). According to Howard et al. (2018), methodologists question the Independent Cluster Model (ICM) constraints inherent in CFA, in which cross-loadings among items and non-target factors are assumed to be exactly zero. Recently, researchers have recognized that the ICM constraints are often not appropriate, given the nature of the data (Marsh, Morin, Parker, & Kaur, 2014). Morin, Arens, & Marsh (2016) point out that indicators are rarely, if ever, perfectly and uniquely related to a single construct and will display some degree of association with non-target factors assessing conceptually related constructs. Exploratory factor analysis

(EFA), an alternative technique to assess the structure of a multidimensional instrument, allows for the estimation of cross-loadings, but has been criticized for being data-driven and unsuited for confirmatory studies. A recently developed technique, namely, exploratory structural equation modeling (ESEM, Asparouhov & Muthén, 2009), allows for the combination of CFA, EFA, and latent variable modeling in a single model.

In this study, we compared different measurement models for the FAWS using CFA, bifactor-CFA (B-CFA), and bifactor-ESEM (B-ESEM). Bifactor analysis provided a flexible way to examine whether the presence of a single flourishing factor underlying the answers to FAWS items also defined specific scales of the FAWS (Morin et al., 2016). The global factor provided a global estimate of the overall quantity of flourishing characterizing individual employees, whereas the specific factors reflected the quality of employees' flourishing profiles. Because of the inherent orthogonality of the bifactor models, employees' overall amount of flourishing would be reflected in the general factor, while the specific features of employees' flourishing left unexplained by the global amount of flourishing would be reflected in the specific factors. The ESEM component of this framework allowed us to incorporate the presence of a second layer of continuity in flourishing ratings expressed through the estimation of cross-loadings among flourishing factors (Morin et al., 2016).

Based on current theory suggesting the existence of an overarching continuum of flourishing (Keyes, 2013) and research suggesting the importance of controlling for cross-loadings among flourishing dimensions, we expected the B-ESEM model to provide the most adequate representation of employees' answers to the FAWS. Following Morin et al.'s (2016) recommendations regarding the application of the B-ESEM framework for the identification of the sources of construct-relevant multidimensionality present in complex psychometric measures, as well as basic principles of model testing (for example, Bollen, 1989), we contrasted this a priori B-ESEM representation with more parsimonious alternative models, including either none (CFA) or only one (ESEM, B-CFA) of these likely sources of multidimensionality.

To establish the criterion-related validity of global (G) and specific (S) flourishing, we also tested the extent to which they were related to covariates occupying a core position in flourishing. In order to more precisely assess the criterion-related validity of the flourishing factors, we systematically contrasted models in which only the G-factor (that is, reflecting the overall *quantity* of flourishing) was allowed to predict the covariates with models in which the S-factors (that is, reflecting the specific *quality* of flourishing) were also allowed to predict the covariates. These comparisons tested the added value (in terms of percentage of explained variance in the covariates) afforded by the simultaneous consideration of both flourishing quantity and quality.

This study aimed to develop and evaluate the psychometric properties (construct and discriminant validity, and reliability) of a multidimensional scale that measured flourishing in a work context, thereby providing an efficient means through which to evaluate the effectiveness of interventions centered on the construct.

4 Research Methods

4.1 Participants

A total of 779 employees of a company in the fast-moving consumable goods industry in South Africa participated in the study. Table 1 shows the characteristics of the participants. A total of 59.6% of the sample were males, while 40.4% were females. The ages of the participants varied between 22 years and 59 years, with 44% younger than 35 years. Of the participants, 77.5% had been in the company for longer than three years. Most of the participants were not given people management responsibilities (58.8%). The distribution of participants across job function was sales and distribution (30%), manufacturing (36.5%), and center of functioning (33.5%).

Table 1 Characteristics of participants (N = 779)

Item	Category	Frequency	Percentage
Gender	Male	464	59.6
	Female	315	40.4
Age	Below 25	33	4.3
	25–34	310	39.8
	35–44	255	32.7
	45–54	134	17.2
	Over 55	47	6.0
Year in company	Less than 1 year	52	6.7
	Between 1.01 and 3 years	123	15.8
	Between 3.01 and 5 years	132	16.9
	Between 5.01 and 10 years	198	25.4
	Between 10.01 and 15 years	99	12.7
	Between 15.01 and 20 years	80	10.3
	More than 20 years	9	12.2
Job level	Staff member	145	18.6
	Skilled worker	265	34.0
	Supervisor	105	13.5
	Manager	200	25.7
	Executive	57	7.3
	Senior executive	7	0.9

4.2 *Measuring Instruments*

The *Flourishing-at-Work Scale* (FAWS) was developed based on the literature review and an analysis of previously developed measures of happiness and flourishing. The FAWS consists of 33 items measuring 10 dimensions of the emotional, psychological, and social aspects of flourishing in the work context. Subject experts were asked to classify the items according to the dimensions of flourishing. A total of 33 items were correctly classified and were used to assess the validity of the measure. Flourishing consists of the following 10 dimensions: positive affect (three items, for example, “During the past month at work, how often did you feel happy?”); negative affect (three items, for example, “During the past month at work, how often did you feel upset?”); job satisfaction (three items, for example, “During the past month at work, how often did you experience satisfaction with your job?”); autonomy satisfaction (three items, for example, “During the past month at work, how often did you feel that you can do your job the way you think it could best be done?”); competence satisfaction (three items, for example, “During the past month at work, how often did you feel you really master your tasks at your job?”); relatedness satisfaction (three items, for example, “During the past month at work, how often did you feel really connected with other people at your job?”); learning (three items, for example, “During the past month at work, how often did you find yourself learning?”); meaningful work (four items, for example, “During the past month at work, how often did you feel that your work makes a difference to the world?”); engagement (three items, for example, “During the past month at work, how often did you feel that you get so into your job that you lose track of time?”), and social well-being (five items, for example, “During the past month at work, how often did you feel that your organization is becoming a better place for people like you?”). Responses were measured on a six-point scale ranging from 1 (*never*) to 6 (*every day*).

Three subscales of the *Job-Demand-Resources Scale* (JD-RS; Rothmann et al., 2006) were administered to confirm the construct validity of the FAWS. Work overload was measured by three items (for example, “Do you have too much work to do?”). Career advancement was measured by three items (for example, “Does your company give you opportunities to attend training courses aligned with your job?”). Negative work-home interaction was measured by three items (for example, “Does your job keep you from spending as much time with your family as you would like?”). Each item required the respondent to answer on a scale ranging from 1 (*never*) to 5 (*always*). The internal consistencies ranged from 0.76 to 0.92, indicating acceptable reliability.

4.3 *Estimation and Specification*

The data were analyzed using Mplus 8.2 (Muthén & Muthén, 1998–2018). The maximum likelihood estimation with robust standard errors (MLR) was used. Model fit

was assessed using commonly used goodness-of-fit indices and information criteria: the chi-square statistic (the test of absolute fit of the model), standardized root mean residual (SRMR), root mean square error of approximation (RMSEA), Tucker-Lewis index (TLI), and comparative fit index (CFI) (West, Taylor, & Wu, 2012). For TLI and CFI values to be acceptable, scores higher than 0.90 are required, while values larger than 0.95 indicate excellent fit. Both RMSEA and SRMR values lower than 0.08 indicate a close fit between the model and the data.

To compare models, changes in RMSEA, CFI, and TLI (greater than 0.01) were studied (Chen, 2007). However, ESEM includes more parameters than ICM-CFA. Because of the free estimation of cross-loadings, indicators that include a correction for parsimony (that is, TLI, the Akaike information criterion, and the Bayes information criterion) were used (Marsh et al., 2014; Morin et al., 2013, 2016). The Akaike information criterion (AIC), Bayes information criterion (BIC), and ABIC (sample-size adjusted BIC) were used in addition to other fit indices. The AIC, which is a comparative measure of fit, is applicable when one estimates different models. The BIC indicates model parsimony (Kline, 2010), and the ABIC is used to reduce the penalty for larger sample sizes (Wang & Wang, 2012). The lowest AIC, BIC, and ABIC values indicate the best-fitting model. Point estimate reliability (ρ) was computed for each scale (Raykov, 2009).

According to Morin et al. (2016), a close inspection of parameter estimates and theoretical conformity is necessary to differentiate among models, as goodness-of-fit statistics might not sufficiently discriminate among models. Firstly, comparison of models could start with the CFA and ESEM solutions (Morin et al., 2016). As long as the factors remain well-defined by strong target factor loadings, ESEM should be retained when the results show a discrepant pattern of factor correlations. Otherwise, the CFA model should be preferred based on parsimony. Secondly, the retained model is contrasted with its bifactor counterpart (B-CFA or B-ESEM). A bifactor representation is favored by the observation of a G-factor that is well-defined by strong factor loadings, as well as the observation of reduced cross-loadings in B-ESEM compared to ESEM.

CFA models were specified according to ICM assumptions, with items allowed to load onto their a priori flourishing factor, and cross-loadings constrained to be zero. Model 1 consisted of 10 latent variables: positive affect (measured by three items), negative affect (measured by three items), job satisfaction (measured by three items), autonomy satisfaction (measured by three items), relatedness satisfaction (measured by three items), competence satisfaction (measured by three items), learning (measured by three items), meaningful work (measured by four items), work engagement (measured by three items), and social well-being (measured by five items). All the latent variables in Model 1 were allowed to correlate. Model 2 consisted of all variables in an ESEM model. ESEM was specified using target rotation: item loadings on their a priori flourishing factors were freely estimated, and all cross-loadings were also freely estimated, but 'targeted' to be as close to zero as possible. Model 3 was a B-CFA model specified as orthogonal, with each item specified as loading on the flourishing G-factor as well as on its a priori S-factors corresponding to the 10 dimensions. Finally, Model 4, a B-ESEM, was estimated using bifactor target rotation: all

items were used to define the flourishing G-factor, while the 10 S-factors were defined using the same pattern of target and non-target loadings and cross-loadings as in the ESEM solution.

Covariates were then integrated in the final measurement model, allowing estimation of relations between the flourishing factors and the covariates (Morin et al., 2016). In a first model, only the G-factor was allowed to covary using the ESEM-within-CFA method, which allows for the estimation of relations between only a subset of B-ESEM factors (that is, only the G-factor) and covariates. In a second model (relying on a regular B-ESEM representation), both the G-factor and the S-factors were allowed to predict scores on all covariates (overload, negative work-home interaction, and advancement). These two models were contrasted based on goodness-of-fit information, but also based on standardized regression coefficients and model-based estimates of the percentage of explained variance (R^2) in the covariates afforded by the model.

4.4 Research Procedure

The management of the participating organization gave permission for the study to be conducted. Ethical clearance for this study was obtained from the Ethics Committee at the university from which the research was undertaken (Ethics number: NWU-00095-14-a8). The researchers administered the questionnaire (in English) electronically in the environment where the participants were working. The questionnaire was accompanied by a cover letter explaining the purpose of the study and emphasizing the confidentiality of participation in the research. Participation in the survey was anonymous and voluntary. Respondents gave consent that the researchers could use the information obtained from the survey for research purposes only. The completed raw data was converted to an SPSS dataset and prepared for analysis with Mplus 8.2.

5 Results

5.1 Descriptive Statistics

Figure 2 shows the mean scores of the total sample on the 10 dimensions of flourishing over the last month. The scale was as follows: 1 = never; 2 = once or twice; 3 = once a week; 4 = about two or three times per week; 5 = almost every day; and 6 = every day.

Figure 1 shows that the lowest scores were obtained on job satisfaction and meaningful work. The highest scores were obtained on competence and work engagement.

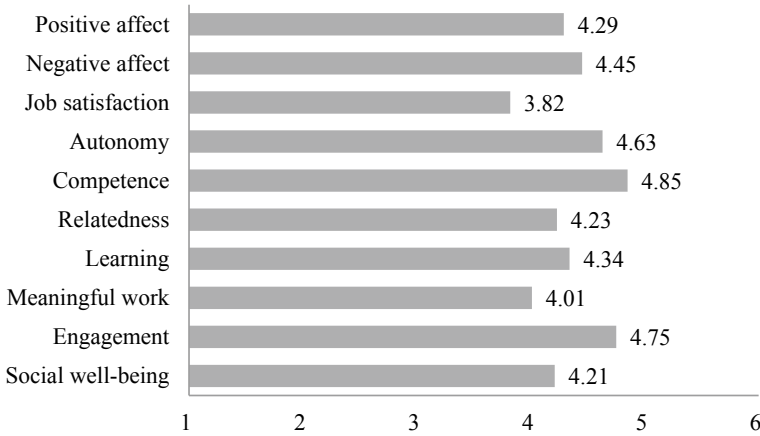


Fig. 1 Mean scores on 10 dimensions of flourishing. *Note* The scale that measured negative affect was reverse-scored

5.2 Testing the Measurement Model

The following four models were tested: Model 1—an ICM-CFA model; Model 2—an ESEM model; Model 3—a B-CFA model; and Model 4—a B-ESEM model. Table 2 presents the goodness-of-fit indices and information criteria associated with each of the estimated models.

The ICM-CFA and the B-CFA showed marginal fit. In contrast, the ESEM solution provided an excellent representation of the data according to all indices and provided a better representation than the ICM-CFA and the bifactor-CFA solutions based on lower scores on the information criteria and substantial improvement on the goodness-of-fit indices: ESEM versus ICM-CFA— $\Delta CFI = +0.09$; $\Delta TLI = +0.08$; $\Delta RMSEA = -0.03$ and ESEM versus bifactor-CFA— $\Delta CFI = +0.05$; $\Delta TLI = +0.08$; $\Delta RMSEA = -0.02$. Furthermore, the 90% confidence intervals for the RMSEA showed no overlap between the CFA and ESEM solutions, indicating a high degree of differentiation between competing models.

Given that the data did not fit the ICM-CFA model to even a minimally acceptable standard, we first compared the B-CFA and ESEM, followed by the B-ESEM solution (see Morin et al., 2016). The goodness-of-fit assessment showed the superiority of the ESEM and B-ESEM solutions when compared to the ICM-CFA and B-CFA solutions. However, cross-loadings were to be expected in the solution, which would result in higher correlations in the ICM-CFA model compared to the ESEM models, on the one hand. On the other, the B-CFA model is orthogonal. According to Morin et al. (2016), cross-loadings are expressed through inflated factor loadings on the G-factor.

Table 3 shows the parameter estimates for ICM-CFA and ESEM (factor loadings, cross-loadings, and uniquenesses), and Table 5 shows the correlations. Inspecting

Table 2 Goodness-of-fit statistics and information criteria

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA	SRMR	AIC	BIC	ABIC
ICM-CFA	1520.65*	450	0.90	0.92	0.06*	[0.052, 0.058]	72,680.29	73,351.04	72,893.77
ESEM	483.40*	243	0.99	0.97	0.03	[0.027, 0.037]	71,650.12	73,285.08	72,170.49
B-CFA	1506.20*	462	0.91	0.92	0.05*	[0.051, 0.057]	72,625.80	73,240.66	72,821.49
B-ESEM	395.17*	220	0.99	0.97	0.03*	[0.027, 0.037]	71,608.36	73,350.46	72,162.82

χ^2 —chi-square statistic; *df*—degrees of freedom; TLI—Tucker-Lewis Index; CFI—Comparative Fit Index; RMSEA—Root Mean Square Error of Approximation; SRMR—Standardized Root Mean Square Residual; AIC—Akaike Information Criterion; BIC—Bayes Information Criterion; ABIC—Sample-size Adjusted BIC

**p* < 0.01

the loadings and cross-loadings, the overall size of the factor loadings of the items on their target factors remained similar in the ICM-CFA ($\lambda = 0.42\text{--}0.97$; Mean = 0.77) and ESEM ($\lambda = 0.17\text{--}0.99$; Mean = 0.63) solutions, showing well-defined factors corresponding to a priori expectations. In the ESEM solution, target factor loadings were systematically higher than cross-loadings, which were very small in most cases ($|\lambda| = 0\text{--}0.30$; Mean = 0.03). One cross-loading was higher than 0.30: Item 2 of autonomy satisfaction (“... you can be yourself at your job”) cross-loaded on relatedness satisfaction at 0.30. A final observation from the results of the ESEM was that two items had factor loadings less than 0.30: firstly, Item 2 of work engagement (“... get excited when you perform well at your job”) had a standardized loading of 0.25; and secondly, Item 1 of social well-being had a standardized loading of 0.24.

Table 4 shows the reliabilities and correlations of the factors in the ICM-CFA and ESEM solutions, with scale reliabilities ranging from 0.65 to 0.95, which indicate acceptable internal consistencies of all the scales (Raykov, 2009).

In line with our expectations, factor correlations proved to be slightly lower in ESEM ($r = 0.17\text{--}0.63$, Mean = 0.40) than in ICM-CFA ($r = 0.19\text{--}0.86$, Mean = 0.67). However, the overall pattern of correlations was not changed by the decision to rely on an ICM-CFA or ESEM solution.

Table 5 shows that the B-ESEM solution had a marginal fit. The typical (that is, orthogonal) representations of bifactor models attempt to synthesize the covariance (that is, correlations) among factors through the estimation of a single G-factor. Therefore, an advantage of the B-ESEM model (compared to the ESEM model), in addition to its close fit to the data, was that it provided a single directly interpretable flourishing G-factor. Item 3 of work engagement had a standardized beta coefficient higher than one.

Results from the B-ESEM solution (see Table 5) revealed a relatively well-defined G-factor representing flourishing at work. The loadings on the G-factor (Mean = 0.63) were moderate to high and positive for the items associated with the emotional well-being S-factors ($\lambda = 0.26\text{--}0.45$ for positive affect, 0.31–0.72 for negative affect—reverse-scored, and 0.38–0.40 for job satisfaction), moderate to high for the psychological well-being S-factors ($\lambda = 0.19\text{--}0.62$ for autonomy, 0.48–0.74 for competence, 0.27–0.51 for relatedness, 0.38–0.60 for learning, 0.39–0.59 for meaning and purpose, and 0.15–0.82 for work engagement), and low to high for the items associated with social well-being ($\lambda = -0.17\text{--}0.47$). Further examination of this solution revealed reasonably low cross-loadings, remaining lower than target loadings ($|\lambda| < -0.33\text{--}0.25$; Mean = 0.00), and reasonably well-defined S-factors ($\lambda = -0.17\text{--}0.82$; Mean = 0.43). Very few loadings tended to be smaller in the B-ESEM solution than in the ESEM solution, suggesting that part of the ESEM cross-loadings reflected the presence of the unmodeled G-factor.

Based on the evidence presented thus far, in terms of both exact fit to the data and, most importantly, theoretical conformity of the parameter estimates, the final retained model was the B-ESEM model. In practical terms, this model also provided a way to simultaneously take all flourishing factors (flourishing *quality*) and a global estimate of the *quantity* of flourishing into account in a single predictive model.

Table 3 Standardized factor loadings (λ) and uniqueness (δ) for ICM-FA and ESEM

		ICM-CFA										ESEM solution													
	λ	δ	F1 (λ)	F2 (λ)	F3 (λ)	F4 (λ)	F5 (λ)	F6 (λ)	F7 (λ)	F8 (λ)	F9 (λ)	F10 (λ)	δ												
<i>Positive affect</i>																									
Item 1	0.80	0.36	0.53	0.21	0.15	0.02	0.04	0.02	-0.07	-0.08	0.01	0.16	0.34												
Item 2	0.64	0.59	0.47	-0.12	0.11	0.02	-0.10	0.12	0.10	0.06	0.15	0.02	0.52												
Item 3	0.69	0.52	0.55	0.04	0.08	-0.02	0.12	0.02	0.14	0.02	-0.05	-0.02	0.48												
<i>Negative affect</i>																									
Item 1	0.61	0.63	-0.01	0.53	-0.01	0.06	-0.03	-0.04	-0.08	0.09	-0.08	0.16	0.64												
Item 2	0.74	0.45	0.13	0.86	-0.13	0.02	0.00	0.00	0.00	0.01	0.00	-0.09	0.29												
Item 3	0.47	0.78	-0.20	0.36	0.21	0.04	-0.12	-0.03	0.22	-0.02	0.24	-0.06	0.63												
<i>Job satisfaction</i>																									
Item 1	0.88	0.24	0.17	0.05	0.54	0.08	0.05	0.01	0.05	0.09	0.05	0.06	0.25												
Item 2	0.91	0.17	0.26	0.03	0.57	0.07	0.04	0.04	0.05	0.04	0.07	0.04	0.16												
Item 3	0.74	0.46	-0.05	-0.01	0.57	0.14	0.05	-0.04	0.03	0.20	0.02	0.07	0.39												
<i>Autonomy</i>																									
Item 1	0.79	0.44	0.06	0.08	0.23	0.51	-0.02	0.05	0.06	-0.07	-0.01	0.10	0.39												
Item 2	0.75	0.37	-0.02	0.17	0.15	0.17	0.24	0.30	0.01	-0.02	-0.03	0.06	0.44												
Item 3	0.79	0.38	-0.03	0.03	-0.01	0.86	0.05	0.06	0.02	-0.01	0.00	0.06	0.10												
<i>Competence</i>																									
Item 1	0.75	0.44	0.09	0.01	0.05	-0.02	0.62	0.11	0.06	-0.09	0.04	0.03	0.43												
Item 2	0.82	0.33	-0.06	-0.06	0.03	0.01	0.90	-0.02	0.01	0.03	0.03	0.00	0.20												
Item 3	0.74	0.45	0.05	0.00	-0.02	0.13	0.55	0.03	-0.04	0.11	0.10	-0.02	0.48												
<i>Relatedness</i>																									

(continued)

Table 4 Reliability coefficients and correlations of the scales

Variable	ρ	1	2	3	4	5	6	7	8	9	10
1. Positive affect	0.76	–	0.63*	0.86*	0.76*	0.51*	0.68*	0.59*	0.54*	0.65*	0.73*
2. Negative affect	0.65	0.41*	–	0.58*	0.60*	0.19*	0.43*	0.42*	0.34*	0.44*	0.52*
3. Job satisfaction	0.87	0.47*	0.45*	–	0.75*	0.52*	0.66*	0.66*	0.71*	0.78*	0.78*
4. Autonomy	0.76	0.44*	0.35*	0.28*	–	0.61*	0.82*	0.58*	0.53*	0.63*	0.77*
5. Competence	0.83	0.35*	0.15*	0.24*	0.34*	–	0.64*	0.33*	0.52*	0.65*	0.55*
6. Relatedness	0.79	0.45*	0.33*	0.37*	0.52*	0.49*	–	0.57*	0.58*	0.66*	0.76*
7. Learning	0.95	0.41*	0.32*	0.50*	0.39*	0.21*	0.44*	–	0.66*	0.72*	0.70*
8. Meaningful work	0.93	0.32*	0.21*	0.48*	0.31*	0.40*	0.39*	0.58*	–	0.76*	0.74*
9. Work engagement	0.85	0.24*	0.17*	0.36*	0.32*	0.39*	0.35*	0.55*	0.49*	–	0.78*
10. Social well-being	0.89	0.51*	0.45*	0.54*	0.52*	0.41*	0.59*	0.63*	0.62*	0.46*	–

Note ICM-CFA correlations are shown above the diagonal; ESEM correlations are shown below the diagonal

* $p < 0.01$

Table 5 Standardized factor loadings (λ) and uniqueness (δ) for B-CFA and B-ESEM

	B-CFA		B-ESEM												
	G-factor λ	S-factor λ	δ	G-factor λ	F1 (λ)	F2 (λ)	F3 (λ)	F4 (λ)	F5 (λ)	F6 (λ)	F7 (λ)	F8 (λ)	F9 (λ)	F10 (λ)	δ
<i>Positive affect</i>															
Item 1	0.63	0.47	0.39	0.62	0.45	0.20	0.13	0.05	0.01	0.02	-0.08	-0.13	-0.07	0.08	0.32
Item 2	0.61	0.21	0.58	0.62	0.26	-0.11	0.05	-0.05	-0.10	0.02	0.03	-0.05	0.02	-0.11	0.51
Item 3	0.58	0.46	0.45	0.56	0.43	0.04	0.09	0.00	0.08	0.01	0.05	-0.04	-0.08	-0.03	0.47
<i>Negative affect</i>															
Item 1	0.35	0.40	0.72	0.35	0.03	0.45	0.01	0.06	-0.07	-0.04	-0.08	-0.01	-0.10	0.09	0.64
Item 2	0.38	0.87	0.10	0.37	0.16	0.72	-0.01	0.07	-0.05	0.01	-0.03	-0.10	-0.06	-0.01	0.30
Item 3	0.39	0.21	0.80	0.38	-0.16	0.31	0.17	-0.01	-0.16	-0.07	0.17	-0.02	0.16	-0.04	0.62
<i>Job satisfaction</i>															
Item 1	0.78	0.42	0.22	0.76	0.13	0.06	0.38	0.02	-0.01	-0.04	0.01	0.04	-0.01	0.01	0.25
Item 2	0.81	0.42	0.18	0.80	0.18	0.05	0.40	-0.01	-0.03	-0.03	0.01	-0.02	-0.01	-0.03	0.16
Item 3	0.67	0.30	0.46	0.66	-0.04	0.01	0.38	0.03	-0.02	-0.08	0.00	0.14	0.00	0.00	0.40
<i>Autonomy</i>															
Item 1	0.65	0.48	0.35	0.63	0.04	0.14	0.11	0.41	0.22	0.25	-0.03	-0.04	-0.03	0.07	0.37
Item 2	0.66	0.25	0.51	0.65	0.07	0.09	0.12	0.19	-0.05	0.03	0.01	-0.11	-0.04	0.03	0.42
Item 3	0.63	0.56	0.28	0.67	-0.04	0.02	-0.10	0.62	0.04	0.07	-0.04	-0.12	-0.04	-0.03	0.14
<i>Competence</i>															
Item 1	0.53	0.49	0.47	0.53	0.05	-0.02	0.01	-0.02	0.51	0.09	-0.06	-0.08	0.03	-0.04	0.43
Item 2	0.45	0.80	0.17	0.46	-0.03	-0.10	-0.02	0.01	0.74	0.04	-0.10	0.06	0.07	-0.03	0.20

(continued)

Table 5 (continued)

	B-CFA		B-ESEM										δ	F10 (λ)	δ
	G-factor λ	S-factor λ	G-factor λ	F1 (λ)	F2 (λ)	F3 (λ)	F4 (λ)	F5 (λ)	F6 (λ)	F7 (λ)	F8 (λ)	F9 (λ)			
Item 3	0.50	0.49	0.50	0.02	-0.05	-0.04	0.10	0.48	0.05	-0.10	0.07	0.08	-0.05	0.48	
Relatedness															
Item 1	0.64	0.39	0.64	-0.03	-0.01	-0.01	-0.03	0.14	0.51	-0.01	-0.03	-0.01	0.00	0.31	
Item 2	0.65	0.58	0.65	0.05	-0.03	-0.06	0.13	0.09	0.41	-0.03	-0.05	-0.02	0.11	0.37	
Item 3	0.52	0.31	0.54	0.05	-0.06	-0.11	0.24	-0.05	0.27	-0.02	-0.04	-0.05	-0.11	0.55	
Learning															
Item 1	0.69	0.61	0.70	0.02	-0.03	-0.01	-0.03	-0.10	-0.03	0.60	0.01	0.03	0.02	0.13	
Item 2	0.71	0.69	0.71	-0.01	0.00	-0.01	0.00	-0.09	-0.04	0.66	0.06	0.05	0.01	0.03	
Item 3	0.76	0.37	0.74	-0.03	0.03	0.06	-0.02	-0.08	0.07	0.38	0.12	0.05	0.02	0.28	
Meaningful work															
Item 1	0.75	0.34	0.73	-0.06	-0.01	0.13	-0.04	0.03	-0.01	0.06	0.35	0.04	0.00	0.32	
Item 2	0.69	0.61	0.70	-0.05	-0.03	0.01	-0.07	0.01	-0.04	0.05	0.59	0.00	-0.02	0.16	
Item 3	0.64	0.59	0.65	-0.04	-0.05	-0.04	-0.08	0.04	-0.03	0.03	0.57	0.06	0.03	0.23	
Item 4	0.71	0.57	0.70	-0.03	-0.05	0.06	-0.04	-0.01	0.00	0.05	0.59	0.01	0.03	0.16	
Work engagement															
Item 1	0.50	0.17	0.49	-0.02	-0.02	-0.03	0.02	0.15	-0.07	0.06	0.03	0.40	0.01	0.56	
Item 2	0.73	0.06	0.72	0.03	0.03	0.08	-0.09	0.03	-0.03	0.05	0.12	0.15	0.00	0.43	

(continued)

Table 5 (continued)

	B-CFA		B-ESEM												
	G-factor λ	S-factor λ	δ	G-factor λ	F1 (λ)	F2 (λ)	F3 (λ)	F4 (λ)	F5 (λ)	F6 (λ)	F7 (λ)	F8 (λ)	F9 (λ)	F10 (λ)	δ
Item 3	0.52	2.03	-3.39	0.53	-0.07	-0.05	-0.01	-0.04	0.05	0.01	0.04	0.03	0.82	-0.05	0.03
<i>Social well-being</i>															
Item 1	0.63	0.08	0.60	0.72	-0.12	-0.14	-0.33	-0.02	0.09	-0.16	-0.07	0.00	0.00	-0.17	0.28
Item 2	0.80	0.27	0.29	0.83	-0.10	0.02	-0.06	-0.05	-0.05	0.05	-0.06	0.01	-0.02	0.20	0.26
Item 3	0.76	0.40	0.26	0.78	-0.02	-0.01	0.04	-0.08	-0.06	-0.02	0.00	0.03	-0.06	0.37	0.24
Item 4	0.66	0.36	0.44	0.67	0.03	-0.01	-0.11	0.11	-0.07	0.06	0.05	-0.04	0.04	0.35	0.39
Item 5	0.69	0.51	0.27	0.71	-0.01	0.01	-0.06	0.02	0.01	-0.08	0.02	0.05	-0.05	0.47	0.26

5.3 Predictive Models

From the final retained B-ESEM solution, SEM analyses were used to assess the criterion-related validity of the flourishing scales. These models were used to compare the added value of the specific flourishing facets (representing the specific quality of employees' flourishing profiles) over and above the G-factor (representing the overall quantity of flourishing) in terms of percentages of explained variance by the various covariates (overload, negative work-home interaction, and advancement) considered. This comparison was achieved by contrasting a model in which the covariates were allowed to predict only the G-factor with a model in which the covariates were allowed to predict both the G- and S-factors.

Table 6 shows that when the flourishing G-factor was considered as a predictor of overload, advancement, and negative work-home interference, higher scores on the G-factor were associated with higher scores on advancement ($R^2 = 23\%$), and lower scores on work overload ($R^2 = 2\%$) and negative work-home interference ($R^2 = 2\%$).

These relations were maintained in the next model, where the S-factors were also allowed to relate to the covariates. This more complete model resulted in visible increases in explained variance in the various covariates: (a) from 23 to 37% for advancement; (b) from 2 to 24% for work overload; and (c) from 2 to 22% for negative work-home interaction. These increases in percentages of explained variance were

Table 6 Relations with covariates: standardized coefficients

Variable	Covariates		
	Overload	Advancement	Work-life interference
G-factor only	-0.12 (< 0.01)	0.48 (< 0.01)	-0.15 (< 0.01)
R^2	0.02 (> 0.05)	0.23 (< 0.01)	0.02 (> 0.05)
<i>Specific factors and G-factor</i>			
Positive affect	-0.16 (0.02)	0.00 (0.98)	-0.19 (0.01)
Negative affect	-0.17 (0.00)	0.06 (0.18)	-0.20 (0.00)
Job satisfaction	-0.12 (0.14)	0.10 (0.11)	-0.16 (0.12)
Autonomy	0.00 (1.00)	0.13 (0.01)	0.03 (0.65)
Competence	-0.22 (0.00)	-0.23 (0.00)	-0.12 (0.01)
Relatedness	-0.04 (0.58)	-0.02 (0.80)	-0.09 (0.31)
Learning	0.05 (0.25)	0.18 (0.00)	0.04 (0.39)
Meaningful work	0.03 (0.52)	-0.07 (0.08)	0.03 (0.57)
Work engagement	0.26 (0.00)	0.04 (0.36)	0.19 (0.00)
Social well-being	-0.19 (0.00)	0.19 (0.00)	-0.21 (0.00)
G-factor only	-0.11 (0.00)	0.46 (0.00)	-0.14 (0.00)
R^2	0.24 (< 0.01)	0.37 (< 0.01)	0.22 (< 0.01)

Note *p*-values are in brackets; G-factor: global factor representing the global quantity of flourishing

also accompanied by increases in goodness of fit (complete model: CFI = 0.99; TLI = 0.97; RMSEA = 0.03; AIC = 75,689.99; BIC = 77,627.72; ABIC = 76,306.72; restricted model where only the G-factor related to the covariates: CFI = 0.98; TLI = 0.97; RMSEA = 0.03; AIC = 75,772.78; BIC = 77,235.39; ABIC = 76,238.29).

Interestingly, relations observed between the S-factors and the covariates appeared to be partly in line with our expectations. Firstly, work overload was negatively associated with positive affect, competence satisfaction, and social well-being, and positively associated with negative affect. However, we also noted the positive relation between work overload and work engagement. Secondly, advancement was positively associated with autonomy satisfaction, learning, and social well-being. The negative relation between advancement and competence was unexpected. In the third place, as expected, negative work-home interaction was negatively associated with positive affect, competence, and social well-being, and positively associated with negative affect. The positive association between negative work-home interaction and work engagement was unexpected.

6 Discussion

The study aimed to validate a scale that could be used to measure the effectiveness of interventions aimed at enhancing flourishing at work. Specifically, the aim was to develop and evaluate the psychometric properties (construct and discriminant validity and reliability) of a multidimensional scale that measured flourishing at work. Support for a multidimensional model of flourishing was reported by Keyes (2005, 2007). This study contributes to the relatively thin, but emergent, literature on the assessment of flourishing at work. The results showed that flourishing at work (or, on the negative end of the spectrum, languishing) could be measured as a general factor and 10 specific factors. In the current study, the G-factor loadings were largely in line with the presence of an underlying factor of flourishing versus languishing at work. The pattern of factor loadings on the S-factors also suggested that each subscale provided relevant, unique information. This was aligned with the flourishing-at-work model conceptualized by Rothmann (2013). The results supported the construct and discriminant validity of the FAWS. The associations between well-being, on the one hand, and perceived workload, negative work-home interaction, and advancement, on the other, provided further preliminary support for the validity of the FAWS. The FAWS provided a useful assessment of self-reported flourishing in work contexts.

The results revealed that the data fit the ESEM representation better than the ICM-CFA model. This suggested that even the small cross-loadings present in the current data were enough to cause significant model misspecification. These cross-loadings were not surprising, given the conceptually fine distinction among dimensions of flourishing at work. The estimated factor correlations were slightly lower in the ESEM solution than in the ICM-CFA solution. The final retained model was a B-ESEM model. The discrepancy in correlation estimates could have significant impli-

cations if these latent factors were used in prediction. Indeed, relying on ICM-CFA would introduce unnecessary multicollinearity (Asparouhov & Muthén, 2009).

The data did not fit the bifactor-CFA model as well as the other models. This was most likely the result of suppressing cross-loadings, which had been shown in past research to be problematic (Morin et al., 2016). Given the orthogonality of this solution, these cross-loadings could only be expressed through an inflation of the loadings on the G-factor. Thus, the relatively poor fit of the B-CFA solution and the superior fit of the B-ESEM solution supported the idea that these cross-loadings were needed to reflect the presence of conceptually related constructs that could not entirely be captured by an overarching global factor. Indeed, the B-ESEM displayed excellent fit and revealed a pattern of factor loadings on the G-factor that supported the presence of a continuum structure.

Research by Keyes (2005) and Keyes and Annas (2009) showed the value of a mental health continuum for promoting mental health in society. These authors found that the absence of flourishing was associated with impairment and burden to the self and society and that only a small proportion of mentally healthy people *were* flourishing. Studies in various countries have shown that the mental health continuum, *which* classifies behavior from flourishing to languishing, is justifiable. Keyes's (2005) conceptualization of flourishing makes it possible to integrate various well-being theories, including positive emotions (Fredrickson, 2006), psychological well-being (Ryff & Singer, 1998), satisfaction with life, and domain satisfaction (Diener et al., 1999), but also includes social well-being.

The results confirmed that a multidimensional perspective of the flourishing of people in a work context could include 10 dimensions of feeling good (emotional well-being) and functioning well (psychological and social well-being). The B-ESEM model of subjective well-being was superior to the CFA-ICM, CFA-bifactor, and ESEM models. Therefore, it was possible to integrate hedonic (Diener, 1984), eudaimonic (Ryff, 1989), and social well-being (Keyes, 1998) in a unified structure. The B-ESEM solution provided a directly interpretable latent estimate of overall flourishing and of allowing explicit tests of whether the S-factors (reflecting the residual variance attributable to different elements of flourishing over and above the global flourishing factor) contributed to the prediction of meaningful outcomes. Therefore, this method should be considered in future research in which the objective is to assess relations between flourishing and various predictors, covariates, and outcomes.

Three items of the FAWS did not perform well in the analyses. These items which are supposed to measure autonomy, engagement and social well-being should be further refined (and/or rewritten). More research is needed to ensure that the items which measure specific factors (as identified by the B-ESEM) could be improved.

Through the incorporation of covariates in the final retained B-ESEM model, the current study has uniquely been able to test the criterion-related validity of the G- and S-factors. Our results clearly showed the added value of considering these specific flourishing elements over and above the global quantity of flourishing. Specifically, across all covariates, the results showed that the complete model consistently resulted

in a higher proportion of explained variance in the covariates when compared to the model in which only the G-factor was allowed to associate with covariates.

Concerning emotional well-being, individuals who flourish at work are satisfied with their jobs and experience positive affect and low negative affect at work. With regard to the psychological dimension, flourishing employees experience autonomy, competence, and relatedness satisfaction (self-determination), as well as learning, meaningful work, and engagement. As far as social well-being is concerned, they experience social acceptance, social growth, social contribution, social coherence, and social integration. The measurement of both feeling and functioning well facets is necessary to assess good mental health. Studying mental health at work cannot focus only on symptoms of feeling well or functioning well; it should focus on both dimensions. Mental health constitutes both positive feeling and positive functioning.

The findings provide support for the construct validity of the FAWS. The multidimensional nature of flourishing makes it possible to study the interplay among the various dimensions. Not considering the multidimensional nature of well-being might result in behavior that is detrimental to the long-term well-being of individuals (Porath et al., 2012).

Higher levels of flourishing were positively associated with advancement (a job resource) and negatively associated with work overload and negative work-home interaction (both job demands). The JD-R Model (Demerouti et al., 2001) and Conservation of Resources Theory (Hobfoll, 1998) predict that job resources are critical factors associated with the well-being of individuals. These findings support the validity of the FAWS.

As such, it is clear that the FAWS shows promise not only to measure flourishing in work-related contexts; it could also act as a vital evaluation metric for measuring the effectiveness of positive psychological flourishing-at-work interventions. The instrument provides a diagnostic framework for the core tenets of flourishing at work and could provide a structural model through which to determine the most critical causal routes contributing to such in organizational contexts. Rothmann's (2013) theoretical framework and the associative instrument (Appendix 1) are essential components on which flourishing-at-work interventions should be built and evaluated. (Examples of types of self-administered intentional positive psychological intervention strategies can be found in Appendix 2.)

7 Limitations and Recommendations

The results of this study are promising. On the positive side, the results strongly support the benefits of using a multidimensional measure of well-being (Porath et al., 2012). However, as with any new measure, various limitations do exist. Firstly, the study was done in a single organization in the South African context, and therefore, the results cannot be generalized to other work contexts. Future research should aim to replicate the current study to samples including more job types, work conditions, and cultures. Secondly, the study did not evaluate the psychometric properties of the

measure of work flourishing among different language, age, and gender groups. In the third place, given the cross-sectional design of this study, it was not possible to study the stability of flourishing over time. In the fourth place, research is critical in refining the construct and investigating the reliability and validity of the FAWS over time. Fifth, readers should be cautioned with the use of a bi-factor model when applying the FAWS to different populations. Bi-factor models are known to over-inflate model fit statistics through artificially increasing model complexity and thus increasing model fit (Reise, Kim, Mansolf, & Widaman, 2016). It is suggested that future research carefully control for possible over-inflation of fit, through systematically comparing all factorial permutations of the FAWS. Lastly, only one item was used to measure each facet of social well-being in this study. Future studies should include at least three items per facet (Kline, 2010).

This study showed that it is possible to broaden the perspective on the conceptualization and measurement of well-being in work contexts to include its emotional, psychological, and social well-being dimensions simultaneously. Subjective judgments of different dimensions provide valuable information about the feeling and functioning of people in work contexts. Therefore, it is recommended that work and organizational psychologists broaden their focus to measure and promote flourishing in work contexts. Investigating well-being from a holistic perspective is crucial. It is probably not very informative if the focus is exclusively on aspects of employee well-being (for example, burnout and work engagement). This study showed that emotional, psychological, and social dimensions of well-being could be assessed validly and reliably. Human resource practitioners and industrial psychologists in practice should consider the findings of this study in measuring and promoting the flourishing of people in organizations.

Although the findings are encouraging and an essential step in understanding the nature of flourishing at work, more research is needed to investigate the psychometric properties of the FAWS in other work industries. Studies regarding the convergent, discriminant, and criterion-related validity of the FAWS are necessary. Specifically, research is needed to link flourishing to its causes and effects in a nomological network. Although the model and instrument provide a framework on which to build positive psychological interventions, the specific work-related antecedents, mediators, and moderators need to be identified in order to ensure that interventions target the right problems.

Supplementary Material

The Mplus syntax files employed for this study will be made available on the first author's website (www.ianrothmann.com).

Appendix 1: Dimensions of the Flourishing-at-Work Scale

Component	Work	Description
Emotional well-being	Satisfaction with job	Liking or disliking the job
	Positive affect	Feeling happy, regularly cheerful, serene, and good-spirited
	Negative affect	Feeling depressed, upset, and bored at work
Psychological well-being	Autonomy satisfaction	Satisfaction of the desire to (subjectively) experience freedom and choice when carrying out an activity
	Competence satisfaction	Satisfaction of the desire to feel effective in interacting with the environment
	Relatedness satisfaction	Satisfaction of individuals' needs to feel connected to others, to love and care for others, and to be loved and cared for
	Engagement	Individuals expressing themselves physically, cognitively, and emotionally during role performance: Absorption: being alert at work and experiencing absorption and involvement Vitality: being physically involved in a task and showing vigor Dedication: being connected to the job/others while working and showing dedication and commitment
	Learning	Perception that one is acquiring and can apply knowledge and skills to one's work
	Meaning	Experiencing work as meaningful, understanding how work contributes to the meaning of life, and sensing what makes a job worthwhile
	Purpose	Feeling that the work the individual does makes a difference to the world, that his/her work serves a greater purpose, and that it helps him/her make sense of the world

(continued)

(continued)

Component	Work	Description
Social well-being	Social acceptance	Being positive towards, and accepting of, diversity in people in the organization
	Social actualization (growth)	Believing in the potential of others (individuals, groups, and organizations)
	Social contribution	Regarding own daily activities as adding value to the organization and others
	Social coherence	Finding the organization and social life meaningful and comprehensible
	Social integration	Experiencing a sense of relatedness, comfort, and support from the organization

Appendix 2: Tabulated Examples of Evidence-Based Positive Psychological Flourishing-at-Work Intervention Strategies

Van Zyl and Stander (2013) collated and presented an array of evidence-based positive psychological intervention strategies structured around emotional (Table 7), psychological (Table 8), and social (Table 9) well-being components of flourishing at work. Based on their work, positive psychological intervention strategies, which could be employed to develop the various components of flourishing at work, are presented.

Table 7 Enhancing emotional well-being at work

Technique
Express gratitude to employees
Learn to forgive mistakes
Avoid overthinking and social comparison at work
Be mindful, and savor positive experiences at work
Cultivate optimism in times of difficulty
Build relationships to create development feedback loops
Learn from successes and mishaps
Express the positives in written form

Table 8 Developing psychological well-being at work

Technique
Set goals, and commit to goals
Deal constructively with distress, and develop coping strategies
Ask for help
Compile a personal growth or personal development plan
Seek out projects, jobs, careers, and/or tasks that are in line with one’s signature strengths
Seek out mentorship, and talk regularly about one’s own development
Develop strategies to minimize distractions and improve concentration
Engage in physical exercise, and take regular breaks
Draw from personal insight, as well as career and job knowledge, to recraft work
List all the ways in which one has a positive impact on people (in life and at work)

Table 9 Facilitating social well-being at work

Technique
Have meaningful and mindful conversations
Use active listening during conversations
Practice kindness and generosity at work
Utilize active constructive responding
Show gratitude and appreciation to followers and peers
Be authentic, and facilitate mutual self-disclosure
Share stories of personal successes
Share and celebrate others’ victories
Build a network of expertise and personal development
Act as a mentor for others/implement peer coaching

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Developing Positive Psychological Interventions: Maximizing Efficacy for Use in Eastern Cultures



Weiting Ng and Wei Shyan Lim

Abstract This chapter explores the feasibility of using positive psychological interventions (PPIs) in a multicultural context, and proposes ways to optimize the effectiveness of PPIs in Eastern cultures. Research in the current literature examining the use of PPIs is predominantly based on European American samples. Of the few studies involving Asians or comparing cultural differences, preliminary evidence suggests that culture influences the effectiveness of PPIs. Specifically, using PPIs improves European Americans' sense of well-being more than it does for Asians' well-being. Furthermore, not all positive interventions are equally effective for Asians—some positive activities may benefit Asians less than European Americans. This chapter examines whether PPIs may be differentially effective across cultures, and explores how a framework that maximizes the efficacy of PPIs in Eastern cultures can be developed. First, the chapter proposes that the definition of PPIs should be expanded to include not only volitional activities that are rooted in an individualistic perspective, but also obligatory activities that are rooted in a collectivistic perspective. An inclusive definition of PPIs enables understanding of multiple avenues of attaining optimal functioning. The chapter then proposes recommendations for optimizing the effectiveness of PPIs for use in Eastern cultures. Strategies could include having multiple positive activities, aimed to prevent hedonic adaptation, and also to enable participants to uncover the activities that they are more adept at using. Developing new activities that may not be considered inherently “positive”, but that may facilitate optimal functioning (e.g., seeking meaning, or building resilience) in a broader sense, will also be one aim of this framework. Such activities may be more relevant to certain populations, for e.g., Asians, who tend to conceptualize well-being differently from Westerners.

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1 Introduction

The field of positive psychology involves studying conditions that promote optimal human functioning, and positive psychological interventions (PPIs) refer to activities that seek to build people's positive psychological resources and enhance their well-being. To date however, PPIs have been guided more by the Western conceptualization of well-being, whether from a hedonic or eudaimonic perspective. Does it matter whether one seeks to boost hedonic well-being, or eudaimonic well-being, or do PPIs improve all types of well-being?

The hedonistic approach to happiness emphasizes pleasure and enjoyment of life, especially the pursuit of happiness. Research has examined hedonic well-being from a subjective well-being (SWB) perspective. SWB comprises multiple facets (Diener, 1984) and is usually assessed by the cognitive and affective components—that is, life satisfaction, and positive and negative affect respectively (Diener & Lucas, 1999). These SWB facets vary on the affective, temporal, and cognitive dimensions (Okun, Stock, & Covey, 1982). Life satisfaction refers to a cognitive, global evaluation of one's life (based on one's own subjective criteria). Positive (or negative) affect refers to the frequency and intensity of experiencing pleasant (or unpleasant) emotions. Although the study of SWB has its basis in hedonic happiness, the concept of SWB takes a broader view of happiness, beyond the narrow definition of hedonism, and it also recognizes other eudaimonic concepts such as autonomy, meaning, and psychological well-being.

According to the eudaimonic perspective, happiness derives from the development and expression of our inner potentials, and from striving for self-realization. Waterman et al. (2010) defined eudaimonic well-being as involving self-discovery, developing one's best potentials and a sense of purpose and meaning in life, investing significant effort in pursuit of excellence, engaging intensely in activities, and enjoying activities that are personally expressive. Other theories rooted in the eudaimonic perspective include Ryff's psychological well-being (PWB) model and self-determination theory. Ryff's PWB model comprises six dimensions (Ryff, 1989; Ryff & Keyes, 1995)—self-acceptance (positive attitude toward oneself), personal growth (feelings of continued development and effectiveness), purpose in life (possessing goals that give direction and meaning to life), environmental mastery (feeling competent), autonomy (having self-direction), and positive relations with others (having warm and trusting relationships). Self-determination theory posits that happiness results from fulfillment of three basic psychological needs; relatedness, autonomy, and competence (Ryan & Deci, 2000, 2001). Relatedness refers to the desire to love and care, and be connected to others. Autonomy refers to the extent to which people can self-direct their behavior and experiences, and have control over their lives. And finally, competence refers to the desire to control and master the environment and

outcome, and being effective. Ryan and Deci (2000) advocated that fulfilling these three basic psychological needs is essential for facilitating optimal functioning and well-being. Despite nuanced variations in the dimensions examined by the different theories, the underlying main themes emphasized by them are similar. That is, eudaimonic well-being emphasizes positive functioning, personal strengths, and mental health, and extends beyond the experience of pleasure. In summary, the eudaimonic approach emphasizes working towards self-actualization, achieving our goals, and leading a meaningful life.

What are some strategies that people can use to boost their well-being? The strategies adopted depends on whether people are seeking to enhance their hedonic or eudaimonic well-being. From a hedonic perspective, people can aim to improve their SWB by increasing positive affect and life satisfaction, or reducing negative affect. For instance, if faced with stressful events, one can use coping or emotion regulation strategies to reduce negative affect, stress, or depressive symptoms. Alternatively, on a daily basis, one can also engage in positive activities (e.g., expressing gratitude) to increase positive affect or life satisfaction. However, from a eudaimonic perspective, enhancing well-being would involve engaging in meaningful activities, finding purpose and meaning in life, and fulfilling one's psychological needs, for example, having autonomy (Deci & Ryan, 2000; Ryan & Deci, 2001; Ryff & Keyes, 1995; Waterman, 2008; Waterman et al., 2010).

2 Positive Psychological Interventions

PPIs are conventionally defined as volitional activities targeted at promoting positive feelings, behaviors or cognitions (Sin & Lyubomirsky, 2009), that aim to help people attain optimal functioning, as opposed to interventions that seek to reduce symptoms or disorders. These positive activities can include emotion-focused regulatory strategies (e.g., savoring, positive reappraisal), or behavioral and cognitive activities such as counting one's blessings, performing acts of kindness, or using one's signature strengths. For instance, savoring, a regulatory strategy that involves focusing attention on positive events to sustain or amplify positive emotions, has been found to successfully enhance positive affect (Bryant, Chadwick, & Kluwe, 2011; Jose, Lim, & Bryant, 2012). Similarly, listing things that one is grateful or thankful for (i.e., expressing gratitude or counting blessings), or counting acts of kindness also improves well-being (Emmons & McCullough, 2003; Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006). Hence, engaging in various positive activities has been shown to successfully boost well-being.

Although PPIs seem more inclined toward boosting hedonic well-being, as the improved outcomes typically involve increased life satisfaction and positive affect, and decreased negative affect, they can also improve eudaimonic well-being. One such example is the positive activity of performing acts of kindness. Performing kind acts or helping others not only enhances hedonic well-being by engendering positive emotions, it also bolsters eudaimonic well-being through the following avenues:

Engaging in prosocial behavior can provide a sense of meaning and purpose to one's life. Helping or kind behavior also satisfies one's basic, innate psychological needs for relatedness, autonomy, and competence (Dunn, Aknin, & Norton, 2014). We feel socially connected with others when we engage in prosocial behavior, thereby satisfying our need for relatedness. We feel that we have autonomy when we can choose whether to help and who to help. Finally, seeing that our generous actions have made a difference to others can contribute toward fulfilling our need for competence. When we help to improve the circumstances of others, or if they are grateful for our help, we would feel effective and competent about being able to change a person's outcomes. Another example is the activity of visualizing best possible selves. Engaging in this activity reduces negative affect and increases positive affect, hence enhancing hedonic well-being (Sheldon & Lyubomirsky, 2006). Additionally, it is guided by the focus of the eudaimonic approach on developing one's best potentials and achieving personal growth. These examples illustrate that PPIs exert beneficial effects on both hedonic and eudaimonic well-being.

2.1 Effects of Positive Psychological Interventions

Research from numerous studies has demonstrated the effectiveness of PPIs such as performing acts of kindness, in enhancing well-being (e.g., Lyubomirsky, Sheldon, & Schkade, 2005; Sheldon & Lyubomirsky, 2006). There is substantial evidence indicating that the positive activity of performing acts of kindness can boost SWB (Curry et al., 2018; Rowland & Curry, 2018; Lyubomirsky et al., 2005). Nelson, Layous, Cole, and Lyubomirsky (2016) found that prosocial behavior (i.e., performing acts of kindness for others or the world) led to greater increases in psychological flourishing than self-focused behavior (i.e., performing kind acts for oneself) or neutral behavior (keeping track of one's activities). These improvements in flourishing were partly due to increases in positive emotions. A meta-analytic review of the effects of practicing kindness found a small-to-medium effect ($d = 0.28$) (Curry et al., 2018). Other forms of altruistic or prosocial behaviors are also effective in enhancing well-being. Participants who were experimentally assigned to spend money on others reported feeling greater happiness than those who were assigned to spend money on themselves (Aknin et al., 2013; Dunn, Aknin, & Norton, 2008). Similarly, those who donated more had higher life satisfaction (Ugur, 2018). The beneficial effects of prosocial behavior on well-being appear innate and universal as even toddlers showed greater happiness when they gave treats away (Aknin, Hamlin, & Dunn, 2012). Analyses based on the Gallup World Poll data revealed that prosocial spending is associated with greater happiness across the world, regardless of the country's affluence level (Aknin et al., 2013). This further underpins the universality of prosocial behavior's benefits. As prosocial spending, donating, and helping behavior are conceptually equivalent to the positive intervention of performing kind acts (typically defined as acts or behaviors that benefit others or make them happy), the scope for utilizing various prosocial behaviors to improve one's well-being is very broad.

Other positive activities that have been widely studied and shown to be effective include expressing gratitude, visualizing best possible selves, or character strengths interventions. For instance, participants who listed things that they were grateful or thankful for had higher global life appraisals, increased positive affect, and reduced negative affect, compared to those who were instructed to list hassles or neutral life events (Emmons & McCullough, 2003). Positive interventions that are strengths-based, such as paying a gratitude visit, listing three good things, using signature strengths in a new way, and variants of these activities, also successfully increased happiness and alleviated depressive symptoms compared to the control activity of writing about early memories (Gander, Proyer, Ruch, & Wyss, 2013). In another experimental study, participants writing about best possible selves, by imagining that everything had turned out as best as it possibly could, showed bigger increases in positive affect compared to those who performed the control activity (writing about activities they did during the past 24 h) (Layous, Nelson, & Lyubomirsky, 2013).

Positive interventions not only effectively enhance well-being among the non-clinical populations, but have also been shown to be effective among clinically ill samples. In positive psychotherapy with a clinical sample suffering from major depression, positive interventions tapping into the themes of identifying and cultivating signature strengths and positive emotions, optimism and hope, gratitude, and forgiveness were used (Seligman, Rashid, & Parks, 2006). This positive psychotherapy performed better than the usual psychotherapy treatment (e.g., cognitive-behavioral therapy), with or without antidepressant medication, in terms of decreasing depressive symptoms and improving happiness. A meta-analysis by Sin and Lyubomirsky (2009) further confirmed that PPIs significantly enhance well-being and alleviate depressive symptoms, compared to no-treatment control groups, placebo activity, or standard treatments, yielding medium-sized effects (mean $r = 0.29$ for well-being; mean $r = 0.31$ for depression). Another meta-analysis consisting of a larger sample ($N = 6139$) than that in Sin's and Lyubomirsky's (2009) meta-analytic study corroborated these findings. PPIs effectively improved SWB, psychological well-being, and relieved depression (Bolier et al., 2013). Small effects were observed for all three outcomes (Cohen's $d_s = 0.34$ [SWB]; 0.20 [psychological well-being]; and 0.23 [depression]). In summary, experimental studies on PPIs and meta-analyses of such interventions have demonstrated their efficacy in enhancement of well-being (Bolier et al., 2013; Sin & Lyubomirsky, 2009). However, empirical evidence as to whether PPIs would be as effective on clinical samples diagnosed with major depressive disorder is still lacking; both meta-analyses focused on depressive symptoms and the studies included in the meta-analyses involved both clinical and non-clinical samples.

The beneficial effects of PPIs are not merely short-lived reactions that occur immediately post-intervention. Rather, they are sustainable over the intermediate- to long-term. The meta-analysis by Bolier et al. (2013) revealed small but still significant effect sizes for SWB and psychological well-being at three- and six-months follow-up. Seligman, Steen, Park, and Peterson (2005) found that participants maintained the gains in well-being six months after completing a one-week positive intervention exercise (e.g., counting one's blessings, using signature strengths), and still showed

increased happiness and decreased depressive symptoms. There is also evidence suggesting that the improved well-being engendered by PPIs can endure over a longer period (Cohn & Fredrickson, 2010). Completing a loving-kindness meditation intervention increased participants' positive emotions, and this beneficial effect endured even 15 months after the intervention, whether or not participants continued meditating. Nevertheless, those who continued practicing the intervention reported more positive emotions than those who stopped (Cohn & Fredrickson, 2010). These findings suggest that PPIs do not merely improve well-being post-intervention; rather their beneficial effects can endure, especially if individuals continue with the positive activities.

2.2 *Culture and Positive Psychological Interventions*

Are PPIs similarly efficacious across cultures? As various cultures promote and emphasize different values, it is likely that many of the common PPIs (e.g., visualizing best possible selves) may not exert the same effects across cultures. Most Western cultures promote an individualistic viewpoint of well-being; as such, they emphasize self-enhancement and autonomy (Heine, Lehman, Markus, & Kitayama, 1999). This explains why most PPIs focus on building positive psychological resources and strengths by boosting positive behaviors, feelings, or cognitions. Doing so increases the individual's self-esteem and thus enhances well-being.

The Eastern conceptualization of well-being however, focuses more on the social aspect of well-being. Many Eastern societies and collectivistic cultures possess a collectivistic viewpoint of well-being and place much importance on social harmony. The emphasis on interpersonal harmony stems from the belief that flourishing occurs in relation to others. That is, well-being is not defined in terms of individual happiness, but in terms of the relationships to one's family and the community. Furthermore, guided by their belief systems (e.g., Confucianism) and religions (e.g., Buddhism, Taoism, Hinduism), Eastern traditions of happiness tend to be more accepting of negativity, as they recognize that well-being encapsulates not only positive affect and experiences, but also negative affect and suffering (Joshanloo, 2014). For example, the religions of Taoism and Buddhism advocate that happiness cannot exist without unhappiness. The Buddhist viewpoint of well-being considers happiness to be compatible with suffering and sadness; what is more important is contentment (i.e., being free from desires) and to have compassion for all sentient beings (Ricard, 2011). Similarly, Taoism advocates that all things exist in polarity; hence happiness and unhappiness complement each other, and acceptance of both poles would lead to inner peace and contentment (Joshanloo, 2014).

These differences in viewpoints suggest that there may be different routes to happiness, depending on whether one adopts a Western individualistic or an Eastern collectivistic view of well-being. There are different avenues—whether one focuses on the individual's or the group's well-being, on building positive resources and strengths, or on embracing and accepting negativity in tandem with positivity—that

enable one to achieve a state of human flourishing. In the subsequent sections, we examine how culture impacts the effects of PPIs, as well as how a more inclusive approach toward well-being could be useful in expanding the repertoire of PPIs.

2.2.1 The Dialectical Nature of Well-Being

Second wave positive psychology now recognizes the dialectical nature of well-being, and advocates that positive functioning encompasses not just building and strengthening positive resources and characteristics, but potentially entails acceptance of the negative. That is, human flourishing entails developing positive outcomes from both the positive and the negative (Lomas, 2015; Lomas & Ivztan, 2016; Wong, 2011). Furthermore, recent research has shown that negative emotions do not always impair, but can also promote, well-being. People who wanted to feel more anger when it was useful (e.g., in a confrontation), or more happiness when it was useful (e.g., in a collaboration), and those who wanted to feel less of these emotions when they were not useful, experienced greater well-being—greater psychological well-being and higher life satisfaction (Tamir & Ford, 2012a). Another study found that participants preferred activities that induced anger if they needed to confront others subsequently in a negotiation (Tamir & Ford, 2012b). And indeed, those who experienced anger were more successful in negotiations involving getting others to accede to their demands. Besides these benefits, negative emotions can potentially also help to promote self-improvement in individuals from collectivistic cultures through a self-critical attitude, as people seek to improve the self in order to achieve the group's goals (Heine & Lehman, 1999). Additionally, experiencing negative emotions due to adverse life events may lead to post-traumatic growth and the building of positive resources like resilience. Such positive growth can lead people to gain an increased sense of personal strength, better coping abilities, and more clarity about what is important in life following adversities and setbacks.

Just as how there is a light side to negative emotions, there is a dark side of happiness. In their review, Gruber, Mauss, and Tamir (2011) highlighted that excessive happiness and positive emotions can result in detrimental outcomes and lead people to engage in riskier behaviors and neglect threats to their health and safety. Other studies have found that people who experienced the highest levels of happiness (defined in terms of those who scored the maximum on a life satisfaction item, or those who experienced positive emotions most of the time and rarely felt negative emotions) were less successful in achievement domains as they earned lower incomes, completed lower levels of education, and attained lower grade point averages, relative to those who were moderately happy (Oishi, Diener, & Lucas, 2007). This could be because extremely happy or positive people are too optimistic. As they feel overly contented, they may be lulled into inaction, and are hence less likely to strive for further improvements in achievement domains. Moreover, in thinking that nothing adverse could happen to them, they may engage in more risk-taking behaviors. This is especially true in people who have a propensity to act rashly while experiencing very positive moods; they engage in riskier behaviors, such as problem gambling

and problem drinking behaviors (Cyders et al., 2007). Additionally, experiencing happiness and positive emotions may be maladaptive in certain situations (Gruber et al., 2011). For instance, in a dangerous situation, it is more adaptive to experience fear rather than happiness. These different lines of research converge to underscore the two sides to the coin—happiness is not always beneficial, and negative emotions are not always detrimental; instead they may lead to both favorable and unfavorable outcomes.

2.2.2 Differential Effects of Positive Psychological Interventions Across Cultures

Some studies have found that certain activities are effective in boosting well-being in both individualistic and collectivistic cultures (Nelson et al., 2015). For instance, participants who received communication that promotes autonomous motivation for doing kind acts (i.e. performing kind acts with autonomy support) improved in well-being (as measured by a composite score of negative emotions, happiness, and life satisfaction) relative to those who practiced a control activity (with or without autonomy support). This held true for participants in the United States and South Korea (Nelson et al., 2015). Yet other studies have found that culture impacts the effectiveness of positive interventions (e.g., Boehm, Lyubomirsky, & Sheldon, 2011). Asian Americans who conveyed gratitude showed slight increases in life satisfaction, whereas those who expressed optimism (writing about their best possible life in the future) showed no improvement. Conversely, Anglo Americans benefited from both the optimism and gratitude interventions, with increased life satisfaction. Furthermore, they showed larger increases in life satisfaction relative to Asian Americans (Boehm et al., 2011). The differential effectiveness of positive activities for Anglo versus Asian Americans may be due to the Western cultural goal of boosting happiness. Hence, Anglo Americans are more adept at using various strategies to enhance their well-being. In contrast, Asian cultures do not emphasize self-enhancement or the pursuit of individual happiness. Instead, for many in Asian cultures, well-being would mean achieving social harmony and prioritizing group goals. Hence, the optimism activity (or what is also commonly termed as “visualizing best possible selves”), which focuses on the individual, may not be closely aligned with Asian cultural values, and could be why Asian Americans are less proficient at utilizing it as a means of improving their life satisfaction.

Similarly, in their study comparing United States (U.S.) and South Korean participants, Layous, Lee, Choi, and Lyubomirsky (2013) found that positive activities were not equally effective across the two cultures. Over six weeks, on a weekly basis, participants in two positive intervention conditions either wrote gratitude letters to individuals whom they were very grateful to or performed three kind acts, whereas participants in the control group described what they did in the past 24 h. Relative to the control group, U.S. participants reported increased well-being from both activities. Conversely, South Korean participants benefited significantly less from practicing gratitude than did the U.S. participants. South Korean participants,

however, showed similar increases in well-being as the U.S. participants when performing kind acts (Layous, Lee, et al., 2013). It is possible that the positive activity of expressing gratitude could produce conflicting feelings (e.g., guilt, or worry about inconveniencing others), which may diminish the happiness obtained from being grateful. In contrast, performing kind acts or engaging in prosocial behaviors may not elicit such conflicting feelings, as they are more evolutionarily adaptive. Hence, this could be a more universally beneficial positive activity. Indeed, in another cross-cultural investigation, Titova, Wagstaff, and Parks (2017) confirmed that gratitude caused non-Anglo Americans to feel more positive affect but also more negative affect at the same time. Relative to the control group (who wrote about daily activities), practicing gratitude or optimism induced greater positive affect in the three cultural groups (Anglo Americans, Asian Americans, and Indians living in India). However, the gratitude activity also caused Indians (but not Anglo or Asian Americans) to experience more negative affect (specifically, feelings of indebtedness, i.e., guilt).

The findings reinforce the idea that most PPIs are rooted in an individualistic perspective that emphasizes increasing positive characteristics (e.g., positive experiences and emotions). Hence, such activities/interventions may favor and benefit individuals from certain cultures more. However, as one of the principal goals of positive interventions is to help people attain optimal functioning, we should look beyond a “positive” individualistic definition of PPIs, and broaden how we conceptualize them. Drawing from second wave positive psychology, as well as research highlighting the functions and benefits of negative emotions (Tamir & Ford, 2012a, 2012b), we should expand the current repertoire of PPIs and include a broader array of strategies targeting not only the positive but also the negative.

3 Implications for Multicultural Contexts

3.1 *Ways to Maximize Success of Positive Psychological Interventions*

3.1.1 Internal and External Factors

Various studies have established that internal factors (such as personality, motivation and effort) and external factors (e.g., activity features, culture, and administration format) may moderate the effects of PPIs (Ng, 2015). For instance, Senf and Liao (2013) found that extraversion moderated the effectiveness of PPIs—specifically, they were more effective for those higher in extraversion. Participants who were more extraverted showed greater decreases in depressive symptoms and had greater happiness after using signature strengths or exercising gratitude than those lower in extraversion. Similarly, motivation and effort moderated the impact of PPIs (Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011). Participants who were moti-

vated to be happier (as measured by self-selection into a happiness intervention) and performed the positive activities (expressing optimism or gratitude) showed greater increases in well-being relative to non-self-selected participants who practiced the activities, or control participants, both immediately post-intervention and six months later. Likewise, participants' self-directed continued effort in the positive exercise (as measured by observer ratings) predicted further gains in well-being (Lyubomirsky et al., 2011).

External factors such as features of the positive activity (e.g., frequency or variety of activities) and the administration format can also influence the success of an intervention in enhancing well-being (Lyubomirsky & Layous, 2013). In terms of the frequency of performing the activities, it may not be possible to prescribe an ideal dosage as that would vary by person and type of activity. Some studies suggest that performing one activity too frequently may lead to hedonic adaptation (Lyubomirsky et al., 2005). Conversely, other studies have found that the frequency of using a happiness-enhancing smartphone application predicted increases in mood (Parks, Della Porta, Pierce, Zilca, & Lyubomirsky, 2012). However, in Parks et al.'s (2012) study, participants were free to choose from a variety of happiness-enhancing activities in the application. This suggests that having multiple positive activities for participants to choose from may improve the efficacy of the intervention, as participants are more likely to find activities that fit their preferences.

Besides broadening the definition of PPIs, we should also draw on research investigating ways of improving the efficacy of PPIs for individuals who are not adept at using such interventions, to develop a similar framework to maximize the effectiveness of PPIs among those in cultures not familiar with them. Proyer, Wellenzohn, Gander, and Ruch (2015) found that preference (having a liking for the intervention and its perceived benefit), voluntary continued practice beyond the assigned period, effort put into performing the intervention, and early reactivity (i.e., changes in well-being immediately post-intervention) predicted changes in happiness even 3.5 years after completion of the intervention, while continued practice and early reactivity predicted long-term changes in depression. This suggests that factors such as effort, continued practice, and preference can affect how effectively PPIs work, even over the long-term (Proyer et al., 2015). Therefore, these are factors that can be targeted as means of improving the efficacy of PPIs.

There is evidence that belief in the efficacy of the PPIs can bolster their effectiveness. Having participants count blessings or list acts of kindness daily for one week yielded beneficial effects that endured for another week after they stopped performing the activities (Ng, 2016). However, only low-, but not high-neuroticism individuals, maintained these well-being gains, and reported greater happiness than those who performed a neutral control activity. Nevertheless, it was possible to mitigate the detrimental effects that neuroticism exerted by informing participants about the happiness-enhancing benefits of the positive interventions. Participants who visualized and wrote about their best possible selves in an initial session were later informed that this strategy of thinking about one's best possible self may improve well-being over the long term, and asked to continue with it whenever necessary or possible over the next three weeks. Doing so improved the effectiveness of the

PPI for high-neuroticism individuals. Three weeks after the initial session, among high-neuroticism individuals, those in the positive intervention reported greater happiness than those in the control condition (Ng, 2016). This finding illustrates that one strategy to improve PPIs' effectiveness is to inform users that such positive activities have potential benefits on their well-being. As continued adherence to the positive interventions has been shown to engender more enduring effects (Cohn & Fredrickson, 2010; Seligman et al., 2005), knowing about their benefits may spur users to continue with those activities on their own.

Another possible technique that may boost the efficacy of PPIs is practice, especially for those less apt at using the PPIs. There is evidence that daily practice of positive reappraisal improves its effectiveness, even for high-neuroticism individuals who are typically less proficient at using reappraisal, enabling them to feel less negative towards unpleasant events (Ng & Diener, 2009, 2013). In summary, there exist various techniques or conditions such as continued practice, preference/motivation, and belief in efficacy that can enhance the effectiveness of PPIs.

As discussed in Sect. 2.2.2, culture influences the efficacy of PPIs—certain positive activities may work better for some cultures, though there are other activities that may be universally efficacious. However, while culture may attenuate the beneficial effects of PPIs on well-being, the above findings suggest that we can draw on similar strategies to aid in developing the full potential of PPIs in cultures where they may not be as effective. For instance, for individuals from cultures that are less familiar with or proficient at expressing gratitude or optimism, they can be informed that such activities are effective strategies for improving well-being. The perceived benefit or belief in the efficacy of the positive activity can motivate them to continue performing the activity, hence reaping more benefits eventually. One reason why those particular activities may not be as effective in collectivistic cultures could be because they are not congruent with the cultural goals and values, thus individuals from these cultures tend not to use them. However, making participants aware of their benefits may spur continued effort, which in turn could improve the activities' effectiveness. Alternatively, having participants from collectivistic cultures practice the activities more frequently may also help them become more proficient at these activities. Finally, researchers can provide a wider array of positive activities in happiness intervention programs for participants to choose from, so that they can find an activity that they prefer, to achieve optimal person-activity fit.

3.1.2 Expanding the Repertoire

Another way to maximize the success of PPIs is to develop positive interventions that are more suitable for individuals in collectivistic or Eastern cultures. That is, rather than rely on the traditional definition of PPIs, it is timely to expand this definition, and adopt a broader perspective. As indicated in Hendriks et al.'s (2018) review, research employing randomized controlled trials to examine the efficacy of PPIs is still predominantly based on Western, Educated, Industrialized, Rich, and Democratic (WEIRD) populations, and it makes up approximately 78% of

the studies. With positive psychology research predominantly construed through the Western lens, especially North American culture, the notion of flourishing is entrenched in individualism, and emphasizes individual strengths and virtues (Becker & Marecek, 2008). We need to go beyond WEIRD conceptions of positive functioning and flourishing, and account for a wider range of social and cultural influences.

Even in studies involving non-Western samples, similar types of positive activities, such as those involving savoring, expressing gratitude, performing kind acts, or activities promoting meaning and purpose, were used (Hendriks et al., 2018). This illustrates that there is room to explore other culturally sensitive PPIs, by culturally adapting the interventions. For instance, Islam-based PPIs that involved expressing gratitude towards Allah (Al-Seheel & Moor, 2016) were found to be more beneficial than the usual (secular-based) gratitude activity in raising the happiness of Muslim participants. Specifically, those in the Islamic-based gratitude condition were asked to associate any blessing and their gratitude to Allah, while those in the regular gratitude condition simply wrote down things that they were grateful or thankful for. Participants in the Islamic-based condition showed larger increases in happiness over time, relative to those in the secular-based gratitude condition or the control group. This suggests that adapting the usual gratitude PPI to fit it more closely with the values and beliefs of the culture where it is used, would yield greater benefits. Another study involving participants in Hong Kong shifted the focus of the PPI from the individual to their relationships with the family and community (Ho et al., 2016) and found that the interventions successfully improved family communication, family happiness, and family harmony, while there were no improvements in the control group. Drawing on recent developments in positive psychology, it is now timely to recognize that PPIs need not be narrowly defined as volitional activities that increase positive feelings, positive behaviors, or positive cognitions. Instead, we should expand the current repertoire of PPIs, include new activities (e.g., those that focus on the family or community instead of the individual), or culturally adapt the existing ones. PPIs can take various forms, so long as they broadly contribute to improving psychological functioning and enhancing human flourishing.

While it may seem counterintuitive, promoting acceptance of negative emotions may help people achieve healthy psychological functioning (Ford, Lam, John, & Mauss, 2017; Ostafin, Brooks, & Laitem, 2014). Findings from cross-sectional, experimental, and longitudinal studies converged to indicate that acceptance predicted better psychological health (Ford et al., 2017). Specifically, acceptance of emotions and thoughts was linked to greater psychological well-being and life satisfaction, and lower depressive and anxiety symptoms. Habitual acceptance also predicted less negative emotions in response to a stressor. Additionally, acceptance predicted lower daily negative emotions during daily stressors, which in turn mediated the link between acceptance and psychological health six months later (Ford et al., 2017). Similar studies have found that acceptance of negative emotions has other well-being outcomes. Among individuals with anxiety and mood disorders, those who accepted (rather than suppressed) their negative emotions showed decreased heart rate during an anxiety-provoking film. They also exhibited lower negative affect during the recovery period after the film than those who suppressed (Campbell-Sills,

Barlow, Brown, & Hofmann, 2006). In another experimental study, people higher in acceptance experienced less negative affect during a negative mood induction than those low in acceptance (Shallcross, Troy, Boland, & Mauss, 2010). Acceptance also predicted better future outcomes. Those with a greater tendency to accept negative feelings subsequently showed lower levels of depressive symptoms three months later when faced with life stress (Shallcross et al., 2010). These findings suggest that training people to accept their negative feelings (e.g., when the negative feelings are appropriate and in moderation), can also be considered as a form of PPI, as it helps people achieve better well-being outcomes. That is, a PPI does not always need to reduce negative emotions. Instead, acceptance of negative feelings can actually lead to better psychological health and improved well-being outcomes.

Another potential area that can be incorporated into PPIs is the concept of positive growth after negative events or adversities. PPIs involve having the volition to use appropriate activities to achieve human flourishing, thus that can encompass building up psychological resources after negative experiences or in unfavorable life circumstances. For instance, after a negative experience, instead of focusing only on positively reappraising the event (e.g., looking for positive aspects/the silver lining of a negative event), participants can instead think about what they have learnt from the negative experience, and how this experience has better equipped them to deal with other life challenges and trials in the future. Developing one's capacity to deal with future stressors and challenges by learning from current failures or negative experiences constitutes a form of positive growth. This links to the concept of resilience as well. Resilience intervention programs are often part of positive psychology (e.g., Gillham et al., 2006), and such interventions have been shown to reduce anxiety and depressive symptoms (e.g., Brunwasser, Gillham, & Kim, 2009). Therefore, exercises that aim to build up resilience when people are faced with hardships and sufferings should be regarded as a core part of PPIs (Lomas, 2015; Wong, 2011). This is especially applicable for individuals in Eastern cultures, which emphasize human suffering and virtues such as compassion (Joshani, 2014).

3.1.3 Technology

With the advent of technology, we can now leverage on technological advancements and develop innovative ways of implementing PPIs, to help to maximize their effectiveness. It is now increasingly common to utilize smartphone applications as a means of administering PPIs. The use of such applications means that it is easier to implement PPIs programs (as participants can access them on their own) and customize the positive interventions for individuals, compared to the traditional administration mode of conducting individual or group face-to-face sessions in the laboratory. Parks et al. (2012) found that participants using a happiness-enhancing smartphone application that consisted of various positive activities successfully improved their mood and happiness. Similarly, there was no difference in the effectiveness of a positive activity—visualizing best possible selves—whether it was administered online or in-person (Layous et al., 2013). The online intervention worked as effectively as

the in-person intervention in improving positive affect. These findings indicate that researchers should explore using smartphone applications or other Internet-based platforms for implementing PPI programs, as they provide a convenient and low-cost administration format. With greater ease and convenience of performing the positive activities, participants are more likely to continue practicing the activities, which would improve their efficacy.

Additional studies have further examined how information and communication technologies (ICTs) support and improve the implementation of PPIs. Using the Emotional Activities Related to Health (EARTH) system, a self-guided internet-based positive intervention, Baños et al. (2014) found that it successfully increased positive mood. EARTH utilizes virtual reality to induce positive mood (specifically the emotions of joy or relaxation) through virtual environments, as well as multimedia resources (music, pictures, videos, writing) for the narrative exercises that sought to create a positive orientation toward the past or future. Likewise, Rose (2014) designed a self-guided multimedia stress management and resilience training program that consisted of various activities to teach resilience and stress management skills (e.g., breathing and muscle relaxation techniques, emotion regulation skills), which could be disseminated via different platforms (e.g., computer, tablet, smartphone, Internet). With these online administration methods, researchers can now utilize multimedia elements, and provide a wider repertoire of positive activities for individuals to choose from and try out, thus reducing the risk of hedonic adaptation, while increasing the likelihood that participants can find an activity with optimal fit.

4 Conclusion

Certain PPIs, such as engaging in prosocial behavior, are likely to be universal as they are evolutionarily adaptive, whereas other PPIs that emphasize self-enhancement (e.g., expressing optimism) may have more culture-specific benefits. An example of a PPI that would be effective for people in collectivist cultures would be performing acts of kindness, or what could be more broadly regarded as prosocial behavior. The evidence illustrating the benefits of prosocial behavior (e.g., Aknin et al., 2013; Curry et al., 2018) implies that focusing on others instead of oneself may be a useful strategy for achieving psychological flourishing. Such a strategy is consistent with collectivistic cultures' emphasis on prioritizing the group over the self and on interpersonal harmony. This type of positive activity is also concordant with Eastern religions (e.g., Buddhism) that advocate virtues such as compassion. Furthermore, it is consistent with the new direction driven by second wave positive psychology (e.g., Lomas & Ivtzan, 2016), which emphasizes that positive psychology encompasses other concepts, including virtues.

4.1 Implications for Future Research

Tailoring PPI programs for individuals, in conjunction with utilizing technology, is likely to be one of the most effective ways of maximizing the success of PPIs. By customizing the positive interventions, delivered through the Internet or other smart devices, participants can try out a variety of positive exercises before selecting one that offers not just optimal person-activity fit, but also provides culture-person-activity fit. Alternatively, such customized programs also enable people to cycle through multiple activities; in this way, they would not be tediously performing the same activity too frequently or over a long period, which could cause the novelty and beneficial effects of the positive activity to wear out.

More specifically, we also encourage researchers to be mindful that certain PPIs are differentially effective across cultures. Thus, when working with Eastern samples, it would be important to include positive activities that have been shown to be effective for them. For instance, promoting the virtue of compassion to encourage more prosocial behavior is one type of positive activity that is congruent with the values promoted by Eastern cultures and religions. Therefore, such an intervention is likely to have better person-culture-activity fit, which would yield greater success.

Another strategy that can contribute to efforts to maximize the success of PPIs in Eastern cultures is to develop novel interventions that are more suited for them. For instance, exercises teaching people to accept negative emotions (rather than suppressing or denying them) could be a suitable form of PPI. Similarly, programs that train people to build up their resilience and manage life stressors and setbacks could be applicable too. Alternatively, researchers can also utilize existing PPIs but culturally adapt them (e.g., Al-Seheel & Moor, 2016; Ho et al., 2016) so that the focus of the PPI is more aligned with Eastern cultural values.

In conclusion, by incorporating the various strategies discussed above, and taking into consideration the moderating influences that may accentuate or dampen the beneficial effects of PPIs, it is feasible to develop positive intervention programs that can be optimally efficacious in Eastern cultures.

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Design for Engagement of Online Positive Psychology Interventions



Saskia M. Kelders

Abstract Online Positive Psychology Interventions (oPPIs) can provide a low-cost way to improve wellbeing in the general population. However, for these interventions to be effective, participants need to use them for a longer period of time and need to practice the content in their daily lives. This means that participants need to feel engaged with the intervention in a certain way. The first part of this chapter introduces this need for engagement with online interventions and provides insight in what engagement might actually be in this context. The next part of the chapter will focus on ways technology can be designed to positively influence engagement. This will be illustrated by means of two cases of oPPIs. Next, the chapter will discuss the way engagement might be used to personalize interventions and thereby increase the individual effectiveness. The chapter concludes with a summary of the main learning points.

Keywords Online positive psychology interventions · Engagement · Intervention design · Personalization · Gamification

1 Introduction

With the increase of the popularity of positive psychology, people from various disciplines acknowledge the value of wellbeing and the potential benefits of increasing wellbeing. Within mental health care, wellbeing or positive mental health has been shown to be a protective factor against developing mental illnesses, it has been shown to positively impact physical health, and it is seen as a worthwhile goal in itself to strive for, besides combating the symptoms of mental illnesses themselves (Duckworth, Steen, & Seligman, 2005; Keyes, Dhingra, & Simoes, 2010; Lamers, Westerhof, Glas, & Bohlmeijer, 2015; Ryff, 2014). Also within e.g. education and

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organizations, focusing on wellbeing is more and more seen as a positive way forward (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009; Youssef & Luthans, 2007). With this positive attitude towards wellbeing, interventions to increase wellbeing have also become more popular. Positive Psychology Interventions (PPIs) have been proven to be effective in increasing e.g. positive emotions, self-compassion and wellbeing (Bolier et al., 2013; Sin & Lyubomirsky, 2009). Furthermore, PPIs seem to be able to attract and interest many people, even those without (mental) health complaints, making them widely applicable to the general public. Increasing wellbeing in the general public and being able to let more people flourish provides many opportunities to increase the overall wellbeing level of communities, countries and even the world (Bolier et al., 2013).

One way to reach all of these people, is by using technology such as smart phones and the internet. PPIs using technology to reach people, or oPPIs (online Positive Psychology Interventions) have been shown to be able to increase wellbeing in the general population (Schueller & Parks, 2012), although the effects tend to be smaller than online interventions targeting mental illnesses such as depression (Bolier & Abello, 2014). An explanation for this might be that oPPIs and PPIs in general tend to be delivered without any human care provider involvement. This does make these interventions extremely scalable with minimal costs (Bolier et al., 2013). However, oPPIs do often struggle with a lack of engagement of participants, after their first interest has waned: often participants start enthusiastically with an oPPI, but after a while usage wanes or even stops (Bolier & Abello, 2014). This issue is well-documented in the literature on eHealth interventions, and seems to be a major reason for the sometimes small or even non-existing effects of interventions (Christensen, Griffiths, & Farrer, 2009; Donkin et al., 2011; Kelders, Kok, Ossebaard, & Van Gemert-Pijnen, 2012).

Fortunately, there seem to be ways to harness the enthusiasm participants start interventions with. Studies have shown that the technology itself can influence adherence to online interventions (i.e. the degree to which participants use an intervention as was intended by the developers) (Kelders et al., 2012). A simple example is the use of reminders that can help people to keep using an intervention. Another example that has received much attention in recent years is gamification, i.e. the use of game design elements in non-game context, to increase engagement of users (Detting, Dixon, Khaled, & Nacke, 2011; Hamari, Koivisto, & Sarsa, 2014). However, although many researchers in the field agree on the importance of engagement for the effectiveness of digital intervention, including oPPIs, there is much ambiguity about what actually entails engagement and how interventions may be designed to foster this engagement (Kelders, Sommers-Spijkerman, & Goldberg, 2018; Perski, Blandford, West, & Michie, 2016).

Therefore, this chapter will first focus on the concept of engagement in this particular field and will then discuss ways to design for engagement. Afterwards, we'll turn to the importance of personalization and the opportunities engagement offers in this respect. The chapter will conclude with a wrap up of the most important lessons of the chapter.

2 Engagement

2.1 *Engagement and Adherence*

In the field of eHealth interventions, the attention was drawn towards the issue of participants not using the interventions around 2005 (Eysenbach, 2005). Since then, there has been much debate on what terms to use in which cases and about whether and why the issue is really important. Relating to the concepts, Eysenbach first used the term (non-usage) attrition to refer to users stopping their use of an intervention. Later on, Christensen et al. provided more clarity to the concepts by distinguishing between drop out attrition (i.e. participants not following the research protocol, e.g. not completing the questionnaires) and non-adherence (i.e. participants not using the intervention) (Christensen et al., 2009). This is an important distinction, first because attrition is only relevant in research studies and online interventions can and are used outside the context of a research study as well. Second because although attrition and adherence are related, they are truly different: a participant can fill out all the questionnaires in a research study, but never have accessed the intervention; or a participant can use an intervention intensively, but never fill out a questionnaire. The definition of adherence of Christensen et al. was later refined by adding the concept of intended use; the way that the developers of an intervention intended the intervention to be used for the participants to gain the most effects (Kelders et al., 2012). Adherence became the concept to describe whether participants used an intervention as intended by the developers. However, this is not always the way it has been operationalized in research papers. Often, adherence is still operationalized as usage and it is assumed that more usage is ‘better’ and can be seen as more adherence (Sieverink, Kelders, & van Gemert-Pijnen, 2017). Although this dose—response relationship (more usage of an intervention leads to better outcomes) is sometimes observed, this relationship is by far not always present, leading to the question whether it is really worthwhile to entice participants to use interventions more (Donkin et al., 2013). It has been posited that the focus should be more on the adherence—response relationship, because that better reflects a meaningful use of interventions (Sieverink et al., 2017). However, even this last relationship is not always found.

Recently, the attention seems to have shifted more from looking at adherence, to looking at engagement, where engagement is seen as a concept that captures the reasons behind usage more than adherence, and might therefore be more related to the effect of an intervention (Kelders et al., 2018; Perski et al., 2016). Unfortunately, the concept of engagement is not devoid of ambiguity either. In the field of digital interventions, it is commonly understood as not only the extent of usage, but also as a subjective experience with this intervention. This subjective experience can be ‘characterized by attention, interest and affect’ (Perski et al., 2016). However, engagement is often operationalized as just the extent of usage, pointing towards the issue of how operationalize engagement according to the full understanding of the concept (Perski et al., 2016). In this respect, user engagement should also be mentioned, but because user engagement is often applied to other contexts (e.g.

online shopping, or searching information) (O'Brien & Toms, 2008), where the goals of users are different than those of health interventions, this concept seems to not fully fit with engagement in this context. Especially when taking into account that engagement with health technologies seems to be needed at two levels: engagement with the technology itself, and engagement with the behavior the technology focuses on (Yardley et al., 2016). Researchers have argued that concepts as involvement, enjoyment and flow might be related to engagement in this specific context, but a common understanding of the components of engagement is still missing (Kelders, 2015; Kelders et al., 2018).

2.2 Components of Engagement

When looking at other fields, engagement is often conceptualized as consisting of the components behavior, cognition and affect. For example, two fields where engagement is seen as an important concept are education (student engagement) (Appleton, Christenson, & Furlong, 2008) and organizations (work engagement) (Bakker, Schaufeli, Leiter, & Taris, 2008). In both cases, the most commonly described components of engagement are behavior, cognition and affect. Behavioral engagement is seen as e.g. participation in classes and positive conduct (student engagement), or vigour, i.e. working with a high level of energy (work engagement). Cognitive engagement is seen as self-regulation and seeing value in learning (student engagement), or absorption, characterized by being fully concentrated with work and time passing by quickly (work engagement). Affective engagement is seen as e.g. identification with school or a positive attitude about learning (student engagement), or dedication, i.e. being involved in your work and experiencing e.g. pride and enthusiasm (work engagement).

To investigate how the components of engagement can be seen in the specific context of eHealth technologies, a recent study interviewed engaged health app users, to find out how they view their engagement (Kelders & Kip, 2019). This study confirmed that engagement can be seen as consisting of the components behavior, cognition and affect, and gives more insight in how each component can be operationalized, which will be summarized below.

2.2.1 Behavioral Engagement

The most prominent theme within behavioral engagement was that usage of the health intervention was routine: it was embedded in the daily lives of the users and was something that became natural to them. Engaged users also felt that the using the technology had become part of the behavior that the technology targeted (e.g. running or having a meal). The distinction between the technology and the target behavior seemed to have faded. A second theme in behavioral engagement was that engaged users think of their technology as easy to use. It does not cost them much

effort to use the technology, which seems to enhance the possibility of the usage becoming routine. The last theme was that engaged users indicated that their usage of the technology matched their goals. This seems to be a personal ‘intended usage’ that they would like to achieve. If their goals with the technology change (e.g. from getting insight to changing behavior), the intensity of their usage will also change. Overall, behavioral engagement was not so much just the extent of usage, but more related to the quality of the usage.

2.3 Cognitive Engagement

For engaged users, cognitive engagement was closely related to the goals they wish to achieve with using the technology. The most prominent themes were ability and motivation. Ability refers to users being engaged because the technology increases their ability to achieve their goals. E.g. a step counter gives them insight in how active they are and helps them control and change their behavior to become more active. Using the technology makes this easier for them. The second prominent theme is closely related and refers to engaged users’ thinking, or even knowing, that the technology motivates them. They ‘just know’ that the technology e.g. motivates them and is helpful, without really experiencing any emotions or expressing that the technology increases their ability. The last theme is mental effort: engaged users tend to expend mental effort in understanding the data that the technology gives them, e.g. by analyzing their runs, or they expend mental effort in using the app itself, e.g. by meticulously entering their diet information. This mental effort is not seen as a burden, but as a positive: this helps them achieve their goals and is a motivating activity in itself.

2.3.1 Affective Engagement

Positive emotions were also important for engaged users. However, these were not only positive emotions (e.g. enjoyment) regarding the use of the technology, but also positive emotions (e.g. enjoyment or pride) regarding achieving their goals such as getting to a certain number of steps. Interestingly, negative emotions also seemed to play a role as not reaching your goal can lead to e.g. a feeling of frustration. However, this is not necessarily a bad thing, as this might also increase motivation to reach the goal a next time. Within affective engagement, connection also played a role. Engaged users seem to identify themselves in some way with the technology or with the goal of the technology. They feel a connection and indicate that they would miss it when it would not be there anymore.

2.4 *Measuring Engagement*

Taken together, the preceding operationalization of engagement seems to be more nuanced than earlier definitions imply. For example, the extent of usage of the technology which is so prominent in earlier definitions and in measuring engagement, seemed to be less important than how this usage is established (e.g. as a routine which costs little effort) and what it is aimed at (an extent of usage which matches the goals participants wish to achieve). Also, it is clear from the description of the components of engagement that it is both about engagement with the technology and engagement with the target behavior, but these different ‘forms’ of engagement seem to be intertwined making the distinction somewhat fabricated.

To gain a nuanced view of the whole concept of engagement, it seems to be necessary to measure the different components and to see how these ‘building blocks’ are arranged to shape an individual’s engagement. E.g. the total engagement score of two people might be similar, but when for one individual this is solely in the form of behavioral engagement, this individual may quickly become disengaged when something breaks the routine. Whereas a different individual with a less strong behavioral engagement might be quicker to miss a day of usage, but be inclined to stay engaged due to the larger cognitive or affective engagement which might motivate a renewed engagement.

A recent overview paper on methodologies to measure engagement identified various ways to assess (a form of) engagement, e.g. qualitative methods, self-report scales, ecological momentary assessments and system usage data (Short et al., 2018). Of these methods, most studies in this field rely on system usage data only (Perski et al., 2016). However, as system usage data mostly captures just how often a system is used, this seems to provide a very narrow image of engagement and does not take into account the complexity of the concept. Self-report scales on engagement might be the most accessible way to gain a more nuanced view of engagement. However, most of these scales are created for measuring engagement with e-commerce websites or video games (Short et al., 2018). The two scales identified in the previously mentioned overview paper specifically targeted at eHealth interventions are not explicitly focused on the three main components of engagement (i.e. behavior, cognition, affect). Moreover, only one of these scales has been the subject of a validation study. It is clear that more work needs to be done in this field and it seems valuable to create and validate a measurement scale based on the previous operationalization of the different components of engagement. However, this work is still in the preparatory stages.

3 Design

Now that we know a bit more about what engagement is, it is time to turn towards ways to foster engagement to digital interventions in general and oPPI’s in specific.

One way to foster engagement is by using the design of these technologies. A common belief, which is supported by research, is that a design that matches the expectations and practice of the intended users, is more engaging than a design that does not provide this match (Abrams, Maloney-Krichmar, & Preece, 2004). One way of reaching such a match between the users and the system is by using a development approach that incorporates the views and values of different stakeholders (as the target group and counselors). An example of such an approach specifically for the eHealth field is the CeHRes-roadmap (Kip & van Gemert-Pijnen, 2018; van Gemert-Pijnen, Kelders, Beerlage-de Jong, & Oinas-Kukkonen, 2018; van Gemert-Pijnen et al., 2011), see Fig. 1. This roadmap is built on theoretical approaches relating to behavior change and technology, but also business modeling to increase the chances of sustainable implementation. One of the pillars of the roadmap is participatory design: this entails incorporating the views and values of different stakeholders in all stages of the design. Another important pillar is iterative development: this means that the design process consists of multiple rounds of idea generation with stakeholders, prototyping, checking ideas and prototypes against the values of the stakeholders, and incorporating the feedback in an adapted idea or prototype. Although it is difficult to assess whether such an approach leads to a more engaging eHealth technology than when the technology would have been developed using a different approach, multiple studies suggest that this approach seems successful.

A second way to look at how design can lead to more engagement, is by looking at specific design elements or features and their influence on engagement. Much of this kind of research has been done in the field of Persuasive Technology, where it is often investigated which kind of features (e.g. reminders or suggestions) lead to more effective interventions. Providing a comprehensive overview of such studies is beyond the scope of this chapter, but can be found elsewhere (see van Gemert-Pijnen et al., 2018). However, to give an impression of this body of knowledge consider a systematic review in which 83 web-based interventions were analyzed to investigate which program and technology features of these interventions predicted adherence (Kelders et al., 2012). This study found that a RCT study as opposed to an observational study, increased interaction with a counselor, more frequent intended usage,

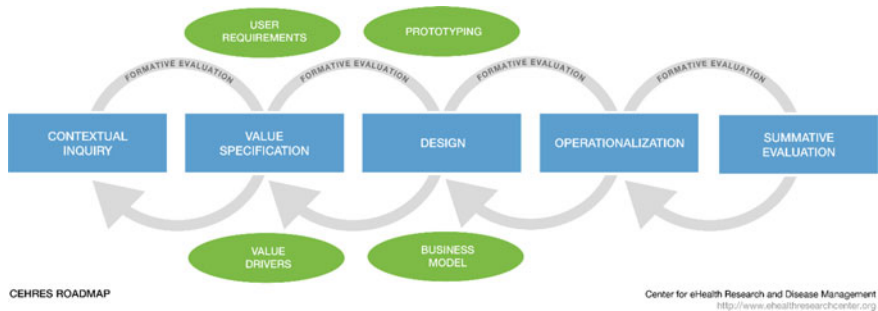


Fig. 1 CeHRes-Roadmap for the development of eHealth Technologies

more frequent updates and more extensive employment of dialogue support significantly predicted better adherence. Interestingly, the results showed that although interaction with a counselor predicted adherence, this variable contributed the least of all the significant predictors. This stresses the importance of using technology to design for adherence and engagement. According to the study, aspects from dialogue support, i.e. features that support the interaction and dialogue between the system and the user, may play an important role in this. Examples of dialogue support features are reminders, providing rewards and having the system itself adopt a social role as e.g. a coach. More recently, newer technologies and design approaches have made their way into the field of health and positive psychology interventions. In the next section, two examples will be discussed to explore in what ways these designs may be able to influence and foster engagement.

3.1 Case: This Is Your Life

The first example is a web-based positive psychology intervention targeted at the general public aimed at improving wellbeing. This intervention has been proven to be effective as a self-help book with email counseling (Schotanus-Dijkstra et al., 2017). The web-based intervention that was created, using a Human Centered Design (Ludden, Kelders, & Snippert, 2014), consisted of an introduction and eight lessons that could be completed in 12 weeks. Each lesson consisted of psychoeducation and approximately five exercises that could be completed multiple times (e.g. each day). In each lesson, there were approximately two key challenges. These were the exercises that needed to be completed to be able to continue to the next lesson. The intervention was self-guided; there was no feedback from a human counselor. However, the intervention itself did provide tailored feedback when a user finished a lesson and provided general feedback about how to best perform exercises at different points during each lesson. For the study, two versions of the intervention were created: a gamified and a standard, non-gamified, version (Kelders et al., 2018). Screenshots of the overview page and a lesson page of both versions are shown in Figs. 2 and 3.

Both versions of the intervention contained the same information and exercises. Differences were only in lay-out and in wording of feedback:

Overview: In the gamified version, the overview was visualized as a map, in which the participants travel to various destinations (the different lessons). In the non-gamified version, a list of lessons was provided.

Lessons: The basic features of the lesson screen were the same in both versions (list of exercises on the left and explanation and filling out opportunity on the right). The gamified version showed an additional progress bar, in which the activities of the lesson were visualized. After finishing all the mandatory activities, participants in the gamified condition were granted a key with which they could enter the next destination, whereas participants in the non-gamified condition were provided with a link to start the next lesson.



Fig. 2 Overview of the intervention in the gamified version (left) and non-gamified version (right)



Fig. 3 Lesson screen in the gamified version (left) and non-gamified version (right)

Professor avatar: In the gamified version of the intervention, participants were guided through the intervention by an avatar of “Professor Happiness”. Instructions and feedback appeared as a pop-up coming from the avatar. In the non-gamified version, the same instructions and feedback were given through a pop-up of the info-button.

Badges: Only participants in the gamified version earned a badge after completing the introduction and each of the lessons. These badges were shown on the right side of the screen, and when “mousing over” these badges, a quote matching the badge’s lesson was shown.

This intervention was used in an experiment to investigate the short term impact of a gamified design on the experiences of the users. For the study, participants were asked to use the intervention for one session of approximately 30 min. They were instructed to do the introduction and two exercises from the first lesson. 75 Participants were randomized to either the gamified version or a standard, non-gamified version of the intervention. Afterwards behavioral, cognitive, and affective engagement were measured. Behavioral engagement was assessed by means of usage mea-

asures gathered through system logs (log data). Cognitive engagement was assessed by measuring involvement. Affective engagement was assessed by measuring positive emotions and enjoyment. Lastly, flow was measured to assess both cognitive and affective engagement.

The results of the study showed that participants in the gamified intervention scored higher on cognitive engagement (i.e. involvement) and on some elements of affective engagement (i.e. flow as a combination of cognitive and affective engagement and the emotions “interest” and “inspiration”). This showed the possibility of the design of an intervention, in this case gamification, to impact the engagement that participants experience when using the intervention. This way, it provides a first step in uncovering how the design of interventions may enhance engagement with online (positive) psychological interventions and it offers a starting point for creating engaging interventions. However, it must be noted that this study does not imply that gamification is always a good strategy to increase engagement. Research indicates that gamification can also have negative effects (Hyrnsalmi, Smed, & Kimppa, 2017). The study merely shows that this specific design approach, which can be classified as a form of gamification, can have a positive effect in a specific context. However, more research is needed on what specific design elements show these effects in which contexts.

3.2 *Case: Mobile PPI*

The previous case is an example of a full blown web-based intervention that has taken much time, effort and money to be created. It is interesting to see how such a design can influence engagement, but developing such a technology might not be something that is always possible to do. This second example describes a mobile Positive Psychology intervention with a shorter duration, which was developed within a much shorter duration and without any technical (e.g. programming) expertise. This approach might be more feasible in a many situations. What it shows is that even in such a situation, it may be possible to leverage engaging design opportunities, but this arguably requires a bit more creative and pragmatic thinking.

First to provide some background information, the current example was developed within The Incredible Intervention Machine (TIIM), a web-based system created at the University of Twente that allows researchers to create their own mobile interventions without the need to program. The system works analogue to online survey tools as e.g. Qualtrics or Survey Monkey. In essence, the researchers create different modules that together form an intervention. These modules consist of short texts, questions and/or videos. The researcher can create modules and decide on the timing of when these will be available to the user. This can be at a specific time; related to when an earlier module has been finished; or related to a specific answer to an earlier question allowing for the creation of tailored interventions.

Figure 4 provides three screenshots of a basic interventions as displayed to a user. However, using images, it is also possible to create a more elaborate version that may

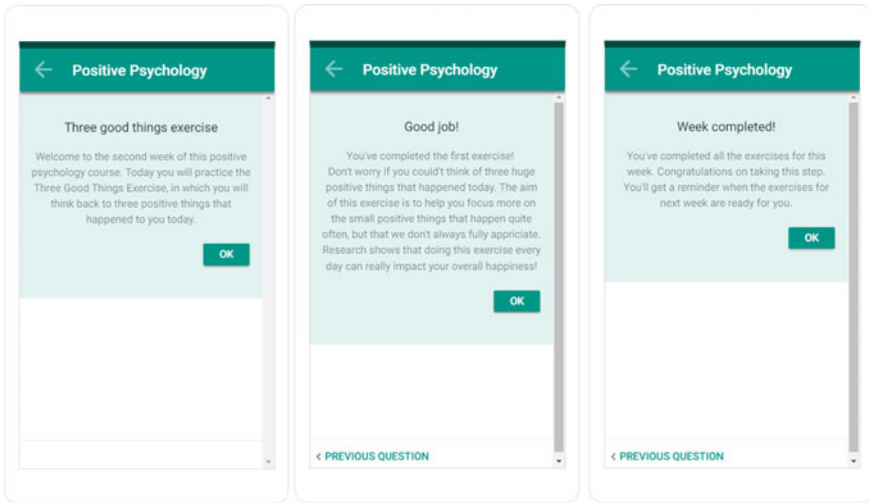


Fig. 4 Basic mobile positive psychology intervention created with TIIM

increase engagement. E.g. Fig. 5 shows the same content, but this time, gamification aspects and a virtual coach are presented as ways to increase engagement. Although in this case the gamification elements are only minimal, in essence, it provides the same experience as the more elaborate gamification aspects of the previous example, in that the progress through the intervention is visualized as a journey. It can be hypothesized that this will positively impact especially affective engagement in making progress more visible and enjoyable. Research into the impact of these less elaborate design approaches is still only emerging, so future research should investigate the value of these approaches in practice.

4 Personalization

Until now, in this chapter we have discussed ways to improve and foster engagement to an intervention in general, so on average. However, as research indicates more and more, the average does not really exist in practice. Often, when looking more in depth to the effects of an intervention, you see that there are people who show positive change, people who show no change, and people who show deterioration (Andrews & Williams, 2014). Of course, this is not what we want: we do not want anybody to be worse off when using an intervention. However, we also have several different intervention-approaches (e.g. positive psychology, Cognitive Behavioral Therapy, Acceptance and Commitment Therapy) which may work differently for different people. Hypothetically, this could mean that there is an effective intervention-approach for everybody, we just have to find the right one.

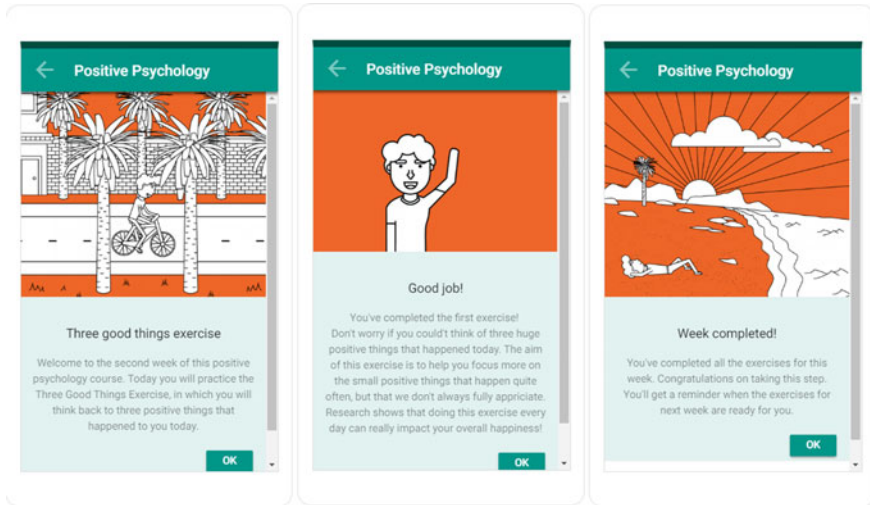


Fig. 5 More elaborately designed mobile positive psychology intervention, created with TIIM

The same goes for the design of an intervention. For example, research on the influence of persuasive technology features in general, and gamification specifically, often show small effects (Hamari et al., 2014; Kelders, Bohlmeijer, Pots, & van Gemert-Pijnen, 2015). It could very well be that this can be explained, in part, by individual differences. For some people, gamifying their health intervention might seem to diminish the value of it, seeming to no take the goals seriously anymore. However, for some, the same gamification techniques might give a welcome boost to motivation.

For both the therapeutic content of the intervention and the design of it, the one-size-fits-all approach seems to be far from ideal. However, at the moment, it has proven to be very difficult to decide in advance which content and design of an intervention is appropriate for whom. For example, studies have shown that we cannot yet identify consistent characteristics that predict for whom psychotherapy is the best option and for whom medication is appropriate (Cuijpers et al., 2012). This limits our ability to personalize interventions by a large degree. However, it may be that engagement provides a solution to this issue.

As we have seen before, engagement is consistently linked to the effectiveness of interventions, although more research needs to be done to empirically validate this assumption. Second, as we have seen, the design of interventions can influence individual engagement. Theory also suggests that the therapeutic content of interventions can influence individual engagement (Hyland & Whalley, 2008; Whalley & Hyland, 2009). In theory, this means that we can have people start using an intervention, measure their engagement, and predict whether or not this intervention will be successful. In itself, this could already increase the effectiveness of an intervention,

by only giving it to the people who score reasonably well on engagement and for whom chances are high that it will be effective.

However, technology enables us to, quite easily, create more versions of an intervention. This way, we can not only not give an intervention to someone who might not benefit, but might also be able to find the right version of an intervention to anyone. Consider for example that you would want to create personalized interventions for people with depressive or anxiety complaints. For this target group, Cognitive Behavioral Therapy, Acceptance and Commitment Therapy and Positive Psychology have been shown to be effective in decreasing complaints (Bolier et al., 2013; Jiménez, 2012), however, it could well be that different people respond better to different approaches. However, there is no knowledge on whether there are any characteristics of people that predict who will respond better to which approach (Andrews & Williams, 2014). Furthermore, within an online intervention, how feedback is given and the design-approach of the intervention are likely to influence engagement in different ways in different people. Table 1 gives an overview of these intervention and technology factors that are likely to influence individual engagement.

Based on these three factors with three levels each, 27 (i.e. $3 \times 3 \times 3$) different versions of an intervention can be created. Although this seems like a difficult thing to do, using technological tools like the earlier described TIIM, this is feasible. The next step would be to find out for each individual which of the 27 versions of the intervention is appropriate. One way to approach this, is to let participants go through a set-up phase where they try out the different versions of an aspect step-by-step. So e.g. first they are asked to read a description of the different content approaches and try out an exercise, after which their engagement will be measured. Based on these engagement scores, the most appropriate content of the intervention can be determined for this individual. Next they will receive feedback in different

Table 1 Intervention and technology factors that are likely to influence individual engagement

Aspect	What	Why
Content	<i>Intervention will be based on:</i> a. Cognitive Behavioral Therapy b. Acceptance and Commitment Therapy c. Positive psychology	Motivational concordance theory: engagement is influenced by whether the content fits personal values and beliefs (Hyland & Whalley, 2008; Whalley & Hyland, 2009)
Feedback	<i>Feedback on completed exercises:</i> a. In text b. By a counselor in a pre-recorded video c. In text given by a virtual agent	Research suggests that individuals are engaged differently when feedback is given in different ways (Kelders et al., 2015; Talbot, 2012)
Design	<i>Intervention will:</i> a. Be gamified competitively (points, levels and achievements) b. Be gamified non-competitively (story line, personal challenges and rewards) c. Not be gamified	Research has shown that gamification influences engagement and that this influence is likely different between individuals (Hamari et al., 2014)

ways and will be shown the different designs after which engagement will again be assessed. Using this approach enables us to predict which of the 27 versions of the intervention is most appropriate for whom and thus gives us the ability to personalize interventions.

However, personalizing interventions based on individual engagement is still new. Although it sounds promising, research should look into how different groups respond to these attempts to increase their engagement. It might be that some people show reactance to these attempts as they might see it as a way to manipulate them. One way of countering this might be by allowing people to choose their own version and in this way increasing their autonomy.

5 Conclusion

In this chapter we have seen that for oPPIs to reach their full potential, it is important that people are engaged with these interventions. Engagement can be seen as a concept that encompasses behavior, cognition and affect. Engaged behavior does not only refer to using an intervention as intended, as the concept of adherence does, but also suggests that it is important that people create a routine in which they use the intervention and exercises. Cognitive engagement is very much related to the intervention being able to support people in reaching their goals, e.g. improving their wellbeing. Affective engagement is related to emotions that are felt when seeing progress, or even a lack thereof, and related to emotions, e.g. enjoyment, when using the intervention itself.

Furthermore, we have seen that the design of oPPIs can influence engagement. Certain aspects of technology, e.g. visualizing progress through gamification techniques, or giving the technology a social role in the form of a coaching avatar, can positively impact the engagement that participants feel and in this way help increase effectiveness. We have seen that although it can be quite difficult to implement these design techniques, newer technological tools may provide researchers and intervention builders with easier ways to implement these kind of features. However, more research is needed to assess the impact of these less elaborate forms of e.g. gamification.

Lastly, we have seen that although some design techniques may increase engagement in general, personalization may be needed to achieve the best results. Technology enables us to create many different versions of an intervention, e.g. varying on the content, the way feedback is given and on the design approach itself. However, it remains an issue how to decide which variation of an intervention is most appropriate for whom as research has yet failed to identify characteristics of people that help us in this decision. We have discussed that engagement may be used to overcome this issue and provide a way to personalize interventions. This may be done by having participants try out different versions and measure their engagement. Based on these scores, a substantiated decision can be made for the version of the intervention that has the highest chance of being successful for each individual.

For future research it seems worthwhile to place more emphasis on measuring and designing for engagement. Specifically, future research should address how to measure the complex concept of engagement. With such a measure, engagement can, and should be, assessed in any online health intervention. This will give us much more insight in how (the design of) interventions impact engagement and opens up the way to effectively use the opportunities both technology and psychology offer to create more effective interventions on a large scale.

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How to Create a Flourishing Classroom? An Intervention Protocol for Enhancing Teachers' Social and Emotional Learning



Markus Talvio and Kirsti Lonka

Abstract The positive psychology movement values good atmosphere and flourishing in the classroom. In order to do this, it is important to develop teachers' social and emotional learning (SEL) as a part of expertise, because teachers are in key position to create supportive and engaging learning environment. Even though promoting SEL as a means to create a flourishing classroom is often recommended in the literature, there is not much multi-national evidence about the development of the teachers' competencies associated with SEL. Previous research indicates that it is difficult to aid students to flourish without teachers having the necessary skills to scaffold them. Focusing merely on cognitive outcomes is not helping, but instead, we need to train the teachers to support autonomy, agency and self-efficacy in classrooms to build sustainable success and happiness among youth. The whole classroom culture should be developed to support positive encounters. This chapter describes studies on SEL interventions on teachers. The participants of the first study were Finnish teachers who attended to Gordon's Teacher Effectiveness Training (TET) workshops, based on humanistic psychology. For assessing teachers' development of SEL, a new method, Dealing with Challenging Interaction (DCI) was developed. DCI helps to capture the real-life challenging situations at teacher's work in various settings. In all, after the TET intervention the teachers really started using the studied skills, and they were more likely to support their students' autonomy and agency than the teachers in the comparison groups. The next step was to carry out global investigations about the Lions Quest teacher workshops. These studies revealed increased readiness to develop teachers' SEL competencies worldwide. Finally, various SEL interventions in nine European countries were looked at. So far, using mixed-method approach in several countries has produced consistent results with satisfactory effect sizes. The research methods appear ecologically valid, yet generalizable in various cultures and contexts. In all, these studies demonstrated that teachers benefit from SEL training. Diverse interventions appeared to increase teachers' readiness to implement SEL.

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Especially, teachers' sense of competence in teaching SEL increased. As such, the purpose of this chapter is to present an intervention protocol, based on the SEL interventions described above that aims at enhancing teachers' social and emotional learning. The final aim is to develop classroom cultures that promote flourishing in both teachers and students. The present research adds to both theoretical and practical understanding of teachers' continuing professional development worldwide.

Keywords Social and emotional learning (SEL) · Professional development · Well-being · Non-cognitive · Intervention · Continuing teacher training · Mixed-method approach · Classroom · Dealing with challenging interaction (DCI)

1 Introduction

The positive psychology movement values good atmosphere and flourishing in the classroom. Both students' well-being and academic achievement are promoted in a classroom that supports positive atmosphere and constructive interaction (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). In order to promote the goals of positive psychology, it is important to develop teachers' social and emotional learning (SEL) as a part of expertise, because teachers are in key position to create supportive and engaging learning environment. The present chapter focuses on interventions that aim at developing teachers' SEL.

Why is SEL so important? First, it gives the teachers instructional tools for promoting engaging learning environment and creating good relationships with students. On the other hand, teachers are always students' role-models who are setting standards for interaction, the use of language and i.e., dealing with challenging situations in the classroom. Hence, it is very important that teachers' lecturing about good manners and respect are in line with their ways of interacting with students in the classroom (Lonka, 2018).

Since initial teacher training seldom includes much theory on SEL teachers seek their ways to the further education during their teacher career. There are several programmes available for implementing SEL at school worldwide (<https://casel.org/>). However, not much evidence is available on how teachers benefit from these trainings. The purpose of our investigations was to get both quantitative and qualitative information on the benefits of SEL for teachers. The intention of the quantitative studies was to validate, confirm and generalize the qualitative categories into structured items and to explore the quantitative change in teachers' thinking during their workshops on SEL. The first intervention studied was *Gordon's Teacher Effectiveness Training* (TET) (Gordon, 2003). Then, the second investigation was targeted on investigating on the quantitative change in teachers' thinking on SEL during the *Lions Quest teachers' workshops* (<https://www.lions-quest.org/>). Since the data were collected in ten areas in nine OECD countries we were also able to look at the similarities in teachers' readiness to develop their SEL competence between countries. The intention of the qualitative studies was to reveal how teachers' thinking changed

during a SEL training. Additionally, by using qualitative approach we investigated the sustainability of the studied SEL skills. TET was used as an intervention of the qualitative studies.

Next, the use of social and emotional learning (SEL) in teaching will be defined. Then, we will look at the development of teachers' pedagogical benefits of SEL. Finally, quantitative and qualitative studies of teachers' development of SEL will be separately presented.

1.1 The Role of Social and Emotional Learning in Teaching

SEL is defined as a comprehensive approach to promote protective mechanisms for positive life development. SEL includes the skills that are needed to regulate one's self and one's human relationships (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Without doubt, teachers' task is to promote students' SEL. To be able to do that appropriately, developing teachers' own social and emotional competence is essential. SEL fosters *intrapersonal competence* when improving our self-awareness, i.e., recognizing our i.e. feelings, needs and goals; the components of our inner reality. Another aspect of intrapersonal competence is self-management, that is, learning how to help oneself to fulfil the needs and manage to reach goals. When learners are aware of themselves they are able to regulate their emotions and actions in various situations. *Interpersonal competence* is another competence in that. It gives an insight to two other aspects of SEL: social awareness helps learners to show empathy and understanding to each other, whereas relationship skills helps them to make meaningful relationships and enhances effective interaction. *Cognitive competence* is the third competence advancing capabilities to collaborate effectively in learning groups. Making responsible decisions and ethical choices are other aspects of cognitive competence including respectful and democratic methods when acting and working together (<https://casel.org/core-competencies/>).

SEL is connected to academic success, too. Fostering positive interactions with those who participate in learning processes increases accomplishments in learning (Durlak et al., 2011; Elias et al., 1997; Zins, Payton, Weissberg, & O'Brien, 2007). Social interaction skills such as listening skills and expressing oneself respectfully promote interaction and collaboration. Socially competent people know how to deal with emotions, too. Recognizing and regulating emotions influences learner's perception, motivation and attention leading more focused studying.

1.2 Teachers' Professional Development in SEL

Research on whether social interaction skills can be improved within the context of professional development is still relatively scarce (Talvio, 2014). The lack of research on teacher learning of social interaction skills has been explained in terms

of the general assumption that teachers automatically adopt the necessary social interaction skills as part of their role (Jennings & Greenberg, 2009). Elliott, Stemler, Sternberg, Grigorenko, & Hoffman (2011) stated, in turn, that the development of teachers' skills is part of the tacit knowledge of the teaching profession. If it is suggested that pedagogical knowledge such as interaction skills is best learned as part of a teacher's job or when in the teaching practice, such knowledge may not be easily transmitted.

Despite above mentioned difficulties some European studies besides the Finnish ones have investigated teachers' professional development through SEL. Gol-Guven (2017) reported positive effects of the LQ teachers' workshops on school climate, student behaviours and conflict resolution strategies in Turkish primary schools. In another study it was found that the implementation guidance is important: teachers need training, but also specific help and ongoing support in how to integrate SEL into their daily school routine (Gol-Guven, 2016). An Austrian longitudinal study found positive effects on class climate as well as reduced bullying and fighting among the students whose teachers had participated in the training on SEL, namely LQ, compared to the control group. The magnitude of positive effects was affected by the implementation level of the LQ. Therefore, the delivered quality of implementation is an important issue when implementing SEL. Well-trained and experienced teachers are crucial for promoting SEL in schools (Matschek-Jauk, Krammer & Reicher, 2018).

In order to succeed in promoting SEL in classrooms, the way the instructor is trained is crucial, because the extent of how faithfully the principles and activities are replicated, how much of the content is delivered, and how effectively the students' other studies and background are considered, are dependent on instructor's competence (Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2013, 2015). Thus, knowledge of the taught content and how to apply is important.

However, expectancy value theory (Eccles & Wigfield, 2002; Wigfield & Eccles, 2000) gives another theoretical approach about the effects on the outcomes of SEL training. According to it, individuals choose tasks based on their expectancies and beliefs of their own performance related to the task. Accordingly, if they feel they will succeed in teaching SEL, they are more likely to choose to start teaching it, and less likely to give up easily if problems arise.

1.3 Aims of the Studies

The overall aim of four studies presented here was to explore the benefits of social and emotional learning for teachers using mixed-method approach. In the present chapter we focus on an international commercialized SEL programs that are seldom investigated by using empirical methods. The findings presented here are based on our investigations of *Gordon's Teacher Effectiveness Training* (TET) and the *Lions Quest* (LQ).

The intention of the *quantitative study on TET* was to develop an instrument to measure teachers' SEL and find out how much teachers' knowledge and applied knowledge changed during the trainings. A *quantitative study of the LQ* investigated the change in teachers' knowledge, applied knowledge and their sense of competence.

Two *qualitative studies* analysed qualitative changes of teachers' thinking that might have occurred due to TET. The other study explored how teachers' knowledge and applied knowledge was developed during the training. The data were based on the teachers' descriptions found in their responses as measured by paper cases. Another qualitative study explored sustainability of the studied TET skills that were explored by analysing answers collected by email a couple of months after the training.

2 Methodology

Next, two SEL trainings used as interventions in these studies will be described. After that, the methodologies of two quantitative studies and two qualitative studies will be approached independently.

2.1 Interventions

2.1.1 Gordon's Teacher Effectiveness Training

An important part of our research has been to give a fresh look at Gordon's seminal work on interventions aiming at foster positive interactions in the classroom. In our own work, we aimed at reconceptualising Gordon from the perspective of modern theories in educational psychology. The general aim of the Gordon trainings for teachers appeared to be supporting participation, decision-making and autonomy among both pupils and teachers (Talvio et al., 2013, 2015). When Gordon developed his models, they were strongly based on the prevailing psychological models and debates. The humanistic psychology movement during the 1960s emphasised the importance of using the resources of the human and adopting a respectful attitude towards others. By freely fulfilling their individual needs, people are able to attain the highest phase of being—that is, self-actualisation (Rogers, 1970). This movement had reflections on teaching. For example, Thomas Gordon (Gordon & Burch, 1974; Gordon, 2003) argued that only by declining to use their power and authority teachers could influence pupils. According to him, using power creates its own opposition and relationships between a teacher and pupils become unpleasant and hostile (Gordon & Burch, 1974; Gordon, 2003). This idea was very different from what prevailing understanding about learning, behaviourism, represented. Behaviourism stressed the importance of strengthening the desired behaviour by rewarding the student and ignoring the student's non-desired performance. It followed that the view of teachers' role as a controller in the classroom remained a main conception

of teacher's task including assessing, judging and rewarding students' performance instead of facilitating knowledge creation or collaboration. Students' role in learning remained passive. Their job as learners was to please their teachers by receiving information and remembering it when it was assessed (Skinner, 2002).

As an opposite reaction to behaviourism, so called *laissez-faire* method, gained ground, too. Instead of teacher's authority, it leaves all the power in the hands of the pupils (Neill, 1960). Gordon did not like that either. He stressed the notion that all the members of the learning community should be heard, treated respectfully and that everybody should take responsibility of creating good learning environment. For example, he suggested that decisions in the classroom should be taken by utilising both the needs of the teacher and the pupils. Hence, as early as the 1960s, a respectful teacher–pupil relationship was seen as an important factor in creating an effective and successful school. An appropriate balance between teacher power and a regulation of student's behaviour has been seen as an important factor in learning even these days (Brekelmans, Mainhard, den Brok, & Wubbels, 2011; Wubbels & Levy, 1997). A Finnish longitudinal study during the period of forty years indicated that success in life is enhanced by parents' active role as children's listeners and empathetic facilitators instead of playing a submissive adult (Pulkkinen & Kokko, 2017).

Teacher Effectiveness Training (TET), is a training programme that offers teachers communication and conflict resolution skills (Gordon & Burch, 1974; Gordon, 2003). According to the Gordon Training International website, TET is available in 26 countries worldwide (<http://www.gordontraining.com/school-programs/teacher-effectiveness-training-t-e-t/>). Gordon developed a model for training teachers' social and emotional skills already in 1960s. As a representative of the humanistic psychology he based his work on trust of the human's agentic capabilities. The social and emotional skills used in the present TET intervention emphasize the core components of social and emotional learning (SEL): self-awareness, self-management, social awareness, relationship skills and responsible decision making (Elias et al., 1997). The skills taught include i.e. *Active listening*, *I-Messages*, avoiding *Road Blocks* and *Both win-method*. If a student has a problem (or "owns" the problem), *Active listening* is a skill to be used. It is a method in which the listener reflects to the speaker his or her understanding of what the speaker has said. This is meant to confirm that the listener has understood the message and to give the speaker a chance to correct the listener if necessary (Ivey, Bradford-Ivey, & Zalaquett, 2009). *I-messages* help people to express i.e. their feelings or needs from their inner reality in a clear and a simple way. They are always true because people talk only on behalf of themselves without interpretations of others. *I-messages* can be i.e. declarative, preventive, positive or confrontive depending on what they are used for (Adams, 1989; Gordon, 2003). Messages that include for example judging, warning, or labelling, are called *Road blocks*. One of the skills of TET is to avoid *Road blocks* and replace them with more constructive expressions such as with *I-messages* (Adams et al., 2006; Gordon, 2003). *Both win-method* helps participants to make respectful and impartial decisions without power. This is possible with the careful investigation of the desired needs and only after that choosing the right alternative takes place instead of "selling" own ideas to others (Adams et al., 2006; Gordon, 2003).

The purpose of the Gordon courses has reformed during their existence before becoming typical SEL programmes. For example, Gordon developed a Youth Effectiveness Training (YET) programme in 70s (<http://www.gordontraining.com/youth-programs-2/youth-effectiveness-training-y-e-t/>). Originally, YET was created to offer teenagers constructive ways of surviving under the power of controlling adults. Later, after the rapid change of the whole society the generation gap faded, and young people and adults started to understand better each other. Therefore, even though Gordon's YET still emphasizes how to deal with controlling authorities the programme changed its focus on the successful relationships and overall well-being.

2.1.2 Lions Quest

Lions Quest (LQ) is an international SEL programme that is available today in over 90 countries (<https://www.lions-quest.org/international/>). The program has been in use for almost 30 years, and more than 13 million students have participated in LQ, with more than half a million teachers implementing LQ in their classrooms. To maintain the quality of LQ, teachers must participate in the LQ teacher workshop that provides the tools necessary to implement LQ in classrooms. The goals of the LQ for students have grown to aim at promoting well-being, by supporting positive youth development at school through *drug awareness*, *strengthening SEL*, and *giving emphasis to service*. In addition to studying SEL skills in the classroom, LQ promotes the *creation of a safe learning environment*. Learning to conduct an LQ lesson using specific LQ curricula is an additional goal of the LQ teachers' workshop. According to the age group of students three LQ curricula are available. Skills for Growing is for pre- and elementary school students, Skills for Adolescence is for middle school students and Skills for Action is targeted at teenagers. The goals of each curriculum are similar, in other words, all LQ materials are designed to help students develop their behaviour and skills to become healthy and capable adults (<https://www.lions-quest.org/>).

Lions Quest (LQ) was originally developed to prevent drug and alcohol abuse. Instead of offering information about drugs it was found that learning some life-skills such as social interaction was essential in preventing substance abuse. For example, Cuijpers (2002) investigated studies on drug prevention programmes in his review article. Because of this study he formulated quality criteria for the prevention programmes. One suggestion in the criteria to strengthening the effects of the programme was to add life skills to the content of the programmes. Today, when promoting positive development of young people, life skills are seen as important per se, not only as tools to prevent drug use. Hence, even though one of the goals of the LQ is still drug, alcohol, & tobacco awareness the programme stresses the importance of anti-bullying, connection to school, positive behaviour, character education and service-learning, all important elements in the development of flourishing classroom. Our recent study on LQ also showed that the focus of the LQ teachers' workshops are more on student's character development and on promoting engaging

learning environment than on the health promotion and the drug prevention (Talvio, Berg, Komulainen, & Lonka, 2016).

2.2 Quantitative Studies

Quantitative studies on the effectiveness of teachers' SEL interventions, namely, TET and LQ focused on investigating the quantitative changes of teachers' development of their social and emotional competence during their training. Teachers were asked to answer to the questionnaires before and after the intervention. The time between the two measuring points was in TET study about four months and in LQ study it was about one week. In addition, data from the comparison group were collected twice as well in order to check the possible effects of the mere measurement.

2.2.1 Sampling and Participants

The participants of *TET study* included 70 teachers (56 female and 14 male) in Finland. Altogether 26 teachers of them received no TET instruction (Table 1). The data for the *Lions Quest evaluation* was collected from 2120 participants in nine OECD countries and in ten areas (in Japan the data were collected in two areas). Of all the participants, 1206 teachers attended to LQ teacher workshops (intervention group) and comparison data were collected from 914 teachers not participating in a LQ teacher workshop (Table 2). Overall, the participants were a heterogeneous group of comprehensive school teachers according to their training and experience in SEL skills and their teaching experience. In these quasi-experimental field studies the samples were not randomized. The intention was to find teachers from ordinary schools in order to maintain ecological validity.

2.2.2 Measuring Instruments

As been mentioned before there is not much evidence on the research on teachers' development of SEL. It follows that it was difficult to find a suitable measuring instruments for our investigations. The following self-developed instruments were used to gather data for quantitative studies.

Materials for the Study on TET

Three instruments, namely, a Reactions questionnaire, a Knowledge questionnaire and the Dealing with challenging interactions (DCI) paper case method were developed according to the hierarchical model of Kirkpatrick and Kirkpatrick (2006). They suggested that instead of mere perceptions of teachers' own learning it is important to

Table 1 Characteristics of the participants of the intervention and comparison groups in the TET evaluation

	Comparison group		Intervention group				Total		
	Subject-matter teachers		Subject-matter teachers		Classroom teachers		n	%	
	n	%	n	%	n	%			n
<i>Gender</i>									
Female	21	80.8	16	69.6	19	90.5	56	80.0	
Male	5	19.2	7	30.4	2	9.5	14	20.0	
<i>Work experience</i>									
>10 years	18	69.2	16	69.6	13	61.9	47	67.1	
5–10 years	6	23.1	3	13.0	3	14.3	12	17.1	
<5 years	2	7.7	4	17.4	5	23.8	11	15.7	
<i>Years worked in the same school</i>									
>5 years	20	76.9	17	73.9	11	52.4	48	68.6	
1–5 years	3	11.5	4	17.4	6	28.6	13	18.6	
<1 year	3	11.5	2	8.7	4	19.0	9	12.9	
<i>Type of job</i>									
Permanent job	23	88.5	20	87.0	15	71.4	58	82.9	
Temporary job	3	11.5	3	13.0	6	28.6	12	17.1	
<i>Status</i>									
Full-time	26	100	22	95.7	20	95.2	68	97.1	
Part-time	0		1	4.3	1	4.8	2	2.9	

look at various aspects of the outcomes of the intervention, including the participants' reactions, knowledge and the application of knowledge (skills).

The Reactions questionnaire collected feedback from the TET course and included 10 items that were assessed using a five-point Likert scale with response options ranging from completely disagree to fully agree.

In *the Knowledge questionnaire*, participants were asked to define in their own words the central concepts of interaction skills studied in TET.

A Dealing with Challenging Interaction (DCI) method was developed to capture teachers' way of interaction in typical situations at work. The original DCI paper case instrument consisted of seven typical interaction situations common in the classroom. Each case consists of a description of a common event at school and the respondent was asked to describe in a few sentences how they would react to that event. For example, in an event that involves confronting the behaviour of a student, the teacher was asked to describe what s/he would do or say to a student (Talvio et al., 2015). The descriptions given by participants in the DCI questionnaire were content analysed, quantified and categorized (Frey, Botan, Friedman, & Kreps, 1992; Weber, 1990).

Table 2 Characteristics of the participants of the intervention and comparison groups in the LQ evaluation

Country	n	Gender ^a		Position ^a						Experience in years		
		Male (std. res.)	Female (std. res.)	Class	Subject	Special	Dual	Other	M	SD		
1	Total	304										
	Intervention	157	72	79	84	32	10	8	23	12.04	10.88	
	Control	147	62	84	81	36	10	5	14	17.71	11.21	
2	Total	202										
	Intervention	101	8	93	13	19	10	23	25	17.11	12.42	
	Control	101	3	98	5	39	5	35	14	21.85	11.36	
3	Total	204										
	Intervention	108	16	91	20	59	4	18	7	13.45	12.17	
	Control	96	25	71	24	50	4	11	3	12.28	11.76	
4	Total	202										
	Intervention	104	7	97	44	29	18	1	8	19.65	10.90	
	Control	98	8	88	32	44	13	1	6	19.10	10.64	
5	Total	284										
	Intervention	177	15	118	73	30	7	3	48+	12.42	8.61	
	Control	107	22	76	35	51	3	2	5-	12.26	8.42	
6	Total	199										
	Intervention	94	24	70	30+	46	1	1	15	15.25	9.17	
	Control	105	44	61	11-	77	0	0	6	16.40	8.91	
7	Total	202										
	Intervention	110	53	54	53	29	7	6	13	11.72	11.79	
	Control	92	38	53	53	16	5	0	18	18.31	10.89	

(continued)

Table 2 (continued)

Country	<i>n</i>	Gender ^a		Position ^a						Experience in years		
		Male (std. res.)	Female (std. res.)	Class	Subject	Special	Dual	Other	<i>M</i>	<i>SD</i>		
8	Total	40										
	Intervention	20	4	15	8	3	2	0	6	16.21	10.91	
	Control	20	4	12	8	2	2	0	7	14.32	8.45	
9	Total	251										
	Intervention	169	41	128	53	40	0	50	15	8.63	6.8	
	Control	82	26	55	24	28	1	11	11	14.66	11.41	
10	Total	232										
	Intervention	166	17	149	74	27	33	0	32	9.80	7.93	
	Control	66	15+	51	20	27	8	0	11	15.55	10.66	

^aStatistically significant over/under-representations with a cut-off of ±1.96 bolded

One idea, notion, view or opinion given by the participants was considered as one analysis unit. Thus, one answer could cover several units.

Both the statistical differences in the post-test scores between groups (two intervention groups and one comparison groups) and the statistical differences between the scores of the pre-TET and the post-TET tests were examined with a dependent sample one-way ANOVA. Pearson correlations were calculated to determine the relationships between the measurement scales.

LQ Questionnaire

In the LQ questionnaire, teachers' perceptions of the LQ goals were approached from their sense competence in promoting the LQ goals. To measure it, participants rated eight statements we developed (e.g., 'I am very skilled at supporting my students' self-esteem and self-confidence.') using a seven-point Likert scale with response option from "totally disagree" (1) to "totally agree" (7). In analysing questions regarding knowledge participants rated 16 statements and regarding applied knowledge they rated 8 statements. These statements were based on the categories of open-ended answers from the LQ evaluation in Finland. A response on the midpoint of the scale (4) was scored 0, agreeing correctly were scored positively from 1 to 3 and in turn disagreeing were scored negatively from 1 to 3. Negative items, where disagreeing was correct, were scored in reverse. The development of the multiple-choice questions in LQ questionnaire on knowledge and applied knowledge is a part of Minna Berg's doctoral dissertation (in progress).

Back-translation was used in order to maintain high quality of the translation of the LQ questionnaire. A translator blind to the original questionnaire was asked to translate the questions back into the original language. The back-translation was then compared with the original questionnaire, and any differences were explored; when needed, questions were rewritten.

2.2.3 Statistical Analysis

Analysis for the Study on TET

One of the goals for the quantitative study on TET was to develop an instrument to measure teachers' SEL skills in school situations and to study the reliability and validity of that, the so-called DCI instrument. In order to explore the discriminant validity of DCI, participants were grouped using latent class analysis (McCutcheon, 1987; Muthén & Muthén, 2009) into three clusters according to their responses to the DCI questionnaire. A principal components analysis with promax rotation and regression-estimated factor scores was used to condense and use the data from the DCI categories, the knowledge test and the course feedback. Finally, a Pearson's correlation, an analysis of variance (ANOVA) and cross-classification with a chi-square test were all used to estimate the relationship between the component variables. Three

statistical programmes were used: SPSS for Windows version 18, Mplus version 6 and Survo MM version 3.

After the development of the DCI possible changes in the participants' knowledge and skills (the application of knowledge) in SEL during the intervention were studied by using data from the knowledge test and investigating changes in six DCI categories, namely, listening, positive I-messages, confrontational I-messages, messages supporting autonomy and overall rating which represented those categories related to the desired ways of interacting and road blocks representing undesirable interaction messages. In addition, teachers' reactions to TET based on data from the course feedback surveys were explored. Furthermore, possible changes in the participants' experiences in terms of their social relationships and in their well-being during TET were investigated. Both the statistical differences in the post-test scores between groups (two intervention and one comparison groups) and the statistical differences between the scores of the pre-TET and the post-TET tests were examined with a dependent sample one-way ANOVA. Pearson correlations were calculated to determine the relationships between the measurement scales. SPSS version 20 was used in the analyses.

Analysis for Study on LQ

After screening the data from missing values and outliers the differences between the intervention and comparison groups in sample characteristics were examined. The differences were explored using cross-tabulations in which the adjusted standardized residuals were used to draw inferences of over- and underrepresentation. The t-test was used in investigating the differences in average teaching experience between the groups.

The mean sum scores were computed from the multi-item measures and they were used as variables in further analyses. Mixed MANOVA, (Tabachnick, Fidell, & Osterlind, 2001) was used to examine the effect of the intervention regarding mean change over time across groups in the variables. The analyses were conducted separately for each sample.

Finally, sample-wise, within-group mean differences between the pre- to post-test scores, were examined and effect sizes of the intervention were evaluated (Gibbons, Hedeker, & Davis, 1993).

2.3 *Qualitative Studies*

Purpose of the qualitative studies was on one hand to find out how teachers' answers changed during the intervention and, on the other hand, investigate the sustainability of the studied skills. TET was used as an intervention on both studies.

2.3.1 Participants

The participants of the qualitative TET study on the change in teachers' answers were teachers from one elementary school ($n = 21$) and one secondary school ($n = 23$) who participated in the TET in Finland. The four-day TET was organized in two parts within a six-month period. As regard to the study of the sustainability of the studied TET skills, altogether 19 class teachers and 12 subject-matter teachers of the intervention group participated in the study (Talvio et al., 2015).

2.3.2 Research Procedure

The qualitative change in teachers' answers were investigated by using Dealing with Challenging Interaction (DCI) method described earlier in this chapter (page x). The pre-test was answered right before the training and the answers to the post-test were given at the end of the training. The comparison groups answered approximately at the same time as the participants who attended to the study. Since the TET was conducted in two parts during the school year the time between the pre-test and post-test was about four months.

Six months after completing the TET the teachers who participated in the study about the sustainability of the studied skills received an email. They were asked to describe a situation where they had utilized or tried to utilize the studied skills. In addition, they were asked how well they can use the studied skills now and how they would comment the training to their colleagues (Talvio, Ketonen, & Lonka, 2014).

2.3.3 Data Analysis

The answers to open-ended questions were analysed by using partly a strategy that was driven from the Gordon's theory studied in TET. In the analysis of the participants' answers one idea, notion, view or opinion was considered as one analysis unit. The first author consulted the other authors regularly to discuss any difficulties that arose during the analysis or to obtain a second perspective on the appropriateness of the classification for specific units of the formulation of specific categories and subcategories. A content analysis of these answers produced a final categorization which included 10 categories with a good inter-rater reliability was established. Five categories—listening, positive I-messages, messages supporting autonomy, other I-messages and confrontational I-messages—represented the desired messages for interactions based on the course goals. Road blocks represented the only category of undesired messages for interactions. Three categories—'I do not compare', orders and conditions and encouraging or predicting—were data-driven and neutral from the perspective of the course goals. Finally, the tenth category—overall rating—was created as a holistic classification.

In regards with the study on the sustainability of TET three categories were established to condense the information of the skills used after TET: I-messages, Listening

and Road blocks. In addition, four data-driven categories were created to condense the information about with whom the skill was used: with students, with parents, with colleagues and with someone else.

3 Results

3.1 Quantitative Findings

3.1.1 Findings from the Study on TET

The dealing with challenging interactions (DCI) method which was developed to measure the social interaction skills of teacher study groups appeared to be a reliable and valid tool for measuring teachers' social interaction skills.

A cluster analysis differentiating between competent and less competent teachers supported the discriminant validity (Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2012). The results using the supplementary instrument were equivalent to the cluster analysis supporting the criterion-oriented validity of the method developed (Talvio et al., 2012).

Multi-phase quantitative analyses showed that teachers benefitted from TET. Among those who participated in TET, both knowledge (see Fig. 1) and the application of knowledge (skills) (see Fig. 2) improved significantly. In the comparison group, no differences between the pre- and post-test measurements were found (Talvio et al., 2013).

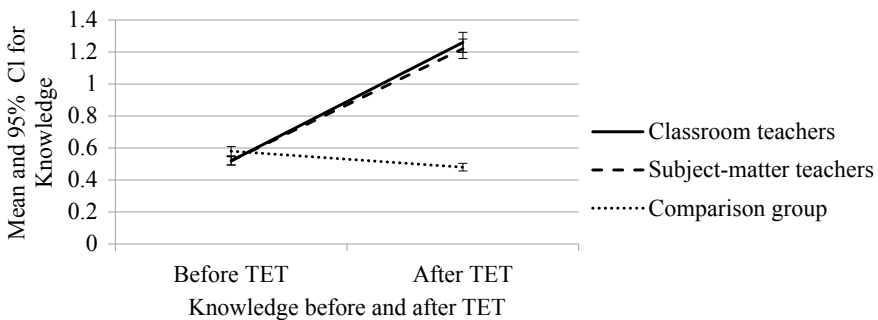


Fig. 1 Changes in knowledge between groups during TET. Study II: Talvio et al. (2013)

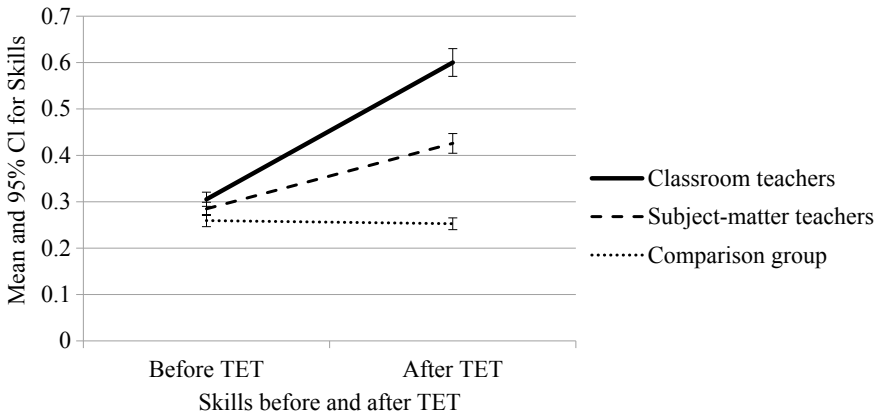


Fig. 2 Changes in the application of knowledge (skills) between groups during TET. *Study II*: Talvio et al. (2013)

3.1.2 Findings from Study on LQ

In our LQ study from nine OECD countries the sense of competence, knowledge and applied knowledge during the LQ teachers' workshops were explored. The preliminary results indicate, the LQ intervention had an identifiable effect on teachers' development of SEL in most of the participating countries. The biggest effects were on average for the development of the sense of competence and the smallest for the development of the knowledge (Talvio, Hietajarvi, Matichek-Jauk, & Lonka, 2018).

3.2 Qualitative Findings

As regard to qualitative findings four of the ten DCI categories—namely listening, positive I-messages, supporting autonomy and confrontational I-messages—fell within the scope of the study of the TET. Before the training, the typical response instead of *listening* was providing a solution to the problem or lecturing about the importance of studying hard etc. After TET, the teachers used Active Listening and avoided responses that might indicate that the teacher was taking control of the conversation. When the teachers were expected to give *positive feedback*, it was typical that before the TET course, teachers positively labelled their students when they had done something desirable (i.e. “You are bright!”). A few teachers said that since the students' diligence was normal and something which should be expected, no positive feedback was needed. After the training teachers provided a positive I-message (Gordon, 2003), that is, a detailed comment that included descriptions of the students' behaviour and the emotions and effects experienced by the teacher as a result of that behaviour. When teachers were supposed to give autonomy supportive

answers the answers before TET were typically teacher-led including giving solutions. After TET the teachers were willing to withdraw from the leader's role and allow the students to be more involved in solving their own problems. In regards to confrontation, before TET teachers used a lot of roadblocks (Gordon, 2003) i.e. warned, gave solutions, and expressed sympathy. After TET they talked about themselves expressing their feelings, and consequences of a pupil's behaviour to them. In addition, they were more likely to describe the undesired behaviour in their answers as well (Talvio et al., 2015).

Overall, the qualitative results showed that after participating in the TET the teachers expressed themselves in more detail by using positive and confrontive I-messages. By giving room to students, for example, by emphasizing listening skills, or by asking students to participate actively in a problem-solving procedure, they were also more likely to support students' actions that reinforced autonomy and agency. In some descriptions, however, teachers used the skills only partially. In conclusion, from the perspective of the TET course's goals, teachers learned to use TET skills in their responses and improved their readiness to support their students' autonomy and flourishing classroom (Talvio et al., 2015).

The study on the sustainability of the results revealed that most teachers mentioned the studied skills and expressed in their descriptions the ways of benefitting the knowledge and skills studied on the TET. In addition, almost all the teachers would have recommended the training to their colleagues.

4 Discussion

To conclude, SEL training appeared to achieve its goals since teachers seemed to benefit from the training on social interaction skills and became socially and emotionally more competent, which has positive effects on the classroom. Additionally, one of the studies indicated that the studied knowledge and skills were applicable and sustainable, too.

Indeed, training outcomes—such as positive reactions, the increase in knowledge and the developed behaviour among participants—represent predictors of high-quality training (Colquitt, LePine, & Noe, 2000). However, SEL is not a compulsory subject studied regularly weekly according to the schedule like math or history. SEL is more an alternative pedagogical approach for teaching and studying any subject at school. For example, in the Finnish national core curriculum SEL is seen as a part of seven transversal competences that should be carried out in all studying (Lonka, 2018). However, it is up to individual teachers which competences they emphasize. Hence, not only knowledge but also the sense of competence plays a central role when investigating the effectiveness of workshops because it predicts teachers' pedagogical choices and readiness in implementing the new programme.

4.1 *Practical Implications*

Mixed method approach gave rich data revealing the large variety of teachers' thinking. Quantitative studies were helpful in understanding the quantitative development in teachers' answers. Yet, it was especially interesting to analyse the descriptions about how teachers solved challenges in their classroom without training on SEL. Their suggestions were seldom straight driven from the theory of SEL but they were sometimes likely to ease the challenge. If the researchers offered answering options based only on the theory of the training, much interesting information would have remained unknown.

However, there are challenges in making qualitative analyses in multicultural context. Researchers should know the language of the answers they are analysing. In addition, understanding the culture of the society and the school is important for researchers to understand more thoroughly teachers' answers about how they were influenced by the training. However, hiring and training an international team for analysing the answers might become laborious and expensive. Therefore, in addition to the qualitative studies the quantitative approach in conducting the research was chosen too, because the data was collected from multiple countries. Furthermore, it gave relevant information about the quantity of the change in teachers' SEL during interventions.

There are a lot of studies on the development of SEL on students (Durlak et al., 2011). However, studying only their outcomes does not necessarily explain the quality of teachers' workshops. For example, it is possible that teachers are unable to conduct SEL in their classrooms due to administrative decisions or lack of knowledge how it should be implemented in the curriculum (see Gol-Guven, 2016). Teachers' beliefs do not affect their individual agency only; collective development should be considered (Biesta, Priestley, & Robinson, 2015). Thus, change in teachers' knowledge or sense of competence does not automatically produce better performance among students. This calls for administrative decisions and common commitment to develop the school culture (Humphrey, 2013). In Finland, SEL is now part of the new national curriculum (Lonka, 2018). Such changes may show in future studies.

It is also important to bear in mind, that the change of teachers' pedagogical practices might be quite slow, and the possible change cannot be explored right away. Since teachers are responsible for the quality of teaching they want instead of changing everything to test the new content they have learned piece by piece to make sure the new content really is beneficial (Guskey, 2002). Accordingly, teachers need time to adopt the studied skills as a part of their pedagogical thinking and practices they already have from their previous studies and experiences.

4.2 *Future Directions*

There is still lack of knowledge of the SEL implementation process in classrooms. Investigating some teachers who have just participated in training of SEL might give a chance to find out how teachers implement SEL at work. This information would be very important in developing the content of teachers' SEL workshops. Qualitative research based on video material for a few participants would provide interesting information. However, using video is not always feasible when the target group is large. In addition, it is difficult to capture the exact right moment when the behaviour of interest, such as how the teacher deal with challenging situations occurs. Furthermore, there is a substantial variety with regards to challenging interaction situations in everyday teaching practice. The professional practice of teachers extends well beyond the classroom. Communications skills are required in encounters with parents, colleagues, school administration and the surrounding society. Video camera does not necessarily record those important moments outside the classroom.

Naturally, students' experiences would also offer important data of the teachers' possible pedagogical change. It would also be interesting to compare those students whose teachers have participated in the training on interaction skills with students whose teachers did not attend any SEL training. Potential research questions could include topics such as the atmosphere of and interpersonal respect within the classroom, bullying and the affiliation of a teacher. Indeed, our next goal is to explore the benefits of teachers' SEL workshops for students. EU funded project Learning to Be looks at both teachers and their students in five European countries (<https://learning-2-be-evaluation.webnode.fi/>).

Administrators' role in implementing SEL at school has lately been emphasized in literature (Humphrey, 2013; Lendrum & Humphrey, 2012). It would be important to compare administrators' attitudes and readiness with implementation processes in schools. This research would help curriculum designers to develop material for school staff who make decisions and give support to teachers.

Since teachers work a lot beyond the classroom students' parents and colleagues would be very good informants as well. Potential research questions could include topics such as the classroom climate and interpersonal respect within the classroom, preventing bullying and the affiliation of a teacher.

5 Conclusion

Today, the need for productive interactions and good relationships are explained through the sociocultural context. It is known that knowledge, skills and understanding are negotiated and developed in a social setting—through interacting with peers, teachers, parents and the broader community (Wenger, 1998). Learning is, thus, an interactive and co-regulative process mediated by thinking tools and social practices (Bandura, 2006; Hakkarainen, Palonen, Paavola, & Lehtinen, 2004; Vygotsky, 1978;

Wenger, 1998) in which individuals constantly alter their actions according to the other members of the learning community (Fogel, 1993). In the classroom, teachers and students tailor their actions according to the clues they receive from one another (Rogoff, 1990). Hence, good teachers know how they are perceived by students. By regulating the amount of affiliation and control they wield, teachers are able to align their instruction with their students' needs and expressed preferences (Wubbels & Levy, 1997). Since the requirement of learning is an awareness of cognitive and metacognitive experiences, feelings and motivation, it is important that these aspects are not overlooked. Instead, by using their interaction skills, teachers promote their students' autonomy, share a relative agency with their students and encourage students to take responsibility of their own learning (Edwards, 2005; Salonen, Vauras, & Efklides, 2005; Talvio et al., 2015).

Active role of the student is seen essential in socio-constructivist theories (Lonka, 2018). Accordingly, students should be able to experience autonomy and self-efficacy (Bruner, 1996; Sfard, 1998; Vygotsky, 1978) in interactions in the classroom (Pyhältö, Soini, & Pietarinen, 2010). The teachers' task include helping their students actively participate in shared learning processes and to foster adaptive models of engagement (Emmer, Sabornie, Evertson, & Weinstein, 2013; Freeman, Anderman, & Jensen, 2007; Hakkarainen et al., 2004; Patrick, Turner, Meyer, & Midgley, 2003). Cultural tools for participating in learning situations offered by the teacher help students to adopt, master and use knowledge, skills and ways of thinking characteristic of the cultural setting (Bruner, 1996). Teachers' social interaction skills promote students also to become intrinsically motivated and competent in demonstrating high levels of autonomy and self-determination resulting in self-regulative students whose psychological well-being is on the high level (Deci, Koestner, & Ryan, 2001; Leroy, Bressoux, Sarrazin, & Trouilloud, 2007).

Hence, modern learning psychology emphasises creating effective teacher–student collaboration and an engaging learning atmosphere, where interaction is effective, active and respectful (Allodi, 2010; de Kock, Slegers, & Voeten, 2005). These are related to students' psychological well-being and academic performance (Durlak et al., 2011; Elias et al., 1997). Therefore, schools should promote these aspects in order to maintain the learning and well-being of the students (Elias et al., 1997). Teachers' social and emotional competence facilitates learning through fostering their students' experiences of participation, autonomy and agency, which also lead to better academic performance (Brophy-Herb, Lee, Nievar, & Stollak, 2007). In fact, many current theories of learning comprise ideas of the benefits related to collaboration and feedback (Ketonen, Talvio, & Lonka, 2014; Lonka & Ahola, 1995; Mezirow, 1990, 2000). For example, a skill to receive feedback in a constructive way and modify one's performance for the next time is an effective way to grow for anyone. Recently, this skill has been named as “feed forward” emphasizing the importance of promoting the ability to take action (Murtagh & Baker, 2009). Thus, social interaction skills are needed for fruitful negotiations in the classroom in order to move on to the next phase of students' SEL.

Accordingly, teachers' social and emotional competence is crucial in students' learning. However, teachers who have adopted knowledge and skills related to social

and emotional learning benefit from them also themselves. Grayson and Alvarez (2008) found that teachers who were able to maintain positive relationships with their students were more likely to remain enthusiastic and to be engaged at work. Additionally, teachers' emotional stage was closely associated with the climate of relationships with parents and/or the community and student–peer relationships. In the flourishing classroom, the teacher uses social and emotional skills for recognising their students' performance in light of the factors related to SEL (Jennings & Greenberg, 2009). As a result of this understanding, these teachers are likely to be skilled in classroom management and in facilitating enthusiasm and enjoyment in learning by being proactive, which make the teacher's work more enjoyable. They also understand the dynamics of conflicts in the classroom and are better able to respond to this behaviour effectively, yet respectfully. Furthermore, socially and emotionally competent teachers serve as role models of social interaction skills. Without consciously teaching such skills, students learn a lot from their teachers' example, for instance, how to recognise and manage emotions and needs, how to promote happy relationships and how to make responsible decisions in respectful ways (Durlak et al., 2011; Jennings & Greenberg, 2009).

The results of the present studies indicate that even a relatively short-term, low-cost intervention in teachers' SEL is worthwhile. Successful SEL enables teachers and their students to face challenges and promote well-being inside and outside school more easily. Due to the globalisation the growing networks of collaboration social and emotional skills will be increasingly important in future. Presumably, the need for research of SEL will grow, too.

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Exploring Flourishing in a Multicultural Work Context: Proposed Constructs for Interventions



Anindita Ghosh

Abstract Flourishing, an indicator of well-being is a growing area of work. Multitude of positive psychology constructs and a plethora of factors in multicultural organizations add to the complexity of studying employee flourishing. Therefore, a gap in knowledge exists pertaining to understanding which interventions directed towards attainment of flourishing are best suited to employees working in multicultural environments. To that end, the current chapter presents gratitude, contribution to community, work engagement and social connectedness as crucial elements in attainment of flourishing for employees. It is thus postulated that positive psychology interventions addressing these four elements would enable flourishing among employees. These constructs have been proposed on the basis of previous literature, well-being theories and specific characteristics of multicultural societies such as India. Furthermore, gratitude and work engagement garner support from a large-scale quantitative study, while support for contribution to community and social connectedness is provided through the findings of a qualitative study. Possible influences of different languages, religion, family systems, social stratification, and traditions have been discussed with insights from a multicultural context. The chapter will provide a description of these four elements, and how they are experienced in multicultural contexts with focus on specific cases from the qualitative study. While the chapter does not propose an entirely novel intervention, it recommends directions for future interventions within the organizational setup for practitioners and researchers. This is expected to contribute to the well-being of employees, which can further build positive organizations; and consequently positive communities, which is the larger goal of positive psychology.

Keywords Flourishing · Positive psychology intervention(s) · Gratitude · Contribution to community · Work engagement · Social connectedness · Well-being

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1 Introduction

In recent years, research on flourishing has expanded to different fields including positive organizational behavior (POB). POB as an area of enquiry was first proposed by Luthans (2002) who defined it as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (p. 59). Therefore, POB addresses the positive aspects of work with the aim of increasing well-being for individuals, and performance for organizations (Ghosh, 2017). Flourishing represents high levels of well-being (Keyes, 2002) and may thus be used as the “gold standard” for assessing it (Seligman, 2011). Flourishing can lead to positive health outcomes through close relationships (Ryff & Singer, 2000), better financial management (Asebedo & Seay, 2015), and sustainable development (Cooperrider & Fry, 2012).

Well-being is a multifaceted construct, represented in a variety of forms especially in multicultural contexts; where employees come from diverse backgrounds and have different personal conceptions of well-being. In the last decade or so, several well-being researchers have reported findings from organizational settings across different cultural contexts on varied topics ranging from work-life balance, engagement, to leadership. This early work was majorly directed towards establishing the relationship between flourishing and its possible predictors. However, relatively less focus was given to how this information can be used to increase well-being. The aim of this chapter is to move beyond these initial investigations and present constructs that have been found to lead to flourishing among employees within multicultural contexts. This proposal is based on research that has found gratitude, work engagement, contribution to community, and social connectedness as important predictors of flourishing in a multicultural organization. Understanding the association between flourishing and these four elements will help develop interventions based on them to increase flourishing. This finding can be used by researchers and practitioners to enhance well-being in other multicultural organizations.

2 Flourishing Among Employees: Background and Current Status

Flourishing has been identified as a “promising new outcome variable for POB researchers” (Simmons & Nelson, 2007, p. 50). It has been variously defined (Hone, Jarden, Schofield, & Duncan, 2014) and its prevalence has been studied across different nations by researchers; with Seligman (2011) declaring it as an important indicator of well-being.

One of the earliest investigations on flourishing among employees by Fredrickson and Losada (2005) was based on the positivity ratio. This study in distinguishing between flourishing and languishing business teams identified positive communica-

tion and expressions of support among team members as key factors in the process. Researchers also developed theoretical models in the context of flourishing in organizational settings. For instance, Grant and Spence's (2009) model suggests that employees experiencing higher flourishing and intentional goal striving are happier and more autonomously motivated than those with lower mental health. Thereby becoming an asset to the organization. Alongside, researchers explored variables that might contribute to flourishing among employees such as engagement at work studied by Schaufeli, Bakker, and Rhenen (2009) and gratitude in organizations investigated by Di Fabio, Palazzeschi, and Bucci (2017).

A review on flourishing at work by Mehrotra and Tripathi (2013) attempted to bring together research on concepts underlying the construct as proposed by Keyes (2002). On the basis of this review, the authors concluded that that flourishing "is rarely used at the level of a psychological construct in the organizational science/business literature" (p. 239). However, if flourishing were to be explored further specifically in the context of organizations, it can be a steadier predictor and enhancer of productivity. This is supported previous research by Diener et al. (2010) and Hone et al. (2014) that claims flourishing is more stable than the short-lived affect. Hence studying and enhancing only positive or negative affect at work will not lead long-term organizational benefits.

3 Studying Flourishing in Multicultural Work Settings

Mio, Barker-Hackett, and Tumaming (2006) define multicultural psychology as the "systematic study of behavior, cognition, and affect in settings where people of different backgrounds interact" (p. 3). Since multicultural settings consist of a wide range of variables that influence the outcome, Mio et al. (2006) identify the goal of the field as helping practitioners find the best match between the client's culture, the problem and the intervention(s) to be used. When this proposition is applied in the area of positive psychology where the aim is to study well-being, the selection of variables appears to be a difficult task. This is because flourishing is understood to be a multifaceted variable, which may be manifested in a range of ways even in a homogenous context. Hence, in a multicultural context, its representations are expected to be even more varied, in terms of both number and intensity of outcomes.

Similarly, even within one organization, regular variations in terms of employee age, gender, designation, and other sociodemographic variables are expected. Furthermore, a multicultural context brings new additions in terms of ethnicity, language, value systems, and nationality factors. Therefore, studying flourishing in multicultural work settings adds to the situation a plethora of factors that researchers must be aware of. This will help researchers and practitioners to select variables and samples accordingly in planning their research, especially intervention-based attempts.

4 Insights from a Multicultural Workplace: The Case of Flourishing Employees in India

Ghosh's (2017) extensive review of literature focusing on psychological variables related to mental health of bank employees in India revealed the number of studies that employed deficit-based approach far exceeds the number of explorations that utilize a strengths-based approach. This establishes that research on public banks has focused more on negative outcomes including stress as compared to positive constructs such as flourishing. It is against this deficit-based backdrop that the present chapter posits a framework for flourishing employees in multicultural workplaces.

Public banks in India, that is, banks owned by the government are ideal examples of multi-cultural environments. Employees belonging to different backgrounds work here together to achieve common organizational goals. These employees represent a range of diversities in religion, caste, region, language, food habits, and cultural traditions among others. The extent of diversity an employee is exposed to may be illustrated through the following example. In India, different languages are spoken in each of its 29 states. Within this background, the government sector banks transfer employees from one location to another, every three to four years. Thus, an employee, from the eastern state of West Bengal, familiar with the Bengali language and with no understanding of other regional languages may be posted to work in the southernmost state of Kerala, where the regional language is Malayalam; followed by a transfer to another state with yet another unfamiliar language in every three to four years. Though official notices are issued in English, Hindi (the national language), and the regional language of that state, a lack of basic communication skills in the regional language hinders interaction with customers and coworkers in many situations. While the former may not have proficiency in English or Hindi, the latter's acceptance of the employee from the outgroup where the employee does not belong to the particular state or region may have an impact on their social and occupational life. The way individuals choose to behave towards an outgroup member depends on the situation and their cultural cognitive styles. Typically, the Indian cognitive styles allow new ideas to seep in but do not replace the already established ideas (Sinha et al., 2010). Thus, there is presence of diversity in thought yet contradictory ideas exist in such a multicultural work environment.

Organizational literature supports that diversity in the workplace promotes performance (for example, Luring & Selmer, 2011). However, Sen (2005) illustrates possible discriminations against those who belong to lower rungs of the caste system, economic class, and similar social strata. Hence, though differences promote diversity, unequal treatment on the basis of these divisions may demotivate employees.

Another vital factor that further influences the organizational context is the presence of both collectivistic and individualist traits in the national culture of India (Hofstede Insights, 2019). The collective nature of behavior might prompt individuals to help in-group members in different situations. For instance, in hiring and promotions, expending extra efforts to help a co-worker or customer, loyalty towards the employer, and display of protection by the employer towards the employee.

Alternatively, the individualistic nature makes individuals understand that they are responsible for their own actions (Hofstede Insights, 2019). Their compelling personal needs (Sinha, Vohra, Singhal, Sinha, & Ushashree, 2002), such as self-serving or goal achieving behaviors (Sinha et al., 2010) are achieved by engaging in collectivist behaviors.

Insight into this multicultural workplace was gained from a large-scale, cross-sectional quantitative study ($N = 1474$) in one such public bank in India (Ghosh, 2017). This identified gratitude $\{X^2(4) = 111.80\}$ and work engagement $\{X^2(4) = 23.29\}$ as important predictors of flourishing in the overall model statistics using multinomial logistic regression. Furthermore, both these variables show significant positive correlations ($r = 0.37, p = 0.01$; $r = 0.36, p = 0.01$) with flourishing. This was followed by a qualitative exploration that captures the personal interpretations of the construct of flourishing. Interviews with 10 bankers uncovered several facets of well-being including participants' understanding of the concept. The researcher deliberately chose to use the term "well-being" over "flourishing" in conversing with participants, as the former term is more familiar to laypersons. Thematic analysis using the Braun and Clarke's (2006) guidelines was performed. Responses expressed indicated that the participants related well-being with a wide variety of experiences ranging from being treated well by others to experiencing work-life balance and being with family and friends. Most importantly, contribution to community and social connectedness seemed to stand out as being imperative to flourishing. Previously, Andrews (2010) using focus group sessions studied flourishing among employed mothers. These participants explicitly expressed that despite challenges, they experienced the state of flourishing described variously as being able to combine career and motherhood in their lives, being realistic about their expected accomplishments, having social support and a good amount of flexibility in their lives. It is important to note that both these studies were conducted in the multicultural nations of India and America respectively, which possibly explains the numerous manifestations of well-being that were reported by individuals belonging to diverse backgrounds.

The constructs have been proposed on the basis of previous literature, well-being theories and specific characteristics of multi-cultural societies considering the case of India. Furthermore, this is supported by evidence from the above-mentioned large-scale quantitative and qualitative investigation on flourishing among bankers in India. This chapter presents four elements that may be enhanced with the aim of increasing flourishing among employees within multi-cultural contexts. These will be explained with cases that best represent the construct from the qualitative study.

5 Flourishing and Gratitude

Literature shows that practicing gratitude promotes both positive selectivity bias and the experience of positive affect thereby contributing considerably to overall well-being. For example, Park, Peterson, and Seligman (2004; $N = 3907$) confirm that gratitude was consistently related to higher life satisfaction while being reported

as one of the top five character strengths for most participants. Also, Wood et al. (2008) found that trait gratitude led to higher levels of perceived social support, and lower levels of stress and depression. Furthermore, increase in gratitude protects people from stress and depression and helps cultivate social support. After multiple cross-sectional and longitudinal studies that established the psychological factors which relate to gratitude, researchers then attempted application of these research findings through gratitude interventions. These studies showed that increasing gratitude results in increasing well-being, its indicators such as health behaviors, physical symptoms, overall life appraisals (Emmons & McCullough, 2003), and relationship formation and maintenance (Algoe, Haidt, & Gable, 2008). Thus, it may be concluded that gratitude shows a strong relationship with well-being (Wood et al., 2010) and a conscious focus on blessings may have emotional and interpersonal benefits (Emmons & McCullough, 2003).

For employees, gratitude may be an effective character strength in enhancing the effect of positive events as well as in dealing with negative ones. This is supported by Vacharkulksemsuk and Fredrickson's (2013) argument that by keeping a stalk of positive emotions within the organizational context, employees can counteract negative cognitive biases in the workplace. This is better explained through the following case study that demonstrates the importance of gratitude and positive selectivity bias on flourishing.

Case Study: Reena

Reena is a 27-year-old, married, female banker who works at the junior management level. She derives well-being from spending time with family and from her travel experiences. While she displays openness to experience such as thrill-seeking behaviors in these experiences, she also seeks meaningful experiences through helping others. Both kinds of behaviors contribute to flourishing according to her understanding of the concept. Her tendencies towards positive selectivity bias such as "eating good food and sleeping" as well as benefits associated with her job, such as low rates on bank loans and travel allowance, enable savoring of pleasant life experiences. These may have contributed to her flourishing. Practicing such positive selectivity for a long time may instill in her with feelings of gratitude towards the organization and her life situations overall. Reena's ability to focus on the positive outcomes to derive well-being is also evidenced through relationship-based behaviors. Reena cites instances from her everyday experiences where "helping friends and family" and "an injured customer to withdraw money" from the bank made her feel good. Thus, both positive selectivity bias and positive outcomes in relationships allow her to experience positive affect.

It may be noted that this is an experience from a multicultural work setting where the presence of a multitude of factors may pose difficulties in executing a flourishing intervention. But, on the other hand, the possibility of having multiple well-being outcomes as seen in the above case study increases the likelihood of employees being able to flourish. Multicultural nations have their specific features as well. For instance, Ghosh and Deb (2016) summarize on the basis of prior studies, that in the Indian culture both male and female children from an early age are socialized

such that they learn to forgive and express gratitude. Furthermore, Hindu, Muslim, Christian, and Buddhist thoughts also consider gratitude as an important dispositional trait imperative to “living life well” (Solomon, p. 3, 2004). Since these are prominent religions followed in India, it may be derived that training in these social behaviors and religious concepts impacts individuals at a conscious and unconscious level. Thereby enabling them to focus on the benefits while overlooking transgressions by significant others and authoritative bodies. The fact that this may not always lead to long-term well-being is debatable. However, the possibility of being able to use positive selectivity bias to achieve flourishing under adverse circumstances cannot be denied due to its association with positive affect.

6 Flourishing and Work Engagement

Seligman’s Authentic Happiness (2002) and PERMA (2011) theories have long established the crucial contribution of engagement to well-being. Later, several researchers studied the POB concept of work engagement in order to understand the process through which well-being and related outcomes are achieved by employees. Bakker and Demerouti’s (2008) investigation describes engaged employees as not those who are workaholics, but rather those who work because they enjoy it and find it fun. This makes them more creative, productive, and willing to expend efforts for the organization.

Using the Utrecht Work Engagement Scale, Schaufeli et al. (2001) (as cited in Bakker & Demerouti, 2008) found that engaged Dutch employees have high energy and self-efficacy. This study further identifies that it is due to the experience of such positive attitudes and activity levels that engaged employees are able to create positive feedback in terms of appreciation, recognition, and success. Also, this is experienced in activities beyond work such as in sports, creative hobbies, and volunteer work. Additionally, studies have established the contribution of work engagement to positive outcome variables related to flourishing. Vigor, which is a component of work engagement has been considered as an indicator of their optimal psychological functioning (Shirom, 2007). Furthermore, work engagement is positively correlated (Field & Buitendach, 2011) and leads to increases in happiness (Malekiha & Abedi, 2014; Rodríguez-Muñoz et al. 2014). It is also one of the contributors of work-related well-being (Soh, Zarola, Palaiou, & Furnham, 2016).

The association between work engagement and flourishing is well demonstrated through the following case study.

Case Study: Rahul

Rahul is a 31-year-old, male employee working at the middle management level. He is married but has to live away from his family due to the transferable nature of his public banking job. His understanding of well-being involves having time for oneself, maintaining work-life balance, and enjoying work. Enjoyment of work

indicates the possibility that the employee is able to engage in it according to Bakker and Demerouti's (2008) explanation. Rahul narrated his experience of setting up a new bank branch in a rural area where there was none earlier. Even though he had to start the branch and its operations from scratch, he metaphorically explained this through the example of how a seed when nurtured will flourish into a tree, "*when it starts with the zero, but gradually we grow. It's like... planting a new seed. And see it grow into a tree...sometimes it's like, you are own entrepreneur of your own business.*" This instance may be analysed in the light of Schaufeli and Bakker's (2010) description of work engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Rahul's willingness to invest effort in a challenging situation at work and mental resilience towards accomplishing this goal of establishing a new bank branch indicates a sense of vigor. High energy associated with vigor helps the individual to engage in such tasks. Furthermore, dedication is indicated through a sense of enthusiasm and pride about being involved in the work. While the aspect of absorption is not explicitly expressed in Rahul's account, it is difficult to conclude whether absorption was not experienced, or experienced but not consciously acknowledged.

In Rahul's case, establishing banking operations in a remote and rural area was an accomplishment of being able to manage an entire unit and developing many technical skills. Being able to lead this remarkable process was acknowledged as a positive aspect of work. These accomplishments and engagements may be understood to contribute to well-being through a sense of meaningfulness and positive affect.

Furthermore, long-term and consistent engagement with work is typically expected to lead to improvement in skills and better output. Thus, other outcomes of engagement that may have indirectly contributed to Rahul's well-being include gaining appreciation, trust, and respect from customers, and achieving corporate success in terms of goals, targets, and rewards associated with it. These may also be viewed as meaningful experiences that according to Seligman (2002, 2011) is a crucial contributor to well-being. Some of these meaningful experiences such as the "helping nature" of the work which provides employees with the opportunity to engage in behaviours such as serving customers, the freedom to take own decisions, and receiving praises from both superiors and customers are described by Rahul as "enjoyable." This shows the overlap between engagement and meaningfulness and their connection with positive emotions—all of which according to Seligman (2011) subsequently lead to well-being.

It may be noted that in a collectivistic society where serving a purpose greater than oneself is highly appreciated by society, Rahul's well-being may have stemmed from being able to fulfill this socially valued criterion. Despite the financial and emotional costs associated with working away from home and spending time in remote locations, Rahul was able to develop a sense of well-being through engagement and meaningfulness associated with work.

7 Flourishing and Social Connectedness

In positive psychology models such as Seligman's theoretical model of happiness (PERMA; Seligman, 2011), relationships have been presented as a crucial determinant of well-being. Researchers including Diener et al. (2010), Huppert and So (2013) and Hone et al. (2014) agree that flourishing consists of specific features, one of them being positive relationships. Kaplan et al. (2014) found that social contact could have an immediate impact on affect, including positive affect in the workplace. One of the chief challenges faced by employed individuals is to be able to balance relationships along with work commitments. If a person is able to give time to people in their lives and not carry problems from one domain to another, they can achieve peace in their family life and attain work-family balance (Delecta, 2011). Comtois (2012) summarizes that people can enhance their ability to flourish by improving their work-life integration. Thus making endeavors to improve work-life balance through the application of positive psychology seem relevant in the pursuit of well-being. This is because most of the positive emotions such as laughter and love according to Ghosh (2017) are generally experienced around others. Moreover, longstanding relationships with peers, siblings, parents, extended family, and friends as well as fleeting ones with strangers are all sources of support.

The following case study illustrates the importance of social connectedness in the experience of flourishing.

Case Study: Priya

Priya is a 26-year-old female employee occupying a clerical position in a public sector bank. She is not married and presently lives by herself in a rural location due to work commitments. Priya is close to her parents and her younger sibling and talks to them over the phone every day. She is often visited by friends and sometimes by her family. Many professionals in the contemporary Indian society live in set-ups where they share accommodation with a colleague or friend. This allows them to have social connections even when they are away from parents, siblings or their spouse, thereby contributing to their flourishing.

When asked about her understanding of well-being, Priya confessed that she had never given it a conscious thought before. She added that she derives well-being from both personal and professional relationships such as that with her customers. Priya has a caring family that is supportive during challenging situations, even professional ones such as the 2016 demonetization process in India, which was a tough phase for bankers. Since professional relationships are important to her, Priya appears to have made an effort to maintain them by developing requisite skills such as controlling "anger" and gaining "interaction skills". These efforts are reinforced via favorable outcomes such as appreciation from her customers. It may be noted that a majority of customers in the rural bank branch where Priya is posted, lack awareness in banking operations and financial literacy. They are thus dependent on the bankers in a way that urban customers are not. Priya experiences happiness from being able to help them as explained in the following statement: "*They all appreciate your*

work when you are trying to help them. Nobody is there to notice these small-small things in urban areas... So after being posted to a rural branch, you experience all these things and you feel good. I am definitely feeling very good." This may also be viewed in the light of Algoe and Haidt's (2009) finding that receiving gratitude promotes relationships with responsive others. Additionally, Priya claims that: "*I do feel my work is meaningful. I felt...great during demonetization by helping poor people*" access money, "*...nothing can give happiness like that. Not even money.*" In this case, the act of gratitude that customers express towards the employee has led to the experience of positive emotions, meaningfulness at being able to help others, a sense of satisfaction and subsequently well-being. Due to the familiarity and closeness developed in interactions with customers, Priya is made to feel like a part of the customer's family. This is reflected well in her words—"*...they... celebrate their happiness with us. We are becoming a part of somebody's happiness who is absolutely unknown*" (to her). The need for acceptance from others, in this case, the customers, fulfills belongingness and esteem needs. Positive relationships with the workplace can encourage employees to go beyond the call of duty when required. This is well illustrated in Priya's narration of how bankers strived uncomplainingly to meet situational demands during the demonetization phase of 2016 in India when they would forgo lunch and spend nights in the bank in order to complete work.

Despite her commitment towards work and professional relationships, Priya is conscious about the necessity of maintaining work-life balance and practices segmentation (versus integration) of work and family. Priya believes in investing absolute efforts at work, but once outside of it, she prefers spending time with friends and family. She emphasises that since she lives far away from them, it is important for her to find time for them.

Finally, an important observation in Priya's narratives was her use of "we" instead of "I" in replying to questions about her professional relationships. When pointed out, she clarified that "*We... meaning bankers here, are like a family itself. Everybody is equal here, everybody is working... So that is why I can never say I.*" It is obvious that much importance is placed on the collective effort of all employees instead of focusing on individual efforts. This may be a characteristic feature of the collectivistic Indian society of India where the respondent resides. Deriving from the same collectivistic dimension of the Indian culture, being rejected by one's peers, or to be thought lowly of by one's extended and immediate in-groups, according to Hofstede Insights (2019) leaves employees with a sense of intense emptiness. Thus, they prefer strong and positive relationships with co-workers and customers. All of this appears to have contributed to Priya's ability and motivation to develop well-being through social connectedness.

This case well demonstrates how well-being is derived from both personal and professional relationships.

8 Flourishing and Contribution to Community

Contribution to community may be understood as behaviors that involve serving individuals other than the self and/or serving whole institutions. Well-being models including Authentic happiness (Seligman, 2002) and PERMA (Seligman, 2011) highlight the importance of meaningfulness in the experience of well-being. The experience of meaningfulness is what encourages individuals to behave in ways that contribute to the community. In professions such as medicine, teaching, and banking where one is able to directly help an individual achieve an outcome, the feeling of having served a greater purpose in another person's life is understandable. Thus, helping people and contributing to the community are integral responsibilities of such professions and can contribute to well-being in multiple ways. While employees receive tangible benefits such as salary and other remunerations, there are also intangible outcomes in the form of a sense of meaningfulness and satisfaction at being able to contribute to the organization. The process of contributing to community also involves engagement and positive emotions which are directly associated with well-being according to Seligman (2002, 2011). Additionally, engaging in acts of kindness induces positive experiences of being appreciated and making new friends (Lyubomirsky & Della Porta, 2010)—outcomes that promote overall well-being.

Biggio and Cortese (2013) posit that respect is one of the factors that influence organizational well-being. Behavior that contributes to community may be reinforced when the employee is respected for their gesture, an outcome that they may consider as an accomplishment. The motivation to then continue such a behavioral initiative may lead to larger community and organizational benefits. However, trivializing an employee's efforts towards contribution to society may destroy the sense of accomplishment felt from having achieved a milestone, thereby discouraging the individual from repeating the behavior.

The following case study demonstrates how contribution to community results in a range of outcomes including a sense of meaningfulness and positive affect that promote well-being in an employee.

Case Study: Ravi

Ravi is a 28-year-old male employee of a public bank working at the junior management level. He derives a sense of positive affect, meaningfulness, and achievement at being able to serve customers, especially the less privileged who are in dire need for assistance. Ravi cites examples of very senior citizens and illiterate farmers who require special attention. In his words, "...*helping them makes me feel nice...I finance the poor farmers. If you don't finance them, they will not be able to cultivate.*" This mindset and behavior may be understood in the light of specific features of the given sociocultural context. The collectivist society of India supports a larger social framework in which individuals are expected to act in accordance with the greater good of one's defined in-group(s) (Hofstede Insights, 2019). Thus patriotism, which is identified as a goal of Indian managers (Hofstede, Van Deusen, Mueller, & Charles, 2002) arising from this national identity organically enables contribution to the commu-

nity through the need to contribute to the country. It should be noted here that though the employee is interacting with other individuals, here the customers, the aim is to benefit the disadvantaged. This separates it from social connectedness, where the act of maintaining or forming new relationships leads to experiences of flourishing.

While Ravi's helping behavior eventually contributes to the community, Ravi also reported simultaneous outcomes such as positive relationships with customers and colleagues, kindness, and positive affect among others. Notably, Ravi mentioned having a helping orientation in life, which extends to both personal and professional relationships; for instance: "*Actually I am a very helpful person. So in my personal life also, I like to help people.*" This is displayed in Ravi's behaviors of not only in serving customers but also in assisting colleagues who experience difficulties in handling clients. Along with positive affect and meaningfulness, this results in developing positive relations with his co-workers. Ravi described a number of incidents that demonstrated his vigor and dedication towards work with the need to contribute to a greater purpose. These instances led to feelings of accomplishment, recognition, respect, and a sense of identity in his work that in turn reinforced this behavior.

Some meaningful experiences stem from an individual frame of reference where there is intrinsic motivation to perform. Others involve an external frame of reference, such that helpful acts towards customers are understood as a requirement of the employee's position and duties associated with it. For example, one derives meaningfulness from being an employee of a public sector bank that allows him to invest efforts in contributing to the country's economy and subsequently well-being of society.

Both kinds of experiences may lead to the development of positive character that will further facilitate the advancement of positive institutions, which in turn will contribute to the building of positive communities. This is a reflection of Seligman and Csikszentmihalyi's (2000) vision of the future of positive psychology. Hence, individual effort contributes to building of organizations, and finally the community, which may be represented geographically as a country. Overall, contribution to community was found to be an important and less studied element that helps individuals, organizations, and communities flourish.

In the above descriptions, it can be seen that all the four elements are interconnected with positive affect being a nexus. The manner of these connections and whether these interconnections have an effect on flourishing remains to be verified.

9 Practical Implications and Future Directions

The proposed constructs for focusing interventions have important research and policy implications. The research implications will help future researchers to develop interventions for employee flourishing in multicultural contexts. The policy implications may be utilized by organizations in enhancing individual and organizational flourishing. While four elements of gratitude, work engagement, contribution to community and social connectedness will remain common to all multicultural contexts,

those administering the intervention should be aware of the unique features of the sociocultural environment that need to be addressed in the process. Some examples of how these features may be dealt with are discussed below with a focus on the interventions' acceptability, timing, target audience, nature of work, personality traits, and group level interventions. It will also provide suggestions for exercises on contribution to community as this is a unique finding from a multicultural context rarely studied in positive psychology investigations before.

Acceptability can be addressed by extending Sin and Lyubomirsky's (2009) findings for self-selection. Among predominantly democratic organizations, employees could be given the option of self-selection or of being assigned an intervention on the basis of person-activity fit. The format of administration- either individual, group or self-administration can also be included in this list. For example, management may give employees access to online self-administered interventions that they can practice as per their convenience and willingness. Allowing these choices would be more fruitful in multicultural contexts, as employees may have different pathways of flourishing and hence different choices for interventions. However, considering the time and money that organizations invest in individual intervention settings, they would perhaps prefer group sessions. This would also promote making new social connections within the group undergoing the intervention. However, employees in organizations that follow a hierarchical setup may be more familiar with interventions being assigned to them according to the organization's expectations from them. It is for the same reason that in such organizations, any intervention needs to be initiated by the top management or higher level personnel; such as in the public banking organization example discussed above. However, if an intermediate collectivistic-individualistic context exists, like modern India, both volitional practices that promote autonomy, and directive exercises would be considered suitable.

The *timing* of positive psychology interventions is one of the most crucial decisions that organizations need to take. Interventions for social connectedness need to be tested and applied when a new team is being built. Furthermore, unexpected adverse circumstances at the organizational or national level such as downsizing and natural calamities respectively maybe times when flourishing interventions are required. Employees can be administered exercises on gratitude and social connectedness such as benefit finding and active constructive responding after such scenarios are experienced. On the other hand, expected changes such as commencement or termination of a major project, introduction of a novel working style or a new management team may also be dealt with better if employees have access to flourishing interventions during these times. For example, these interventions can be tested for effectiveness during job insecurity and restructuring as presented in Abildgaard, Nielsen and Sverke's (2017) study.

The *target audience* of flourishing interventions may comprise of every employee in an organization as positive psychology exercises are meant for all. However, a pre-intervention survey in the organization will help to identify those with immediate and specific needs. Since positive psychology interventions are more effective with increasing age (Sin & Lyubomirsky, 2009) senior employees who likely occupy higher designations, and therefore experience higher stress will benefit more. How-

ever, in specific cases such as India, which exhibits decreasing levels of work engagement from the senior generation to generation Y (Chawla, Dokadia, & Rai, 2017), the latter should be offered interventions on increasing work engagement and flow. Multicultural work settings are likely to comprise of employees from a wide range of backgrounds. Those belonging to cultures that do not encourage open display of emotions may be more comfortable with the three blessings exercise as opposed to a gratitude visit exercise as the former allows them to feel emotions without having to go through the discomfort of expressing them frankly to another person. Similarly, other-oriented interventions will work well in collectivistic cultures (Sin & Lyubomirsky, 2009). The management can be encouraged to write letters of gratitude for their employees. This will promote stronger social connections with the employees and make them feel valued by the higher authorities. Employees can also be encouraged to perform acts of kindness for coworkers. For example, in Ghosh's (2017) qualitative study on public bank employees, participants reported helpful acts from coworkers when handling difficult clients, which contributed to their well-being.

Intervention goals must be set in accordance with job requirements such as the role, responsibilities, and working environment. The *nature of work* may not allow the experience of flow if there are too many interruptions from customers, coworkers, or machines. This was evident in the narratives of participants in Ghosh's (2017) study, none of whom reported the experience of flow due to the customer-centric and interaction-based nature of the work. This, however, was not considered as a sign of poor engagement as vigor and dedication—the two other components of engagement were frequently reported.

Apart from the culture-specific features mentioned above, employees in a multicultural work environment display a wide array of *personality traits*. These are a combination of genetic factors, socialization, cognition, unconscious and semiconscious factors such as the collective unconscious and unintentional learning. Developing and executing interventions that pay attention to such differences in the sample is not always a viable option. However, among cultures that have high restraint (versus indulgence), educating employees about the benefits of experiencing pleasant life activities would contribute to flourishing. Since in such a culture, cynicism and pessimism is high and immediate gratification of desires is criticized. Here perhaps an optimistic perspective would enable the experience of positive affect. However, this suggestion does not advocate that a certain pattern of behavior or cultural practice is better than the other. Psychoeducation as proposed here would introduce the individuals to a different method of achieving well-being that they can opt for if it appeals to them.

The presence of *group level dynamics* and meta-constructs cannot be ignored within an organizational context. While most positive psychology interventions can be administered both individually and in group settings, commonly used exercises may be modified to address group level concerns. For instance, the questions in the three blessings exercise can be about the team instead of merely an individual- "write down at least three good things that have taken place over the past one week which were good for the entire team". Further steps can be carried out in two forms. Each team member can write what they think went well for the whole team. The adminis-

trator then collects and announces the responses to the team at large. Alternatively, the entire team can discuss and one person notes responses. The former technique may be more beneficial in contexts where there is greater power-distance as in the public banking case discussed in this chapter. However, the latter would work well in contexts where there is higher trust and lesser subscription to masculine (vs feminine) principles. It may be noted that this is only being suggested and future research can test for the presence of a team/group level gratitude and its effect on work. The advantage of this team level intervention would be that the practitioner can build team level gratitude and enhance team communication in the process.

Among the four constructs proposed, while the others enjoy researchers' attention, contribution to community, has seldom been addressed in previous research. Hence little knowledge about how it might be improved exists. It is thus proposed that practitioners and researchers would benefit from introducing components of meaning-making exercises in order to increase contribution to community. This can be incorporated by asking specific questions such as in asking them to identify what motivates them to work and introspect how their work can help people. Here too, it is expected that collectivistic cultures would benefit strongly from interventions that encourage employees to understand the significance of their work in contributing to other people or society. The meaningfulness experienced as a result will not only provide a sense of personal satisfaction but also bring in societal appreciation. While individualistic cultures would also support meaningful experiences, however, societal validation and appreciation for such behaviours are expected to be more prominent in collectivistic environments.

Policy implications can further help to put the above-mentioned research implications into actual practice. Multicultural organizations can target flourishing by including well-being policies in induction, training and development programs for new staff which is advocated by the National Institute for Health and Care Excellence (NICE) (2015) guidelines. For cultures where there is greater power distance, employees would typically not question the decisions of those in senior positions to avoid being rude or for having to take responsibility for the outcome of the decision. Thus broaching the topic of enhancement of well-being and sensitive issues like mental health would have to be raised by supervisors in such cultures. This endeavor may be aided by providing psychoeducation and interventions to the managers themselves in addition to the NICE (2015) guidelines that suggest the selection of managers with positive leadership traits. This approach will then follow a top-down mechanism where employees feel that the organization cares about their well-being. Furthermore, encouragement of democratic decision making from the managers can aid the self-selection process in the flourishing intervention as described above.

10 Merits, Limitations, and Future Prospects

This chapter presents four basic elements that have shown to contribute to well-being among employees of a multicultural society. These are supported by theoretical and empirical evidence from prior research. These narrowed down evidence-based con-

structs can be used to devise interventions for other multicultural organizations, which can further be tested. With more studies being conducted using these constructs, the data gathered will address past concerns of researchers who have found weak evidence for certain positive psychology exercises. This includes gratitude interventions reported in meta-analyses by Davis et al. (2016) and Dickens (2017) with the latter claiming that despite the improvements in happiness, the unique benefits of such interventions are perhaps overemphasized in the literature.

While these four elements have been identified among employees in the Indian sociocultural environment, their importance in other multicultural contexts must be evaluated as well. The above discussion demonstrates that these constructs are connected to the five PERMA elements thereby supporting the former's universal prevalence. However, more empirical evidence in support of this assumption is required to better consolidate this proposition. Moreover, these four constructs have been derived from an employed sample that has job security. Hence future research should also be open to other variables that can be important in multicultural settings.

11 Conclusion

The proposed elements can be used to devise interventions for employees from multicultural backgrounds by utilizing the suggestions provided here. This may be helpful considering that the area of positive psychology interventions is relatively new with limited research on flourishing within POB. An endeavor was made to move beyond initial investigations that are concerned with the definition and prevalence of flourishing to areas where applied research can make headway. The current chapter is a concrete step towards aiding researchers, practitioners, and organizations that are interested in developing knowledge, skills, and techniques in enabling employees to flourish. It reduces the effort of navigating through a host of available positive psychology interventions and selecting techniques on the basis of trial and error. Furthermore, these constructs can be tested in other multicultural settings and findings can be pooled to increase the knowledge base for this construct. This becomes important in light of the implications flourishing has as a scientific construct for the betterment of health, overall well-being, organizational progress, and sustainable development. Flourishing employees are more productive and can contribute better to their organizations. Efforts to increase flourishing at both the individual level and the organizational level would finally lead to community-level influences, such that entire communities can thrive together.

Note

All names of respondents used in this chapter have been changed to protect the identity of the participants.

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Developing Leaders in Multicultural Organisational Contexts Within a Positive Psychology Framework: Jung's Active Imagination Intervention



Claude-Hélène Mayer and Rudolf M. Oosthuizen

The true sign of intelligence is not knowledge, but imagination.

Albert Einstein

Abstract The aim of the chapter is to introduce positive psychology intervention, which is useful and constructive in contributing to the development of leaders in terms of multicultural cooperation and team development, as well as conflict management skills within a multicultural organisational leadership context. By applying this intervention, team members are guided to improve the collaboration, conflict management and creative potential within the multicultural setting of the organisation. The chapter is based on a critical review of the relevant literature on positive psychology wave one (PP1.0) and positive psychology wave two (PP2.0), and provides insights into the selected applied intervention. This intervention refers to Jung's active imagination and transfers it into the multicultural leadership context. The intervention is presented within a case study scenario in which it was used to strengthen individual and organisational cooperation, conflict management and problem solving competences, as well as the mental health and well-being of the diverse team members. The intervention of active imagination is explained and it is shown how team members could work with their images within the team management context to improve mutual comprehensibility, manageability and meaningfulness. Finally, conclusions are drawn and recommendations for future theory and practice are given.

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Keywords Positive psychology interventions · PP1.0 · PP2.0 · Active imagination · Jung · Multicultural team development · Creativity · Creative leadership intervention

1 Introduction

The challenges and potential of collaborating in multicultural organisations and workplaces have been discussed for many decades, often by focusing on the conflicts, misfortunes and pitfalls of intercultural cooperation and leadership (Jackson & Rothmann, 2006; Mayer, 2008). Only recently, the shifting of the focus towards collaborating successfully in multicultural organisational contexts has taken place more visibly and the positive psychology paradigm has been applied to organisational and leadership contexts (Luthan, 2002a, 2002b; Lyubomirsky, 2013). In the literature, which supports a positive psychology wave one (1.0) and a positive psychology second wave (PP2.0) (Wong, 2013, 2015; Wong, Ivtzan, & Lomas, 2016) perspective, authors often refer to the shift from a pathogenic to a salutogenic-oriented life and work style within organisations in transcultural context (Mayer, 2011). Accordingly, the focus is placed on the development of health and well-being in positive psychology movements.

This salutogenic orientation, based on Antonovsky's (1979) theory on salutogenesis, is a complex system that responds to the question of what keeps people healthy. It includes lifestyle orientations, such as a sense of coherence, as well as the interplay of various general resistance resources (GRRs) which support the individual to remain healthy. In this chapter, the positive psychology frameworks (PP1.0 and PP2.0) will be introduced and reflected within the context of multicultural leadership and organisational processes.

Further on, active imagination—as a form of an individual development intervention—will be shown as a possible positive psychology intervention. Then, the intervention practice for leadership in multicultural contexts will be discussed. Based on the theoretical conceptualisations, a case study will be presented, which provides the reader with an insight into how active imagination can become a successful tool for leadership development and team cooperation in a multicultural organisational context.

The aim of the chapter is to introduce a specific leadership intervention, which is useful and constructive in building individual and organisational team cooperation and development based on a positive psychology construct, thereby aiming to improve the collaboration and creative potential within multicultural settings within organisations and across members of varying and diverse cultural, gender, age and religious backgrounds.

This conceptual chapter is based on a critical review of the relevant literature and provides insights into a selected intervention within a case study scenario context to strengthen the positive psychology perspective in organisational research and

practice and its potential positive impact on multicultural team development in a specific international and multicultural organisation.

In the following section, the two positive psychology waves will be described and afterwards multicultural leadership within positive psychology perspectives will be explored. The intervention of active imagination will be explained in theory and practice to then present the case study in which active imagination was applied. Finally, conclusions and recommendations will be given.

2 Positive Psychology (PP1.0) and Positive Psychology Wave Two (PP2.0)

Positive Psychology (PP), the empirical study of optimal human functioning (Linley, Joseph, Harrington, & Wood, 2006), has grown considerably and has made important contributions to science and practice since its introduction at the end of the last century (Gruman, Lumley, & Gonzales-Morales, 2018). In view of the rapid expansion of PP, it becomes increasingly difficult to have a comprehensive definition that encompasses different aspects of PP. Seligman, Steen, Park, and Peterson (2005) remain committed to the three-pillar definition of PP as “an umbrella term for the study of positive emotions, positive character traits, and enabling institutions” (p. 410). It is worth noting that Seligman et al. (2005) recognise that “a complete science and a complete practice of psychology should include an understanding of suffering and happiness, as well as their interaction”, but they consider relief of suffering and enhancement of happiness as “two separate endeavours” (p. 410). According to PP2.0, these are inherently interdependent endeavours. The focus on what is good about people in times of peace and prosperity is only half of the story. The whole story of PP is about how to bring out the best in people in good and bad times in spite of their internal and external limitations. Thus, PP may be defined as the scientific study of virtue, meaning, resilience, and well-being, as well as evidence-based applications to improve the life of individuals and society in the totality of life (Wong, 2011; Wong, Ivtzan, & Lomas, 2016, 2017).

PP is in flux. Given the dynamic changes in the field, PP today is already very different from what was originally proposed by Seligman (1998a, 1998b). PP needs to synthesise the positive and negative, take a clear stance on the imperative of virtues, integrate across levels of analysis, and build constituency with all branches of mainstream psychology around the globe. The focus shifts away from individual happiness and success, to a meaning-centred approach to making life better for all people. According to Csikszentmihalyi (2009), “The next big challenge for this new field is to help improve the social and cultural conditions in which people live” (p. 203) (Wong, 2011). If PP is broad enough to encompass most areas of psychology, it may lose its identity and reason for existence. On the other hand, if an arbitrary restriction is placed on PP, it may be perceived as being divisive. To resolve this dilemma, PP 2.0 represents a mindset, a movement and a big umbrella for all positive-oriented

psychologists, rather than a distinct sub-discipline. PP will continue to evolve and grow, and it will emerge as a vibrant and ever-expanding area of interest without clear borders. PP can serve the same function as the counterpart to abnormal psychology by integrating the various lines of research related to meaning, virtue, resilience, and well-being in the service of making life better for individuals and society. PP provides a hopeful framework for developing good and fully functioning human beings and psychologically healthy institutions in spite of the negativity and finitude inherent in human existence (Wong, 2011, Wong et al. 2017).

PP interventions are designed to enhance positive emotions and pleasure, engagement in life, and meaning in life (Seligman et al., 2005). The focus and aims of these interventions can be differentiated from those of most mental health interventions, which are targeted toward the amelioration of suffering rather than the promotion of well-being (Seligman & Csikszentmihalyi, 2000), although some well-being protocols have specifically and successfully targeted the treatment of residual symptoms of anxiety and depression with a well-being approach (Fava, Rafanelli, Cazzaro, Conti, & Grandi, 1998; Fava, Ruini, Rafanelli, Fnisos, Salmaso, Mangelli, & Sirigatti, 2005). A recent meta-analysis of 39 controlled trials of PP interventions indicates that PP interventions offer reliable benefits, reflecting small to moderate effect sizes ($d = 0.20\text{--}0.34$) for subjective and psychological well-being outcomes (Bolier et al., 2013; Gorlin, Lee, & Otto, 2018).

Virtue, meaning, resilience, and well-being are the four of pillars of PP 2.0, and research has shown that they are the major ingredients of PP, as evidenced in various publications on positive psychology (Gruman et al., 2018; Mayer & Vanderheiden, 2019; Wong, 1998, 2011, 2015; Wong et al., 2017). Empirically, these four pillars incorporate many areas of mainstream research, which recognise the moral imperative, the centrality of meaning, the intrinsic human capacity for resilience, and the universal human yearning for happiness and a better future (Wong, 2011). Seligman's (1998a, 1998b) three pillars represent the characteristics and outcomes of having achieved a high level of meaning, virtue, resilience, and well-being. Recently, Seligman added relationships as an additional pillar which is also included as a major source of meaning in PP2.0 (Wong, 1998). The present balanced model of PP2.0 has the potential to attain both goals; it emphasises the need to enhance the positives and manage the negatives in order to increase well-being and decrease mental illnesses, thereby taking the concept of meaning particularly into account.

3 Meaning and Sense of Coherence as Pillars of Positive Psychology

Meaning is connected to how individuals understand the world, how they manage the world and how they ascribe meaning and meaningfulness to their being in the world and to their actions. The sense of coherence (SOC) is a general life orientation, which consists of three components that help to make sense in life and give meaning.

These three components are components of the SOC, which impacts on the development of mental health and well-being (Antonovsky, 1979). Without a SOC, life is incomprehensible, unpredictable, and unsettling (Mayer, 2011). Without a SOC and the understanding of order and of how the world works, individuals might have difficulty of managing the world and creating meaning and meaningfulness. At the same time, SOC and meaning-making support an individual to build a self-identity with which the individuals define themselves, their thoughts and actions within the world. Without a strong SOC, individuals struggle to know how to understand life and themselves, what to do with their lives, what to work for and how to make meaning out of it. SOC helps to know and understand how to manage challenging events (Baumeister, Heatherton, & Tice, 1994) and to apply meaning to it. At a situational level, one requires attribution and appraisal in order to know how to cope (Lazarus & Folkman, 1984; Peacock & Wong, 1990; Seligman, 1990; Wong & Weiner, 1981). SOC, at the same time, becomes a mechanism of coping. At a deeper level, enlightenment about life and death and one's place in the larger scheme of the world is needed to discover the meaning of life (Wong, 2010). Meaning contributes to meaningfulness and can only be defined when individuals comprehend their environment, manage the challenges and know their place within the world. Through defining themselves within the world, individuals need to reflect about themselves and accept their challenges (Wong, 1998, 2007, 2011), understand themselves and define themselves within the socio-cultural environment. According to the constructivist psychology (Raskin & Bridges, 2004), meaning-making is involved in understanding the self and the world, in navigating everyday life, and attaining meaningfulness. Meanings are subjectively constructed based on one's personal history and idiographic way of experiencing the world, but the ways we understand our world and ourselves are also shaped by culture, language, and ongoing relationships. Thus, curiosity, meaning-seeking, myth-making, and storytelling all contribute to our understanding of ourselves and the world we live in (Wong, 2011). This understanding is needed when individuals look at themselves within the context of leadership in multicultural contexts. It then builds the foundation for further actions and the creation of meaningful team development and cooperation.

4 Multicultural Leadership in the Context of Positive Psychology PP1.0 and PP2.0

Culture has been defined as a learned social dimension in which meaning and sense-making are created and negotiated (Mayer, 2005, 2011). Bennett (2017) defines culture in terms of "the coordination of meaning and action within a bounded group". Therefore, in this chapter, culture is viewed as a social construct, which is defined by the boundaries of the group that creates itself based on meaning and action. This leads to the idea that multiculturalism is a setting in which different cultural groups interact within and across their boundaries.

Focusing on multicultural leadership, in this chapter, we define leadership as the ability “to motivate and influence others to achieve the goals of an organisation” (Samani, Koh, Saadatian, & Polydorou, 2012, p. 160). In multicultural leadership, employees are motivated and influenced to reach the goal of the organisation by taking the various cultural groups into consideration, and the employees work across the cultural group boundaries to motivate meaning and action for the common organisational goals. Thereby, leadership is based to a large extent on the leader’s ability to influence others while building interpersonal relationships rather than being based on administration (Amos, 2012). Leadership needs to take the health and well-being of the employees and the entire organisational health into account (Kuopalla, Lammimaa, Liira, & Vainio, 2008; Haslam, Reicher, & Platow, 2011), since leadership affects the health of both leaders and employees in organisations (Wolf, Huttges, Hoch, & Wegge, 2010).

A positive-orientated leadership needs to be empathetic and appreciating to enhance health and well-being within the organisation (Wegge & Rosenstiel, 2004, p. 475). Research has grown with regard to positive organisational behaviour and health (Mayer & Van Zyl, 2013) contributing to expand organisational research from a positive psychology perspective. This is particularly important in terms of leadership that needs to bridge the cultural differences of employees to create a common organisational culture (Mayer, 2011). As stated in Mayer and Viviers (2016), new approaches in transcultural coaching and leadership are needed, which are aimed at bringing employees of different cultural origins together and extend cooperation and collaboration across cultural boundaries by creating common meaning and action to work successfully together. Leaders are needed to create a common ground for the work of all employees in alignment with the organisational goals. This leadership needs to create meaningfulness and meaningful actions as a common ground for the healthy collaboration of the employees (Mayer & Walach, 2018; Mayer & Geldenhuys, 2018 in press).

Psychological interventions which have been used in psychological practice can be transformed and re-contextualised within organisational and leadership contexts (Mayer & Vanderheiden, 2019; Vanderheiden & Mayer, 2017; Wright & Dziak, 2016). In the following subsection, active imagination as a positive psychology intervention will be presented as a tool that can be used in organisational and leadership contexts to reconstruct comprehensibility, manageability and meaningfulness and thereby support a healthy approach in multicultural leadership settings.

5 Active Imagination as a Positive Psychology Intervention

In this section the following intervention, namely the active imagination (Jung, 1953, 1928), will be presented. Imagination is a widely acknowledged human capacity that is essential for a harmonious psycho-social development, and it can alter the perception of reality in such a way that it can affect the body and evoke feelings and emotions. Jackson (1990) even speaks of a “placebo effect”. That means that

imagination that is constructive and used in a positive way from an inner-world perspective can lead to an increase in mental and physical health and well-being in the outside world of the individual. Seabright and Schminke (2002) emphasise the fact that imagination is ambiguous and can also be used in a negative and destructive way. Harvie and Milburn (2017) even speak of a crisis of imagination that fails to develop new imaginative organisational forms. This contributes to developing new and healthier forms of organisations with new political and anti-capitalist social relations, which contribute to positive leadership and organisational developments.

In this chapter, we argue that imagination can help leaders and organisations to explore the light and the shadow with regard to specific topics on individual and collective levels in organisations (Mayer and Tonelli, 2017) in order to finally come to a balanced leadership and organisational practice in multicultural contexts. Imagination in leadership and organisational development is therefore important to be connected to ethical and moral contents and intentions, so that it can contribute positively to health and well-being, as well as to moral and ethical leadership (Rozuel, 2012) across cultures. However, for imagination to be potentially valuable and enriching, moral knowledge, as well as moral deliberation and its psychological foundation, needs to be carefully examined before the tool of active imagination is used (Rozuel, 2012). In other words, a person should know him/herself, the shadows, and potential destructive or immoral sides of the personality, for example, through self-reflection (Kekes, 2006), to ensure a rather constructive and positive process of active imagination, which is anchored in the context of positive, moral leadership.

Rozuel (2012) argue that although inward explorations in leadership and organisation processes are increasingly being accepted, managers and leaders are still often sceptical of inner world processes to resolve conflicts, problems and increase development and solutions on an outside level of leadership and organisation. However, to lead organisations successfully, it is argued here, leaders across cultural divides need to acknowledge that the psyche of the individual employee impacts on the collective organisational psyche and that it can impact at its positive best when individuals within the organisations—and particularly leaders—become aware of their inner processes, dynamics and complexes, which impact systemically within organisations. Werhane (2002) point out that individuals and leaders within organisations need to take on their responsibility to impact (positively) on organisations, and therefore must involve systemic thinking processes and transcultural approaches (Mayer & Viviers, 2016). These processes should, at best, include conscious and unconscious processes to connect not only to the self and leadership with inner meaning (Kriger & Seng, 2005), but also to the collective consciousness. This aims at overcoming cultural divides within organisations by drawing on universal symbols, which can then be explored in a second step in terms of their cultural implications and meanings. Through active imagination, leaders might make improved sense of the ambiguities of organisations and their social and cultural change processes (Brown, McDonald, & Smith, 2013). Wilson Reynolds (2015) emphasises the fact that, in leadership and organisational processes, imagination plays an outstanding role in fostering creativity and innovation and in building an organisational and workplace culture. Thereby, the Jungian Depth Psychology supports connecting individuals within the organisation

through common human universal archetypes, thereby bridging potential cultural communication gaps, misunderstandings or differences. According to Wright and Dziak (2016), this is particularly the case when these symbols and archetypes are shared through positive storytelling within the organisation.

Cruz (2017), for example, uses the metaphor of “the pilgrimage” as an outer and inner symbolic image, to which humans are drawn from all over the world to develop their leadership. The pilgrimage, which might be used as a starting point of transformational leadership and active imagination, may build a positive image for individual and organisational growth. It may also develop the qualities for becoming a sustainable and transformational leader across cultural contexts and within a multicultural workforce, since it draws on a universal pattern of behaviour of humankind that can be used to join employees with different cultural and religious backgrounds and form a common ground of understanding, based on a positive psychology perspective. In the following section, the intervention of active imagination will be presented and a case study will be provided to give practical insight into the work with active imagination in the context of positive psychology within a multicultural leadership and organisational context.

5.1 *Active Imagination*

Carl Gustav Jung worked throughout his life on exploring the psyche and particularly the dynamics between the conscious and the unconscious mind (Jung, 1928). He developed numerous and various interventions, techniques and creative approaches to explore the inner and outer world of individuals and their potential to interconnect these worlds, and to think, feel and act in a holistic way, which continuously strives for self-development, self-actualisation and individuation—the process of aligning the ego with the archetypal self. Jung (1970) defines individuation as the “process by which a person becomes a psychological ‘in-dividual’, that is, a separate, indivisible unity or ‘whole’”. He further highlights that not every person can become individuated fully, but that every person should strive to integrate the conscious and unconscious mind to create a greater psychological balance, authenticity, integrity and an in-depth and positive connection with the socio-cultural world (Jung, 1928). This personal development can be stimulated through self-reflexive processes, but also through creative processes, such as active imagination.

The intervention of active imagination is based on Jung (1953, 1928), who defined active imagination as a natural process of self-healing and self-development. For Jung, active imagination was a method to foster his own personal investigation. Swan-Foster (2018, 209), a Jungian analyst, defines active imagination as: “... holding the conscious and unconscious in dialogue around an image, theme, or cluster of ideas to gain further insight from the unconscious.” Active imagination connects the conscious and the unconscious mind and knowledge. Jung defined the introverted psychological tradition in alchemy as the art of active imagination, referring to unconscious material of the mind (Von Franz, 2017).

Active imagination as a practice can be introduced through bringing the mind to a relaxed state. Thereby, the body, mind and soul relax. Active imagination can be used in various forms and approaches with the aim to use the potential of the conscious and the unconscious mind. It can then be expressed through different forms, such as writing, drawing, speaking, painting, sculpturing, music, dancing, acting or sand play (Von Franz, 2017). By using the technique, Jung (1953, 1928) did not describe it in the form of a technical term, but rather as a natural process of the mind. The gap that is usually experienced between the conscious and the unconscious mind can be used to find solutions for problems, which are—in a solely conscious state—unthinkable, unimaginable and unreachable for the individual. Active imagination reaches out for the unconscious mind, symbolic experiences of an individual and the collective, and thereby connects conscious and unconscious processes and builds a common ground for individuals with diverse cultural background and in multicultural contexts.

5.2 *The Practical Process of Active Imagination*

The practice of active imagination can start with an image, a symbol or a re-occurring fantasy. However, in a work and organisational development context, the leader—or in team settings each of the team members or leaders—can firstly define a question or problem for which the individual, being a leader in an organisation, needs a solution that could not be found through conscious reflection or other creativity techniques or interventions. According to Jung, most fundamental ideas and views in life are based on experiences (Chodorow, 1997, 2006). These experiences can be intrapersonal, interpersonal or social experiences. The experiences build up conscious and unconscious knowledge within the mind.

In the active imagination process, it is fundamental that the individual trusts the unconscious mind to bring up new solutions that are usually covered in unconsciousness. The active imagination process starts with defining a question, a problem or a topic that will be explored in the following stage through the unconscious mind. During the process of active imagination and after the question or problem has been defined, the individual relaxes and puts him/herself into a state of bodily relaxation (Mayer, 2018). Then, (s)he waits until the unconscious mind brings up an image, word or other symbol. The individual then remains an active observer of the image and how this image might change with time within the process. The individual, who now completely focuses on the inner world, observes the inner symbolic image(s) with regard to the question posed or problem defined. The process can involve different forms of creativity, such as visualisations or an inner dialogue with the inner voices and/or images, figures and symbols that occur (Jung, 1928).

The symbols that occur in the mind of the individual usually hold a symbolic meaning for the individual based on the individual and/or collective (internal and external) experiences and context. Symbols are thereby defined as culturally and socio-historically transmitted ideas (Wong & Tsai, 2007). By accessing and understanding symbols and symbolic meaning, which are usually primarily hidden in the

unconsciousness, the individual opens up the core of his/her potential to address and transform, for example, inner blockages or pathological practices, self-destructive attitudes or complexes, personal problems and emotion patterns that might hinder the individual from finding solutions to the problem, conflict or situation (Jung, 2009). By accessing this usually unconscious knowledge, aspects of general meaning in life are often uncovered. The process further on reconnects the individuals with their soul, their life energy and deep experienced truth, and thereby contribute to their meaning in life, as well as to their mental health and well-being (Mayer, 2018). Since the individual works with unconscious content, the spectrum of solutions grows by expanding the conscious content and unrecognised possibilities are displayed symbolically. Mayer (2018) has described how this intervention and technique can support individuals in leadership positions, as well as in situations that occur unexpectedly within the work context, such as unemployment. Usually, the success of the intervention depends on the readiness of the person to self-engage and to push the boundaries of the limitations of the consciousness (Jung, 1953, 1928). Problems can be transformed into solutions and experiences of disempowerment, victimisation or low self-esteem, and can be addressed, taken into account and acknowledged and then be transformed into empowerment and increased self-esteem. This is, for example, the case when a person has experienced failure and connected this to shame, which often leads to a decrease in mental health and a low sense of coherence and which can be transformed and strengthened through the active imagination process.

Several psychotherapists, Jungian analysts and psychoanalysts have developed active imagination in different directions and with various foci (e.g. Bosnak, 2003; 2007; Von Franz, 2017; Swan-Foster, 2018).

Von Franz sub-divides active imagination into four different stages: (1) to empty one's mind from the trains of thought of the ego; (2) letting an unconscious phantasy image (feeling, sensation, etc...) enter into the field of inner attention; (3) to give the phantasy some form of expression, (4) the ethical confrontation with whatever one has previously produced. According to Jung, the process of active imagination brings the responsibility to actively strive for wholeness and to bring the new aspects into life, to bring insights into the consciousness for personal, socio-cultural, organisational, collective change (Jung, 1961). Bosnak (2003, 2007) has developed the concept of embodied imagination, thereby working with dreams and memories, experiencing dreams as embodied events. This concept of embodied imagination through dream work and dream images definitely expands the concept of Jung into a different direction in the work with individuals and groups. However, in this chapter, we will primarily focus on Jung's work of active imagination. In the following section, as case example in a multicultural leadership context will be presented in which active imagination has been used as a tool in multicultural leadership.

5.3 *Active Imagination in Multicultural Leadership*

Active imagination as a topic can be used in counselling and leadership in multicultural organisations and collaborations, particularly when working in coaching, team development, conflict management and mediation processes, which involve employees of different cultural origins in multicultural work spaces. The intervention of active imagination proves to be usable due to the fact that it includes conscious and unconscious aspects of the individual and the organisational psyche, and that it is based on universal symbols, which can be worked with and discussed with the individual employee, as well as with the team. The following case is taken from a real case scenario in which the multicultural team of a German chocolate factory was trained and consulted within a team development and conflict management workshop.

During the leadership developmental work, active imagination as a method was presented to the leadership team to work with images build in the unconscious mind and to explore the situation on a different level. After the active imagination method has been conducted and taken place, the individual and the group can start working with the symbols and the interaction observed on a conscious level. This is possible on a self-reflective level or guided by a coach or consultant.

The individual is invited to recreate their (business) world—including the new information gained from the unconsciousness by engaging with the meanings of the symbols viewed in their minds. Self-awareness and self-actualisation processes begin, and new knowledge around the defined problem is created, which provides new ideas for its solution. The solution can then be addressed on a conscious level and, through the constructive processes, energy is released and contentment and self-esteem increased. That means that not only practical problems are resolved, but also a more general contribution to mental health and well-being of the individual is made.

6 The Case: Multicultural Leadership Team Development in a Chocolate Enterprise

The organisation at hand is a German chocolate enterprise that is rapidly growing in the European and international market, exporting chocolate across Europe, as well as in Asian and African countries. Due to its rapid growth, the organisation is undergoing dramatic restructuring processes, and employees and leaders are under immense pressure to cooperate well across cultural and national boundaries to build an internationally sustainable organisation. To ensure that communication and leadership practices are aligned across the different area managers of the organisation, leaders of the marketing team were invited to attend a development process in London to improve their cooperation strategy, their intercultural understanding, and to discuss the conflictual issues that have built up during the past two years of their cooperation. Before the workshop took place, each of the participants was interviewed

and consulted to prepare for the three-day workshop. Six face-to-face sessions took place before the workshop: the attendees included the head of the German marketing team and her assistant, the UK marketing team plus assistant, as well as the Scandinavian and Southern Europe marketing team leaders. The general director of the German headquarters responsible for the European market and who is based at the German headquarters, was also consulted in a face-to-face session, as well as during the three-day workshop development process online at four points in time. The workshop continued over three full days, including evening sessions.

In the face-to-face single consultancy pre-workshop sessions, each of the team members was asked for their expectations, aims of the workshop, conflicts and ideas to develop. The contents derived from these sessions were used in the kick-off session of the workshop. The team worked over the three days on topics such as experienced conflicts and conflict management across cultural groups, strategy planning, decision-making processes, roles and responsibilities, market management, intercultural misunderstandings, communication and competence. While day one and day two focused on resolving issues from the past and present, the third day was used to develop strategies for future cooperation. On day three, the intervention of active imagination was used when the team was asked to reflect on where they were standing as a team at that point in time. To expand the discourse of what had been discussed during the process on a conscious level, the active imagination was used to connect to the unconscious processes of the individual members of the session and their impact on the international marketing team leaders.

The overall question was posed as follows: "Where do we stand as a team in our development process?" The active imagination process was explained to all team members and they were prepared and voluntarily agreed to participate in this intervention. Since, after the entire process, the levels of trust were high in the team, the intervention could be placed without any resistance and the team members were excited to include the unconscious processes in the workshop.

The intervention was conducted, a relaxation exercise was introduced as explained above, and the team members had clear instructions and explanations upfront of how the intervention worked. They were informed that they could stop at any point and how to work with the images that occurred.

After the active imagination they were given time to write down their experiences during the process, their observations, their interpretations, and their judgements of what they had experienced. They were then asked to reflect on their experiences with the team. Each of the team members wanted to share their experiences. During the process, the German marketing team leader, for example, saw a huge mountain in the sun with the top of the mountain covered in snow and ice. Her interpretation was that this mountain expressed her idea that there was still a steep path to follow with the team and that, although parts of the conflicts had been resolved, there were still "icy times to come", when reaching the top of the mountain. She was then asked if she wanted to hear ideas and associations of the other team members regarding this image. She agreed and the southern European team leader, for example, emphasised the fact that when he heard about the image, he immediately thought about skies and snowboards and specific modes of travel at a mountainside to make it possible to

reach the top of the mountain. Based on the image, the team could then transfer their symbolic images to the present situations on the one hand, and discuss new ideas to “make it to the top of the mountain” on the other hand. Associations with regard to the mountain, the leadership and leadership practice and their cultural background associations were discussed from each person’s cultural viewpoint.

While the German and the southern European leaders connected “home” and familiarity with the mountain site, the Scandinavian leader felt that this was “new land” for her, based on the different associations. The team then could discuss potentials and pitfalls of the symbolic images and transfer the different viewpoints into their processes with regard to strategic leadership and potentials and dangers, and could balance these out in terms of PP2.0. On the other hand, however, what seemed to be even more important, was the fact that the presentation of the images required a lot of trust and was part of a long-term trust building process, particularly regarding the open communication about the feelings and emotions involved. The icy mountain in the sun had evoked the German team leader to speak about her exhaustion, her fears and stress, looking at the way forward, and fearing not being able to make it to the top. The Scandinavian team leader referred to her feelings as well, explaining that she was happy that it was now clear to everyone that this was not an easy process, but a process in which every person had to “dress up warm”. The southern European team leader’s reaction was similar: he was excited to bring in snow boards and sky and thoughts of innovation and new techniques, while the German marketing assistant emphasised her feelings of paralysis—seeing such a huge mountain in front of her and fearing not being able to make it to the top. All of the team members were excited to share their images within the team, and to hear the ideas, feelings and associations of the other team members in a respectful way, including the shadow and the light of these associations and their meaning to the individuals (Wong, 2011; Wong et al. 2017).

At the end of the process, we noted down all the symbols that came up from the active imagination process: the icy mountain in the sun, a turning/dancing chocolate wrapped in silver paper, a trickster walking along a lonely road, a king dressed in red and gold colours sitting on a king’s chair smiling, a lighthouse in stormy water, and a “sacred site” that included huge grey stone formations placed in a circle. Each person was asked to reflect on their personal images during the following month, and to explore this image in terms of collective associations and meaning with their images, their potentials and pitfalls (Wong, 2011; Wong et al., 2017). The team was supposed to reconnect in an online session after one month to discuss their process. Part of this revision session was to revise their new discoveries and realisations regarding their symbolic images in terms of changes of content, feelings and meaningfulness (Seligman et al., 2005; Wong et al., 2017) during the past month in the context of their social and cultural conditions (Csikszentmihalyi, 2009).

7 Conclusions

The aim of this chapter was to present a specific leadership intervention, which is based on Jung's process of active imagination, and which can be used successfully in multicultural team development processes to balance the conscious and unconscious team processes of team development. The process is based on a shift from the pathopsychological paradigm, which focuses on problems, pitfalls and misfits. This is done via a focus on positive psychology (PP1.0) concepts—focusing on the positive aspects of the team and its development—and finally coming to a positive psychology (PP2.0) perspective, which balances and integrates positive and negative aspects on cognitive, affective and behavioural levels (Wong, 2011; Wong et al., 2017).

During the process of team development, the team develops strategic and operational management aspects, as well as their multicultural and transcultural processes and competences. They thereby take particularly conscious aspects of all team members into account. After the shift from a pathopsychological towards a positive psychology paradigm has taken place, the team can start working with active imagination as an intervention method to include unconscious processes in the development process to integrate conscious and unconscious aspects with regard to cognitive, affective and behavioural levels. By including the unconscious aspects through active imagination based on a PP1.0, the individual team members are prepared to finally work on integrating and balancing out positive and negative aspects, not only on cognitive and behavioural levels, but also on affective (emotional) levels. This process contributes strongly to trust within the team, since team members connect to collective and universal symbolic images that open up discussion on a deeper level, connecting individuals of different cultural origins on a universal, transcultural level. This deeper connection builds a new, balanced foundation for expanding multicultural and transcultural competences, and strategic and operational management processes (Fig. 1).

8 Implications for Theory and Practice

On a theoretical level, the process of including conscious and unconscious aspects in multicultural leadership team development processes needs to be evaluated. Applied research processes are needed in future to evaluate consultancy. Consultancy uses these kinds of processes and interventions, such as active imagination, using a mixed method longitudinal research study process; by evaluating the impact of using in-depth consultancy interventions for members of different cultural origin and their effectiveness in building multicultural leadership team; and by connecting and building trust and multicultural and transcultural competences across cultures. The sustainability of processes using these in-depth interventions and working with unconscious levels needs to be tested and compared with multicultural team

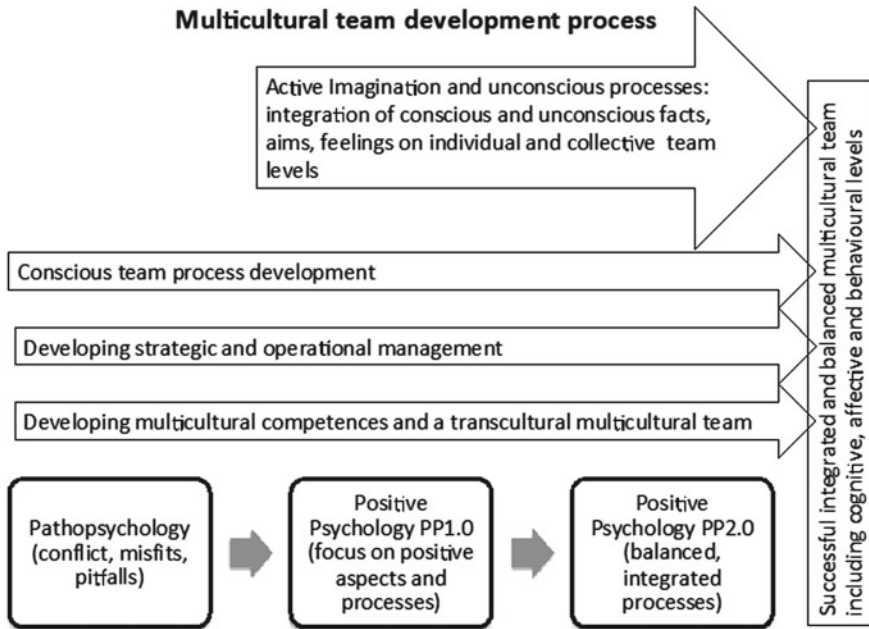


Fig. 1 Multicultural team development process

development processes, which use traditional interventions that do not go beyond the consciousness realms.

Practical implications of this multicultural leadership and team development approach include the following aspects:

- (a) Leaders can learn to reflect upon their pathopsychological viewpoints and expand this through the PP1.0 and PP2.0 perspectives, thereby shifting their viewpoint and finally come to a balanced and integrated view.
- (b) Leaders across cultures can learn to connect with others on a deeper, unconscious basis and thereby draw on universal human concepts that provide them with a base for transforming cultural differences and conflicts in a positive manner, which leads to a balanced, transcultural work base.
- (c) Leaders can learn to use in-depth psychology concepts, such as the work with active imagination and symbols (or even archetypal concepts) for themselves, as well as for their team members, to increase creativity, innovation and imagination for themselves and within their teams to develop beyond the conscious (normal) framework. Multicultural leadership, if open to new, in-depth interventions, can easily rise beyond the normal success by expanding their conscious ideas and management concepts. In this manner, they can prove that multicultural teams, if well-managed, are more creative, innovative and successful than monocultural leadership teams.

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Inspiring Growth: A Counselling Framework for Industrial Psychology Practitioners



Lené I. Jorgensen-Graupner and Llewellyn Ellardus Van Zyl

Abstract Industrial psychologists provide short-term counselling in the workplace and should, therefore, be equipped to manage or deal effectively with the challenges that confront employees. However, practitioners report that they are ill equipped to manage both the practical and emotional demands associated with work-place counselling. Most professional industrial psychology training programmes also fail to provide neither adequate training in counselling, nor practical skills, or “tools” to aid distressed employees. The reason may be that there are no clear training framework for the industrial psychologist as counsellor. Therefore, the purpose of this chapter is to develop a counselling framework for the industrial psychologist as workplace counsellor. Illuminated by a metaphor of a growing sycamore fig tree, this chapter delineates a four-phased framework (Rooting, Growing, Branching and Thriving). The aim is to help tertiary educational institutions train industrial psychologists as workplace counsellors.

Keywords Industrial psychologist · Counselling · Counselling framework

1 Introduction

The professional identity of industrial psychologists has been subjected to intensive debate during the past five decades (Van Vuuren, 2010; Van Zyl, Nel, Stander, & Rothmann, 2016). Various attempts have been made to clarify the relevance, nature or scope of professional practice, the skills, competencies, responsibilities as well as professional roles industrial psychologists occupy at work (Aguinis, Bradley, &

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Brodersen, 2014; Highhouse & Schmitt, 2012). Although there still are contested views about industrial psychologists' professional identity, seemingly a form of agreement is reached in defining the profession/discipline. According to Van Zyl et al. (2016, p. 9), industrial psychology can be defined as a profession with the following functions:

... relates to optimising individual, group, organisational and societal potential through developing or applying scientific theories, processes, methods, paradigms and principles of psychology at work in order to facilitate sustainable improvements in performance, productivity, well-being and general health. It is a specialised field of professional practice aimed at diagnosing, understanding, predicting and managing human behaviour within work contexts. It has to do with working with people, their integration into the world of work through enhancing human resource processes and practices in an ethical manner.

From the definition above, it is clear that industrial psychologists' scope of professional practice is broad, and that these individuals are able to fulfil numerous roles within organisational contexts (Barkhuizen, Jorgensen, & Brink, 2014; Van Zyl, Deacon, & Rothmann, 2010). These roles range from developing, validating and utilising psychometric instruments, implementing training and development interventions, to human resource functions as well as therapy or counselling (Benjamin & Louw-Potgieter, 2008). The mentioned roles are indicators of the professional domains in which industrial psychologists are trained. In most cases these roles provide clear guidelines about the nature, scope, and content individuals require to be considered proficient in each domain (Barnard & Fourie, 2007).

Although this is true for most domains of professional practice, there are no structured guidelines, frameworks, models or meta-theories that provide the context in which to train industrial psychologists as workplace counsellors (Barkhuizen et al., 2014). Research shows that industrial psychologists do provide short-term counselling services at work (Benjamin & Louw-Potgieter, 2008; Van Zyl et al., 2016). However, they seem ill-equipped to manage both the practical and emotional demands associated with such efforts (Barkhuizen et al., 2014). This deficiency can be attributed mostly to inadequate professional training during tertiary education, which leaves industrial psychologists with limited skills, models, or tools to aid distressed employees. Furthermore, this lack of perceived competence causes industrial psychologists to shy away from counselling employees due to a lingering impression that counselling may fall outside of their scope of practice (Barkhuizen, Jorgensen, & Brink, 2015; Careless & Taylor, 2006).

In reality, industrial psychologists are at the proverbial front-line of psychological support and are suited best to help employees manage distress or trauma at work (Barkhuizen et al., 2015). If appropriately trained and skilfully equipped, industrial psychologists could help employees manage stress before it degenerates into burnout; debrief trauma before it turns into anxiety or mood disorders; or build personal resources to buffer continually increasing job-related demands. However, as noted above, industrial psychologists are not equipped to render the mentioned services since most formal academic programmes merely provide a brief introduction to counselling/facilitation (Weathington, Bergman & Bergman, 2014). These programmes borrow from models, approaches or paradigms that were developed orig-

inally specifically for clinical psychological training (Adler School of Professional Psychology, 2018; University of Pretoria, 2018; North-West University, 2018).

The wide array of psycho-therapeutic or counselling models employed in brief academic courses, are not tailored to address the unique demands that confront employees within organisations (Corey, Nicholas, & Bawa, 2017). Therefore, industrial psychologists revert to coaching skills or models that are usually more goal-oriented or solution-driven, in order to aid distressed employees (Jorgensen, Van Zyl, & Stander, 2016). These approaches are not appropriate to manage the acute onset of stressors or burnout, or debrief traumatised employees at work. Industrial psychologists must be trained within a specific work-related counselling framework to help them manage these types of experiences effectively within organisational contexts. However, it is evident from both the programmes presented by universities and the academic literature that no such training framework exists.

As a result, the purpose of this chapter is to develop a specialised counselling framework for the industrial psychologist as workplace counsellor. Presented in terms of a metaphor of a growing sycamore fig tree, this chapter outlines a four-phased framework (Rooting, Growing, Branching and Thriving). Such a framework includes the basic assumptions, legislation, and values for training industrial psychologists as counsellors. The aim is to delineate the foundational principles of the counselling framework, which is supported by the psychological capacities (skills, competencies), foundational counselling knowledge, and the counselling models required to train successful industrial psychological counsellors.

2 A Counselling Framework for Industrial Psychologists

2.1 Defining Work-Place Counselling

The function of counselling differs according to various application domains, for example, trauma counselling has different requirements than relationship or performance counselling. Nevertheless, the fundamental principle underpinning each counselling paradigm/model/approach is that individuals have the internal capacity to grow and develop (Jorgensen et al., 2016). Counselling is considered a dynamic relational process that guides individuals to generate their own solutions to complex personal, social, or psychological problems (Palmer & Whybrow, 2018).

In particular, counselling is a process through which a practitioner helps relatively normal functioning clients clarify life challenges and help them develop clear lines of action to contain negative predispositions such as anxiety (James, 2017). Within the work environment and in the context of industrial psychology, counselling should be focused not only on managing the proverbial negative experiences at work and associated with job requirements, but also embraces principles of personal growth and development to facilitate sustainable wellbeing. This description of counselling is the core principle on which the proposed framework rests.

2.2 *Introducing the Core Tenets of the Counselling Framework*

Based on the definition of workplace counselling, the framework to train and develop industrial psychologists professionally as counsellors proposed in this chapter, is depicted by the growth cycle of a tree. It is not unusual for a scientific discipline to employ a tree as metaphor. The tree of life (ToL) is often used as metaphor or model for multiple scientific communities to describe life's diversity, growth or development (Johnson, 2014; Ludden, Kelders & Snippet, 2014; Mindell, 2013; Withington, 2016). In this regard, the ToL emphasises the life-giving capacity of a single seed, and under favourable conditions, its growth into a resilient organism that can withstand even the harshest environmental challenges.

In Africa, the sycamore fig tree, of which the existence has been reported as far back as biblical times, is believed to have been a type of ToL (Earth Touch News, 2014). In addition, the fig tree provides food for a larger variety of animals than any other tree in Africa and has a symbiotic relationship with a wasp, which triggers a pollination process. Therefore, the descriptive metaphor of the sycamore tree seems appropriate for presenting a counselling framework.

Based on the metaphor above, the tree is a living organism (in this case the counsellor), producing seeds (impacting the community and providing hope and direction), constantly changing and growing towards the end goal (showing growth initiative, aiming to become the best version of themselves as well as best counsellors for their clients). Furthermore, the tree reproduces a form of fruit, figs in this case (i.e. the counsellors' life work visible through their own flourishing but also when those they serve thrives). Thus, the counselling framework presented in this chapter aims to help industrial psychologists *instil and inspire* a process of growth in their clients. This framework outlines the foundational principles, skills, competencies, and expected outputs relevant to training industrial psychologists as counsellors. Thus, it seems appropriate to incorporate the name of the fruit into an acronym as an easy reference for the framework proposed in this chapter, namely the *Framework Inspiring Growth* (FIG), as depicted in Fig. 1.

According to Fig. 1, the metaphor utilised in the framework above, reflects the process of being rooted firmly in values, legislation, identity, and ethics. This is followed by the continually growing process of an optimally functioning person, which is reflected in the stem of the tree from which the branches sprout. This stem resembles the skillset, competencies, knowledge and counselling approach that industrial psychologists have to offer. Ultimately, as with the sycamore fig tree, the main aim is enhancing the capability of industrial psychologists to help clients grow and develop. Thus, the practitioners observe the fruit of their life's work flourish in the wellbeing of employees and organisations. The outcomes, therefore, according to the tree metaphor, are bearing fruit and providing shade through its leaves, with a lasting effect.

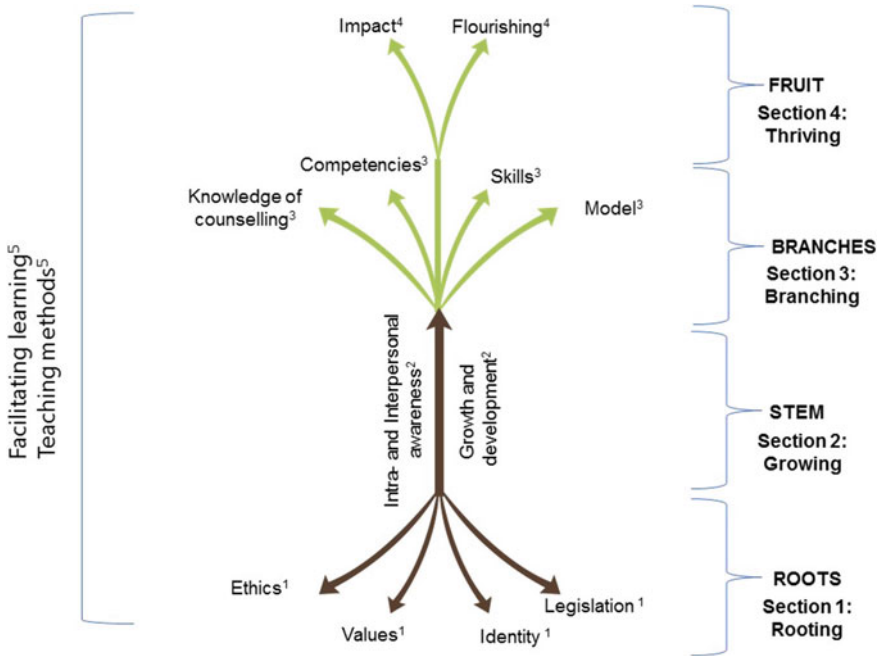


Fig. 1 Inspiring growth: A framework for industrial psychology counselling

Subsequently, the framework for inspiring growth (FIG) is unpacked systematically, based on the four mentioned sections: (a) Rooting, (b) Growing, (c) Branching, and (d) Thriving.

2.2.1 Section 1: Rooting

The professional identity of the industrial psychologist as counsellor should be rooted in sound ethical, and value-based behaviour patterns, which are guided by sound governance and local legislation. The professional identity of industrial psychologists as counsellor is crafted through the guiding ethical principles they follow, thereby informing their actions and intent during the counselling process. Rooting the psychologists’ behaviour therefore implies interaction between ethics, personal values, professional identity and governance or legislation.

Ethics

In the first instance, portraying *ethical* principles for this profession serves as a starting point. Various codes of ethics show similar principles for psychologists (APA,

2018; South African Department of Health, 2011). As is the case with legislation (see Sect. 2.2.1.3), practitioners often perceive ethical guidelines as punitive measures to correct deviant behaviour. Instead, ethical guidelines are developed to help practitioners provide in practice the best possible service to their clients (Hoffman & Koocher, 2018) and uphold the minimum standards of the profession (Handelsman, Knapp, & Gottlieb, 2009). Ethics should not be viewed as remedial actions or behaviour patterns but rather be experienced as guidelines helping practitioners reach their full potential, and facilitate a positive impact on clients (Handelsman et al., 2009).

The functional benefits of ethics should therefore be clarified during the rooting phase. This will help practitioners of industrial psychology realise that ethics does not merely imply minimizing harm; rather facilitating virtuous behaviour (Knapp & VandeCreek, 2012). Smith (2006) argues that a strength-based or 'positive-ethics' approach should be followed. Thereby, counsellors can improve the quality of their work and benefit the client within the counselling relationship. In particular, these guidelines encourage counsellors to respect the clients' rights and dignity, and take care that no harm befalls the clients (Knapp & VandeCreek, 2012; Smith, 2006). These ethical guidelines functionally direct the behaviour of the counsellors and influence their engagement with their clients (APA, 2018; Smith, 2006).

The proposed framework (FIG) seeks to ingrain positive ethics as a way of being, rather than a set of strict or stringent rules, codes, or policies to be followed. From this perspective, the framework should depict a strong foundation of the core ethical principles that underpin psychology, for example Kitchener's (1984) five: autonomy (allowing clients freedom of choice and action); justice (treating clients equal but differently); beneficence (focusing on clients' welfare and doing well); non-maleficence (avoid causing harm to others); and fidelity (being trustworthy throughout).

In addition, the framework should also facilitate the understanding that positive ethics is a functional value that (a) identifies aspirational principles, virtues or values; (b) focuses on conduct and the underlying positive attributing forms of behaviour; (c) helps prevent harm but also promote positive reasoning, (d) facilitates self-awareness and understanding how personal valances influences behaviour, (e) guides practitioners to invest in self-care and own psychological health; (f) ensures an investment in practitioners' continued personal and professional development; (g) emphasises moral traditions that underlie ethical principles; and (h) helps practitioners recognise and integrate self-interest into positive motivations for optional professional practice (Knapp & VandeCreek, 2012). Based on the above-mentioned functions, positive ethical behaviour should become a core value of the industrial psychological counsellor's make-up.

Values

Furthermore, the behaviour of industrial psychologists as counsellor is a function of their personal and professional *value system*. For Lefkowitz (2010), the value system of industrial psychologists includes their fundamental beliefs, which are guided by

professional goals and ideals. These professional values are an extension of personal values and function as a metaphorical compass that guides industrial psychologists in the pursuit of their goals (Strauss, 2017). Although values are considered noble traits (Strauss, 2017), a conflict between personal and professional values could have negative consequences for both practitioner and client (Lefkowitz, 2017). Therefore, it is important to ensure alignment between the professional and personal values. This will not only enhance the quality of the service provided by the industrial psychologist counsellor, but also ensure the alignment of the self to the professional role. Van Zyl et al. (2010) argues that the closer the alignment between the strengths (personality, values) of industrial psychologists and their work role, the more likely they will show increased levels of positive mental health. Thus, alignment between personal and professional values and the associative work roles is imperative for the industrial psychological counsellor.

Strümpher (2007) identifies three primary values that should guide the behaviour of the industrial psychologist (i.e. counsellor). Firstly, he refers to the *pensive watcher*, the person who cares for others' feelings (empathy), which is important when working with people. Secondly, for the *aroused thinker* an active problem-solving way of thinking is applied when confronted with deep-rooted problems that influence people's lives. Finally, the *bold worker* is the counsellor who shows courage and is relentless and without fail to serve humankind. These values should guide not only the decisions and beliefs but also the actions of the industrial psychologists as counsellors. Such values should become essential to practitioners' organism and form a core of their professional identity.

Professional Identity

According to Moss, Gibson, and Dollarhide (2014), the professional *identity* of a counsellor entails the integration of the professional and personal self. Professional identity is a set of distinctive characteristics belonging to a given profession that is generally shared by all members within a particular occupational category (Van Zyl et al., 2016). Such an identity is a function of a socially-constructed interplay or integration of personal characteristics (interests, beliefs, personality traits), and professional attributes (ethical principles, professional values, professional skills, etc.). Moss et al. (2014) add that this integration includes values, is formed by personal attributes, but is shaped by professional, formative training. Higher-education institutions can therefore play an important part in developing the professional identity of the industrial psychological counsellor.

The primary step to train industrial psychologists as counsellors is to establish a firm identity and acquire knowledge about where and how to make a difference in the organisation. According to Wiles (2017), being clear and confident about identity improves the practitioner's contribution by working with other professionals. Providing effective qualifying education that is developed and maintained throughout people's career, aids a strong professional identity. According to Fink-Sammick (2019), a framework for achieving professional competence should include strong

leadership competencies, focus on continuous learning, register with the appropriate governing bodies, and be visionary.

Furthermore, identity also means understanding who the client is exactly. Within the context of industrial psychology there often is uncertainty whether the organisation that employs the practitioner is the client, or the employees (internal stakeholders) in the organisation themselves. A clear understanding of the boundaries for such a practice provides a clear identity. Legislation (discussed below) is one obvious means of supplying such boundaries.

Legislation

Legislation governs industrial psychologists' scope of practice, the functions they perform, the behaviour exhibited, and the services rendered. Although legislation is usually considered a corrective or punitive instrument, it is positioned as a guiding principle within the framework. Industrial psychological counsellors must ensure their behaviour is aligned with the overarching pieces of legislation that govern practice within their given country. For example, within the United States, the Mental Health Act of 1946 regulates the diagnosis and treatment of mental health problems. The main purpose of the Act is to aid understanding and treatment of mental illnesses, thus paving the way for prevention, recovery, and cure (National Institutes of Health, 2019).

Similarly to the above, the Health Professions Act 56 of 1974, provides for the functions of psychologists within the South African context by outlining the scopes of practice and of profession. The main focus for industrial psychology's scope of practice within the South African context is to optimise individual wellbeing to help organisations work more effectively. Functioning within the mentioned framework offers a safe environment for both practitioner and client (South African Department of Health, 2011, p. 9). Training industrial psychologists through a counselling framework would suggest that it is critical for these practitioners to know, understand, and function within the parameters of acts, laws, policy documents, and guidelines relevant to their profession within their respective countries.

Having a firm foundation and being rooted strongly means that growth is possible. The following phase depicted in the framework describes the growth process recommended for industrial psychology practitioners' to fulfill their role as counsellors.

2.2.2 Section 2: Growing

Growing as an industrial psychological counsellor implies a function in terms of three areas. The mentioned growth function can be described by referring to the tree metaphor: a strong trunk provides the central support system for the tree, by holding the branches and leaves and transporting water and minerals from the ground as well as nutrients from the leaves to support the root system (Kerr, 2019). Considering this tree metaphor, the development of strong inter-personal awareness can be viewed as

influenced mostly by the *root system* (in this case, the ethics, values, identity and scope of the counsellor). Firstly, such awareness entails the extent to which personal characteristics influence the outside world. Secondly, this development enhances self-knowledge (intra-personal awareness). Thus, drawn from the principle of identity, the counsellor should demonstrate self-insight and a strong focus on self-awareness. Finally, investing in self-development and growth, provides the proverbial water and nutrients to support the developing counsellor.

Inter-personal Awareness

Inter-personal awareness refers to individuals' self-insight into the ways their emotions, behaviour, attitudes, perceptions, personal strengths, developmental areas, experiences and valances *impact the outside world* (Arnold, 2015; de Jager-van Straaten, Jorgensen, Hill, & Nel, 2016; Jorgensen et al., 2016). In this case, such awareness describes how industrial psychological counsellors can either employ/utilise, or withhold/manage these capacities during counselling to help build and maintain a positive relationship with the client. Kaslow (2004) views inter-personal awareness as a core competency of an effective counsellor. This means that the (conscious or unconscious) behaviour patterns demonstrated by a counsellor may impact the effectiveness of the counselling process.

There are numerous specific sub-competencies and components of inter-personal awareness (a thorough discussion of which is beyond the scope of this chapter). In this regard, the framework encourages practitioners in particular to become systematically more aware of how their inner workings affects others. This framework adopts 'Johari's Window' from Luft and Ingham (1961) as a heuristic model to diagnose and facilitate the development of inter-personal awareness, as depicted in Fig. 2.

As is clear from Fig. 2, the model proposes a 2×2 grid (of four quadrants) of areas impacting inter-personal awareness, based on two continuums: (a) aspects known to the psychologist and (b) aspects known to others. The four quadrants can be expounded as follows:

- *Quadrant 1*: Entails an area of free activity, where the behaviour, and motivations demonstrated by the industrial psychological counsellor is known to the self and clients.
- *Quadrant 2*: Represents the practitioner's blind spot, where clients can recognise behaviour patterns or motivations of which the practitioner may be unaware.
- *Quadrant 3*: Refers to the façade practitioner presents, which represents the areas they avoid or hide from the client.
- *Quadrant 4*: Points out the area of unknown activity where neither the practitioner, nor the client is aware of certain behaviour patterns, or motives.

Practitioners must consciously be made aware of their blind spots and be presented with opportunities to explore the unknown areas of their personalities. This will help ensure these aspects do not hamper the counselling process (Khattoon, 2018; Saxena, 2015).

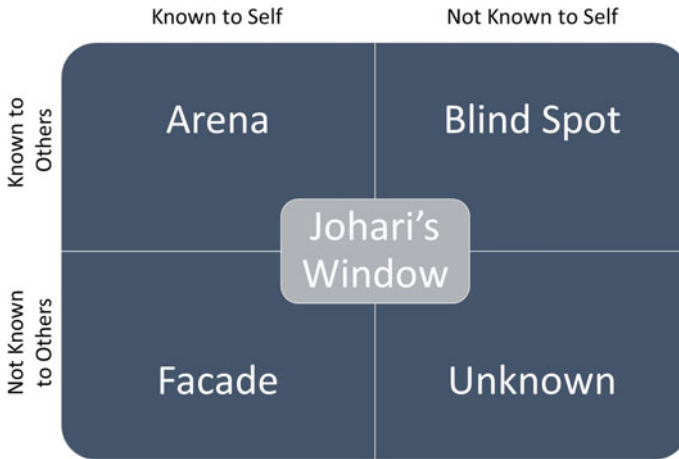


Fig. 2 Johari's Window

In contrast, practitioners must also be made aware of their underlying psychological strengths and positive capacities, as these could help enhance the counselling session (Van Zyl & Stander, 2013).

When facilitating a process to develop the inter-personal awareness of potential industrial psychology counsellors, Luft and Ingham (1961) identify the following seven important principles:

- (a) Changes taking place in one quadrant will impact changes in other quadrants.
- (b) Extensive energy is consumed when practitioners attempt to hide/deny or ignore their underlying motives or behaviour during the counselling session.
- (c) Threats to the identity of the practitioner as part of the developmental process will decrease awareness, however if a psychologically safe environment is established (thus, facilitating mutual trust), stronger inter-personal awareness will develop.
- (d) Forcing a practitioner to become aware of blind spots, or explore the unknown areas, leads to undesirable outcomes and is usually ineffective.
- (e) When inter-personal awareness is developed, the quadrant of the Arena increases and the other areas decreases.
- (f) Working with clients means that the Arena area must be large, and the practitioner should act authentic during the counselling session.

Enlarging the Arena area (i.e. developing increased levels of inter-personal awareness) can be facilitated by requesting feedback, self-disclosure, shared discovery with a client or self-discovery by investing in self-development (Van Zyl & Stander, 2013). From this perspective, it is important not only to focus on becoming aware of the negative (or developmental) areas. Specific focus must be placed on identifying strengths of which the practitioner may not be aware. Developing in-depth inter-personal insight will inevitably lead to heightened levels of intra-personal awareness.

Intra-personal Awareness

A primary function of the industrial psychological counsellor is to understand, predict, explain and influence human behaviour (Levitt & Piazza-Bonin, 2017; Rothmann, 2006). Although this function is influenced strongly by knowledge acquisition and skills training, its effectiveness is underpinned by counsellors’ intra-personal awareness (Habeeb & Fatema, 2016; Myers & Tucker, 2005). In contrast to inter-personal awareness (i.e. how the practitioners relate to others), intra-personal awareness reflects individuals’ inner-world, and how people manage the issues within the “four walls of our brains” (Sharma, Mangal, Mishra, 2017 p. 79). From this perspective, it is clear that intra-personal awareness is the function of (a) developing self-understanding and (b) how effectively individuals deal with their own issues.

Developing self-understanding

Similar to the development of intra-personal awareness, practitioners must employ tools that help them develop a deeper understanding of their core psychological building blocks. This entails developing self-insight, self-understanding, and the intention to grow (Cilliers, 2000; Klynveld, 2014). The framework indicates that practitioners must be made aware of how they think (e.g. personal biases; preferences in information processing); how they feel, (e.g. emotional intelligence); how they function (e.g. wellbeing, strengths and underlying pathologies); and how they relate to others (i.e. relational styles). The aim is increased self-awareness by developing the above-mentioned aspects through applicable training techniques, as reported in Table 1.

Dealing with own issues

Research has shown that psychologists tend to develop psychological distress and mental illness due to the unique personal and professional demands they face (Figley, 2002; Firth-Cozens, 2007; Veage et al., 2014). In particular, it has been found that psychologists are prone to higher levels of psychological distress (McCann et al.,

Table 1 Training techniques that develop self-awareness

Component	Technique	Reference
Cognitive processing	Self-directed learning	Grant and Hartley (2013)
Emotional insight	A growth process such as an encounter group Experiential learning Mentoring	Parilla and Hesser (1998); Jorgensen (2016) Van Zyl et al. (2016)
Psychological functioning	Encounter groups Psychometric Assessment	Jorgensen (2016)
Relational awareness	Experiential learning Encounter groups Mentoring/Coaching	Van Zyl et al. (2016) Jorgensen (2016)

2013), emotional exhaustion (Steel, Macdonald, Schröder, & Mellor-Clark, 2015), burnout (Di Benedetto & Swadling, 2014; Lim, Kim, Kim, Yang, & Lee, 2010) and other general health-related problems (Cushway & Tyler, 1996). If practitioners fail to identify these issues or manage it actively, their mental health could impede the quality of care they provide, or may damage the counsellor-client relationship (Bourne et al., 2017; Tartakovsky, 2018). Therefore, industrial psychological counsellors must invest actively in developing and maintaining their own mental health.

As indicated by the framework, the mentioned practitioners should be encouraged to identify the distressful issues (abnormal behaviour) in their lives, deal with these in the here and now, and focus on a growth process aimed at optimal living. The framework proposes certain techniques (among others) to help manage the mental health of the industrial psychologist as counsellor:

- (a) Actively seek a mentor with whom to attend regular supervision sessions (Carroll, 2006).
- (b) Focus on self-care (Wise, Hersh, & Gibson, 2012).
- (c) Include counselling or therapy such as mindfulness-based therapy (Wise et al. (2012)).

Professional Growth and Development

Similar to the outer bark of a tree, which is renewed continually from within (Trees-SA, 2017), industrial psychological counsellors should focus on continual personal and professional development (Jorgensen et al., 2016). This keeps the practitioners aware of ways to stimulate growth and enable them to instil such a process in their clients as well. As with a tree's sapwood functioning as pipeline transferring water to the leaves (Trees-SA, 2017), industrial psychologists' focus on their own process of growth and development is reflected in the ultimate goal of stimulating and facilitating such a process in the client as well. The counselling framework therefore points out that practitioners should internalise the principles of continuous personal and professional development, to become life-long learners.

2.2.3 Section 3: Branching

Branching involves the specialist capacity and process of skills development required from the industrial psychologist as counsellor. During this phase of the development process, practitioners must fulfil the following functions: (a) acquire and master knowledge about counselling methods and techniques; (b) develop certain fundamental counselling competencies; (c) glean certain skills; and (d) determine the counselling model that best suits their natural strengths, preferences, or capabilities. Whereas the fundamental principles of the Rooting and Growth sections are universally applicable, the Branching section allows for industrial psychological counsellors to find their own proverbial voice and thus provide an effective service

to the client. According to the framework, these domains are depicted as branches, which are expounded in the following sub-sections.

Counselling Knowledge Acquisition

The **first** branch would be to obtain the required and necessary *knowledge* that underpins counselling. Positive psychology provides a solid paradigm to anchor the counselling model for industrial psychology in the suggested framework. Positive psychology is oriented more towards a strength- and solution-driven approach, and diverts from the traditional deficiencies typical of the psychology profession (Lingley, Harrington, Joseph, Maltby, & Wood, 2009). Defining and understanding the theory of a strength-based approach, provide a strong foundation for a counselling framework such as the FIG (Smith, 2006).

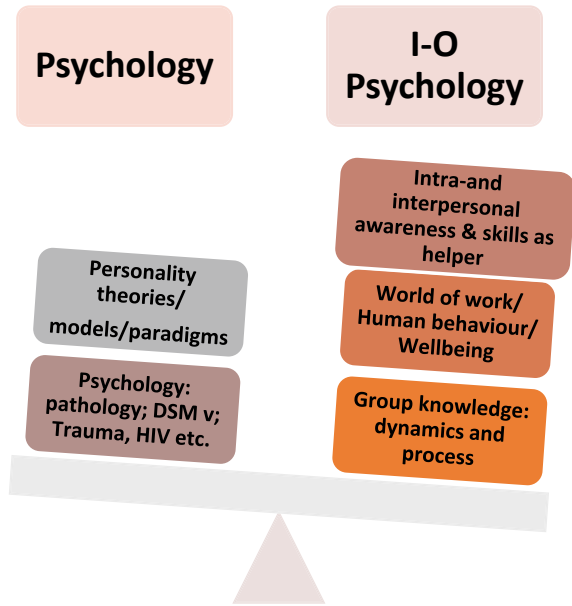
Strümpher (2007) points out that extensive theoretical psychological material must be covered as a prerequisite to becoming a psychologist, according to whichever application. The Task Group for Counsellor Regulation (2006) emphasises that training for counsellors should include the application of theory regarding psychology. Strümpher (2007) explains further that the following grounding theories should be included in the curriculum of an industrial psychologist: management, psychopathology, psychofortology, personality courses. This includes a course on adult development, background in counselling as well as knowledge of interpersonal theories, group-dynamics and conflict. Based on the proposed framework, it is thus essential that industrial psychology practitioners have a foundational knowledge about the counselling process, for example as described in the three-staged counselling model of Ivey (1998), Hill (see McLeod & McLeod, 2011), or the helping model of Carkhuff (2009). A counselling model helps the counsellor apply a framework to guide the counselling process.

Furthermore, perhaps more important (thus, the slight imbalance in the scale image in the figure below) is that for their skillset, industrial psychologists must incorporate knowledge of the *theory* on the following aspects: career counselling, coaching, (employee assistance programme) counselling, informal counselling as well as marital and relationship counselling. Practitioners should also be skilled in feedback of psychometric assessment, dealing with personal problems, and workplace counselling situations. Figure 3 depicts the counselling framework's building blocks of knowledge that applies to industrial psychologists.

Counselling Competencies

As part of practitioners' skillset, the **second** branch of the framework symbolises specific *competencies* of industrial psychologists as counsellors within the work place. Smith (2006) indicates that competencies of strength-based counselling range according to a continuum of counsellor skills from the most negative pole to the strength-based end of the continuum. In this regard, practitioners should portray

Fig. 3 Knowledge building blocks



hope-instilling counselling skills and focus on developing and growing as a counsellor despite acknowledging and treating deficiencies.

Hope-instilling counselling means guiding clients towards a focus of being hopeful and encouraged. In this regard, Frankl (1969) explains that even individuals who has suffered the most horrific traumatic experiences can discover hope and find meaning from such incidents. Buckingham and Clifton (2001) assert that by identifying employees' strengths, they can be helped to function optimally within their work environment. Buckingham and Clifton (2001) identify components of strength such as talents, knowledge, and skills, which allow employees to lead an optimal life.

According to Smith (2006), the strength-based approach can be applied to most disciplines of psychology, such as industrial psychology where the aim is building strengths within employees to steer them through difficult periods of change. Literature shows that specific competencies relevant for industrial psychologists and their training, include core dimensions such as remaining neutral, showing respect, having empathy, and demonstrating genuineness in behaviour (Cilliers, 2000; Shattel, Starr & Thomas, 2007). The Task Group for Counsellor Regulation (2006) identifies certain core competencies for counsellors, such as effective communication and relationship; sensitivity for diversity; maintaining basic conditions consistent with theory and practice; and structuring and facilitating the therapeutic process.

Smith (2006) points out further that counsellors who follow the strength-based approach should be culturally sensitive by understanding both their own and clients' culture. Similarly, Jorgensen et al. (2016) highlight multiculturalism as an important competency for industrial psychologists. Sue, Arrendondo and McDavis (1992)

Table 2 A counsellor-competency profile for industrial psychology practitioners

Competency	Description	Reference
<i>Group 1: Professional conduct</i>		
Culturally sensitive Ethical Structure and facilitate the counselling process Analytical Problem-solving	Exhibit cultural sensitivity Being aware of own and others' cultures Identify key issues in counselling relationship from a base of information Identify cause-effect relationships Apply professional practice skills and skills to manage the counselling process	Smith (2006) Strümpher (2007) Cilliers and Wissing (1993)
<i>Group 2: Interpersonal sensitivity</i>		
Remaining neutral Showing respect Authentic behaviour Serving	Show the ability to remain unbiased during the counselling process Use a sensitive interpersonal style Apply core dimensions of helping (namely, respect, empathy, genuineness) Aware of the needs and potential contributions of client	Cilliers (2000), Cilliers and Wissing (1993) Strümpher (2007) The British Columbia Task Group for Counsellor Regulation (2006) Sburlati, Schniering, Lyneham, and Rapee (2011), Shattel et al. (2007) Smith (2006)
<i>Group 3: Rooted in a paradigm (e.g. positive psychology)</i>		
Solution-focused Courageous Hope-focused	Portray competencies rooted in positive psychology such as results-and hope- focussed	Gable and Haidt (2005) Smith (2006) Strümpher (2007)

explain being culturally sensitive during counselling as recognising cultural origins of own biases, values and attitudes, acknowledging own prejudices and challenging own values (the values individuals hold is not automatically true for others).

Table 2 lists additional competencies derived from literature and deemed important for counsellors. This summary is according to three groups of competencies, placed in the framework (FIG) that could be used to train counsellors.

Counselling Skills

The **third** branch focuses on specific *skills* relevant to counselling. At a minimum, such competencies should include the micro-skills as recommended by Ivey (1998), namely: listening, questioning, minimum encouragement, and paraphrasing (i.e. responding to content and personalising meaning) (Du Preez & Jorgensen, 2012). Such skills may include: clarifying, reflecting, summarising, and giving information. In a study by Shattel et al. (2007), patients of healthcare workers indicated that com-

munication techniques such as restating, clarifying, summarising, and reassurance, helped them relate better to their patients. In addition, eye contact and expressing emotion were highlighted as ways to influence on the counselling process positively (Shattel et al., 2007).

Counselling Models

Relevant competencies to function effectively as an industrial psychologist and exercising sound counselling skills should be placed against the backdrop of a suitable counselling model. Literature recommends various types of counselling models. For purposes of the proposed FIG framework, solution-focused therapy (SFT) suits the counselling model for the context of industrial psychology. Several studies recommend solution-focused therapy to be used within an organisational setting (Ault-house, Kolbert, Bundick & Crothers, 2017; McKergow & Hogan, 2017). According to Shattel et al. (2007), reaching a solution to solve a problem was deemed central to counselling relationships. The participants to their study indicated that, for them, reaching a goal or action was essential to the therapeutic relationship.

In addition, a basic three-staged model such that of Hill (reported in McLeod & McLeod, 2011) can be employed in the counselling process. As noted previously, the counselling skills of Ivey (1998) is as effective in the context of industrial psychology. Figure 4 indicates the competencies, skills, and counselling model applied in the FIG framework by using the three-staged model of Hill.

Figure 4 shows how the strength-based approach forms the paradigm in which the counselling model and relevant micro-skills are embedded. The competencies of the

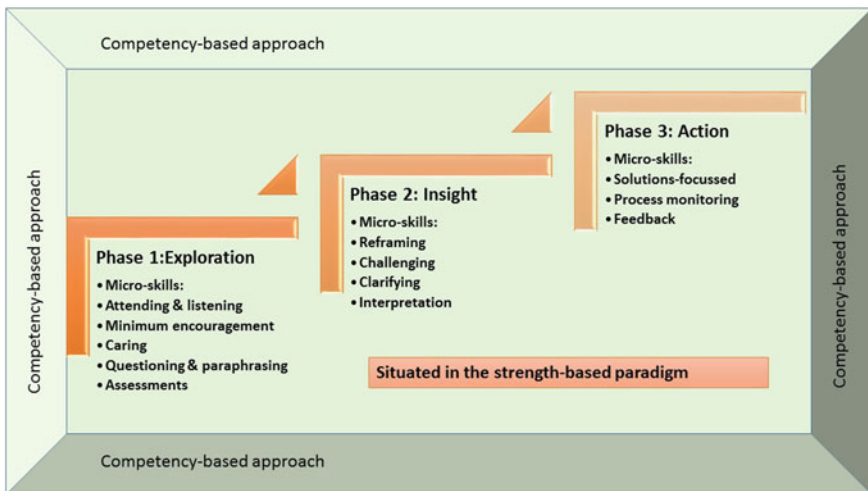


Fig. 4 Three-staged model depicting micro-skills and counselling model

industrial psychologist as counsellor outline the model and simultaneously provide the parameters for the skills and model.

2.2.4 Section 4: Thriving

The final section of the proposed framework focuses on the outcomes portrayed in the visible fruits of the mentioned proverbial tree, according to which the counselling framework is applied. Two types of outcomes are highlighted: firstly, how the counsellor's application of the counselling framework is expected to impact the client; and secondly, the visible outcomes when the counsellor leads an optimal life, these two outcomes are discussed subsequently.

Impact

Firstly, the *impact* of the sycamore fig tree was indicated in the metaphor of supplying fruit to a large variety of animals, living in symbiosis and providing shade. These functions provide an apt description of the potential impact that industrial psychologists have on their clients. Such an impact should be visible in the outcomes, or the amount of 'fruit' the 'tree' carries. Fruit, as outcomes in this case, could be the practitioner impacting widely in the internal as well as external community, for example focusing on corporate social responsibility.

SIOP (2016) reports about the UN-Global Impact team that includes industrial psychologists, which demonstrates the contribution that industrial psychology can make in the community. Furthermore, psychology practitioners should be involved in the organisation's sustainability and its focus on ethical business practices. The industrial psychologist can play an important role in ensuring good governance and ethics in organisations by designing and implementing governance models (Barnard & Fourie, 2007). Governance and ethics can also be related to the root of the metaphorical tree as discussed in this chapter. These fruits as outcomes thus, indicates harvest from the 'good seeds' that was planted and from which the counselling process grew.

Flourishing

The above-mentioned positive outcomes do not only apply to the client, but also to the counsellors themselves. The fruit and leaves of the metaphorical tree would thus portray the wellbeing and optimal living of the clients as facilitated in a process by the counsellor. Not only should the impact be visible; there should also be growth signs of a flourishing individual. Ludden et al. (2014) define flourishing as the improved capacity to lead a pleasant, successful, social, and meaningful life. This implies that industrial psychologists would know when and how to take care of themselves by managing boundaries and relationships and remaining psychologically and physically healthy.

Successful industrial psychologists would be flourishing individuals who show traits (i.e. ‘fruit’) of leading an optimal life. This would include characteristics such as living well, healthy, and thriving; articulating a vision of the ‘good life’; and showing which action leads to wellbeing. The fruit as outcomes would be thriving individuals and communities (Seligman & Csikszentmihalyi, 2014). Gable and Haidt (2005) view the ultimate aim of a positive-psychology approach as building what is known about human resilience, strength, and growth. Thriving individuals would also be in a better position to guide and facilitate a growth process in the client (Strümpher, 2007).

3 Conclusion

This chapter set out to provide a framework that could help train industrial psychologists as counsellors. The training process is symbolised by the anatomy of the sycamore fig tree. The metaphor establishes that growing and developing industrial psychologists as counsellors can be depicted by the growth cycle of such a tree. Rooted in the strength-based paradigm, terminology such as ‘thriving’ and ‘flourishing’ seemingly stimulate thoughts of impressive, cultivated and steadfast trees that provide shade and food for those seeking nourishment during times of difficulty. The preferable outcome is that these recipients are inspired to flourish and grow themselves. They must be empowered to believe that even in worst-case scenarios, new life is possible, analogous to the resilience of the so-called Survivor tree of 911 (911memorial.org).

It should be noted that a specific area is left undiscussed in this chapter (i.e. Section 5 of the framework). This is the methodology of training counsellors. Such a conceptual section will focus on typical training techniques, methods and how to facilitate a learning process to train industrial psychologists as counsellors. The coaching and training framework suggested by Jorgensen et al. (2016) form a sound basis to work from and is deemed a suitable grounding for the framework by which to train counsellors, however more research is needed in the focus area of counselling. In terms of the sycamore-tree metaphor, the training techniques would most likely entail the rain, nourishment and food necessary to thrive, in the form of continuous development, simulations, growth groups and role-plays to facilitate growth and ultimately, maturity in the industrial psychologist as counsellor.

Finally, scholars of psychology such as Frankl (1969) and Rogers (1970) often describe a condition where individuals find meaning through suffering. Naturally, suffering per se is not a prerequisite to reach this ‘place’, what can be learnt thus from these scholars is that an individual grow and develop as a person despite challenges and difficulties. Such individuals themselves grow into impressive examples such as the sycamore and Survivor trees.

In conclusion, and untraditionally for a scientific paper, the author presents a photograph taken in the African bushveld of a sycamore fig tree, which was allowed to grow in its own space and capacity. Thus, the chapter closes with the metaphor



Fig. 5 The sycamore fig tree (photo by the author, Kruger National Park, South Africa, 2012)

of the tree (FIG), a thriving, flourishing and inspiring specimen indeed, making an obvious impact on its surroundings (Fig. 5).

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The Virtual Gratitude Visit (VGV): Using Psychodrama and Role-Playing as a Positive Intervention



Daniel J. Tomasulo

Abstract Gratitude has been established as one of the leading interventions that can lead to sustainable happiness. This paper describes the virtual gratitude visit (VGV) selected for the inaugural Avant-Garde Clinical Intervention award at the 2017 International Positive Psychology Association (IPPA) conference in Montreal, Canada. The technique activates many therapeutic elements contained in the literature on gratitude, role-playing, and storytelling and is described for use by clinicians and coaches in both individual and group settings. The VGV uses role-playing with an empty chair, and a role-reversal to enact a gratitude visit. This extends the applicability of an expression of gratitude to include people who are unavailable; those who have passed on; “parts” of ourselves we have gratitude toward (such as a time when we had more resilience, grit, or joy in our lives); or expressed gratitude toward a higher power or entity. Additionally, the usefulness of the VGV as a non-reading and non-writing positive intervention could have tremendous value for the typically under-represented individuals of more than 775 million adults in the world who are illiterate.

Keywords Gratitude · Role-playing · Psychodrama · Empty chair · Positive clinical intervention

1 Introduction

Expressing gratitude as a positive intervention has been central to the positive psychology movement. The gratitude visit, where participants write and deliver letters of gratitude to people they feel they have not properly thanked, was one of the first positive interventions studied (Seligman, Steen, Park, & Peterson, 2005). In the initial report, when compared to other interventions, those who performed the gratitude visit were found to be the least depressed and the happiest of all the participants. As

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discussed by Tomasulo (2014), gratitude has also been found to enhance self-esteem (McCullough, Emmons, & Tsang, 2002), life satisfaction (Kashdan, Uswatte, & Julian, 2006), prosocial behavior (Wood, Joseph, & Maltby, 2008), and better interpersonal relationships (Algoe, Haidt, & Gable, 2008; Tsang, 2007). It was also found to directly influence the capacity to broaden and build positive emotions (Fredrickson, 2004, 2009) and was noted by Lyubomirsky, Sheldon, and Schkade (2005) as one of the main interventions that can lead to sustainable happiness, and by Algoe, Gable, and Maisel (2010) to enhance relationships. But not all gratitude exercises are the same and there have been some surprising results of such. Boehm and Lyubomirsky (2009) studied participants who savored positive events by writing in a gratitude journal five things they were grateful for either once a week or three times a week, and then compared them with a control group that did not keep journals. Pre- and post-measures on well-being revealed that gratitude journaling worked better once a week rather than three times a week, and better than the control group. In fact, the once a week approach was the only condition in which improvement in well-being was noted. The authors theorize that the success of a positive intervention depends not only on what the intervention is, but also how it is delivered.

When looking at delivery and assessment procedures there is a gap in the literature when it comes to practices used in the research to express and measure gratitude. Beginning with the original delivery of letters of gratitude (Seligman et al., 2005) researchers have almost exclusively used writing as a way of expressing gratitude be it in journals (Boehm & Lyubomirsky, 2009) or in the collection of data from the participants (Algoe, et al. 2010).

Expanding on the method of delivery is where the Virtual Gratitude Visit (VGV) finds applicability. The term “virtual” is being used here in its alternate definition to mean an approximation of something that is not exact in every way. The technique uses imagining someone in an empty chair and then role-playing that person. They are there ‘in effect’ rather than ‘in person’.

New research by O’Connell, O’Shea, and Gallagher (2017) focuses on the enhanced power of expressing gratitude to others. They compared a gratitude journal group to a similar group that, in addition, verbally expressed their gratitude. The researchers found the expressive group did better than gratitude journaling alone or the control group. In the expressing-to-others group, negative emotions and depression decreased, which provided greater emotional balance. The authors concluded that other-oriented gratitude is enhanced when it is outwardly expressed. It is the deliberate verbal expression to others that has relevance to the VGV.

There are three ways the traditional methods and research of a gratitude letter and visit can be re-envisioned and restyled with the VGV. First, most evidence-based interventions concerning gratitude involve writing and/or reading through the use of journals, letters, and sharing of the same. As O’Connell et al.’s (2017) article highlights, expressive writing is only one means by which a therapeutic improvement can happen. The VGV uses an enactment of feelings of gratitude in a role-play with an empty chair. Importantly, the VGV format liberates the technique from a written procedure, as the enactment with the empty chair is unscripted. This unscripted enactment has the potential to reap the benefits of expressing gratitude toward oth-

ers, yet can be accomplished without them present. Drama therapy (Tomasulo & Szucs, 2016), psychodrama (Fong, 2006; Yazdekhasti, Syed, & Arizi, 2013), and role-playing (Nikzadeh & Soudani, 2016) are all methodologies that have shown to offer therapeutic gains (Kipper & Ritchie, 2003), and delivering gratitude with such enactment methodologies is worthy of further investigation. Additionally, the usefulness of the VGV as a non-reading and non-writing intervention could have tremendous value for the more than 775 million adults in the world who are illiterate (List of countries by literacy rate, 2017). Interventions that can address the need to deliver the advantages of expressing gratitude to these individuals deserve research and application attention. People with concomitant intellectual and psychiatric disabilities who have no or low literacy are a primary clinical interest to the author, and the use of VGV in this context for the interested reader can be found elsewhere (Razza & Tomasulo, 2005; Tomasulo, 2014; Tomasulo & Szucs, 2016).

Second, the delivery of a gratitude letter as originally intended involves the availability of a live recipient. As the VGV uses role-playing with an empty chair to enact a gratitude visit, the intervention can include others who are unavailable. Using this empty chair approach may be helpful in four ways:

- The person one has gratitude for may no longer be living and an enactment would be one way to activate the positive effects of the relationship.
- The person may be alive, yet unavailable. As an example, it may be a person from childhood who has moved or a friend one has lost contact with.
- As internal family systems have shown, there may be “parts” of ourselves that we have gratitude toward (such as a time when we had more resilience, grit, or joy in our lives). An enactment with these parts may be helpful in activating strength from another memory point in time. Role-playing allows this type of intra-psycho exploration of gratitude to take place.
- Expressing gratitude toward a higher power or entity through an enactment may be particularly helpful.

Research by Rosmarin, Pirutinsky, Cohen, Galler, and Krumrei (2011) has shown (as others have either provide references here or leave the bracketed section out) that gratitude is significantly correlated with religious commitment. But their research also found that the relationship between these two variables is fully mediated specifically when gratitude is directed toward God. With the VGV, using an unscripted monologue of God-directed gratitude toward an empty chair highlights this specific intention. It has also been demonstrated that when there is spiritual content in an enactment, mental health, happiness, and joy can be positively affected (Yazdekhasti et al. 2013).

Finally, a VGV performed in vivo in the therapist’s office allows for both immediate feedback about its effectiveness and integration of the experience with the therapist. Accordingly, the client may be inspired to continue the work with more traditional positive clinical interventions beyond the session. In fact, recent research by Shahar, Bar-Kalifa, and Alon (2017) has shown specifically that the use of empty chair role-playing will help do just that.

2 VGV Technique¹

For this technique, two chairs are arranged, one for the protagonist and the second (auxiliary) empty chair for the unavailable/other. The protagonist arranges the chairs in a way that symbolically depicts the relationship; that is, are the chairs close? Far apart? Side by side? One behind the other? The chairs' arrangement sets the emotional tone for the encounter, which is a procedure drawn from standard psychodrama practices. The protagonist then sits in his or her chair and expresses gratitude toward the imagined unavailable/other in the empty chair. Typically the look at the empty chair directly and express to the imagined individual statements of appreciation. To give an example of an exchange in a recent session the protagonist began: "Dad, you always made me feel special. I know you weren't always home because of work, but you made sure we spent time together and you always wanted to know what I was doing." Following this, (and perhaps several other statements deepening the expression of gratitude) the protagonist reverses roles and becomes the auxiliary. In doing so, the protagonist responds as if the gratitude had just been expressed to him or her. In the above example the protagonist reversed roles and became his father and responded: "You were such an easy kid to love. Spending time with you was one of my favorite thing to do. I wish I didn't have to work so much when you were growing up." This auxiliary role is then relinquished (usually after a few other statements in responding to the protagonist's statements) and the protagonist returns to the original chair, saying a closing remark to the empty chair. This ends the enactment.

The empty chair technique with a role reversal has the potential to activate two important therapeutic elements. First, it allows for an unscripted expression of gratitude. There is no reading or writing involved. This would be a significant shift in how gratitude is studied and delivered. The research on expressing gratitude in written form demonstrates the power of expression. The VGV extends the method of expression, which appears to be both a necessary and natural extension of the ways gratitude can be used effectively in a clinical setting.

Secondly, the understanding accrued by reversing to the other role employs elements of empathy and learning of the other through theory of mind (Goldstein & Winner, 2012). This role-reversal allows for an amplification of the positivity of gratitude and integration as it is experienced as both sender and receiver. This learning helps to facilitate what Moreno referred to as a catharsis of integration: "Mental catharsis is here defined as a process which accompanies every type of learning, not only release and relief but also a catharsis of integration" (Moreno, 1953/1993, p. 206).

¹A version of this description was first published in Tomasulo (2014).

3 Use of the VGV in Group Therapy

As a member of a group using a VGV, a member can not only enact his or her gratitude, but also witness the expression of gratitude by others. Thus, even in an audience or participant/observer role, a client may derive benefit. Group therapy has traditionally provided a dynamic, low-cost treatment opportunity. By adding the VGV to the toolbox for group therapists, the collective well-being of the group can be enhanced. There are three primary reasons this approach is a valid and fruitful avenue for future research. First, psychodramatic role-playing has been shown to be effective within a wide variety of clinical conditions (Hurley, Tomasulo, & Pfadt, 1998; Kipper & Ritchie, 2003). Second, at its core, the VGV is a narrative, which is one of the most pervasive and promising elements of positive interventions. As discussed by Tomasulo and Pawelski (2012), stories play a significant role both in psychological research and application. The expression of gratitude is a narrative of the benefits of the relationship. Several key positive interventions use participants' narratives as a component in the research (Danner, Snowdon, & Friesen, 2001; Pennebaker, 1997, 2004; Seligman et al., 2005). Furthermore, three of the first five positive interventions reported on by Seligman and his colleagues (Seligman et al., 2005) involved the use of autobiographical narratives: the gratitude visit, you at your best, and three good things in your life. Storytelling was also a central feature in the teaching of positive psychology as Seligman and Chris Peterson began their first course with "serious introductions," where each person tells a story about being his or her best self, and Paul Zak (Future of Storytelling) has articulated the biochemical changes that take place during an engaging story (Zak, 2013).

Other major positive intervention programs and research use storytelling as a central element in the means to deliver or facilitate the intervention. In fact, the Penn Resiliency Program (PRP), the world's most widely researched program for the prevention of depression (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009), includes storytelling as a central component. Haidt (2006) believe there is great power in the use of story as a vehicle to extend empathic understanding. They believe the development of empathy using story may be part of the core dynamic inherent in why stories and psychodramas work.

The VGV also offers a uniquely practical implication for multi-cultural contexts. The specific type of gratitude being expressed by the protagonist, be it familial, interpersonal or spiritual, allows the cultural specifics relevant to the protagonist to be expressed and shared with the group. This does two things simultaneously. First, it allows the protagonist to bring in the rich experiences from their life and culture into the group to be appreciated. Secondly, it helps demonstrate the universality of the power of gratitude regardless of its different forms of expression.

There is also an opportunity for the protagonist to use their native tongue during the VGV, which (as argued in Tomasulo, 2000) allows for a greater emotional expression of the emotion while still conveying the powerful expressive elements of conveying gratitude. Expressing gratitude in one's native tongue even when the group does not speak it doesn't diminish the power of the exercise. The emotive and expressive

elements of the gratitude come through the enactment and can activate the group to discuss their own activation while witnessing the drama.

Finally, a positive emotional enactment, as would be demonstrated by a VGV, has the power to activate *elevation* as defined by Haidt (2003) as an emotion elicited by witnessing virtuous acts of human goodness. Watching others express their gratitude is such an act, and there is direct evidence that elevation can uplift depressed clients. Through the established elements of elevation and clinical role-playing in groups, a VGV can elicit a positive emotional response simply by watching others express their gratitude. It is elevation that makes the expression of a positive emotional experience in a group setting an important feature for psychodramatists to amplify in enactments. The research of Haidt (2003, 2006) on elevation shows that we are wired to notice human goodness. He notes there are three main features of elevation: First, we are drawn to those scenes and stories that are elicitors, such as acts of courage, kindness, loyalty, or any other act of human goodness. Second, there is often a phenomenological and physiological reaction, such as a calm/relaxed, a warm/open/pleasant feeling in the chest, sometimes getting “choked up.” Finally, we are motivated by the elicitors to emulate and self-improve. Haidt (2003) noted that the motivational tendencies that elevation produces include merging with, opening to, and helping others. Psychodramatists are in a particularly good position in a group to use the methods of enactment to take advantage of the natural benefits of elevation. In Haidt’s words, we “inspire to rewire.”

4 To Summarize

- A VGV uses an unscripted enactment with an empty chair to express gratitude.
- It uses a role-reversal with the empty chair to integrate the emotional experience.
- It extends the method by which the positive intervention of a gratitude visit is delivered.
- Since an empty chair is used, gratitude can be expressed to individuals no longer alive.
- The empty chair also allows for an encounter with other stronger parts of the self.
- It can be used with people with low or no literacy.
- It can be used for spiritual growth by expressing gratitude toward a higher power or entity.
- It is an intervention that can be delivered face-to-face with the therapist during the session.
- VGV also offers a uniquely practical implication for multi-cultural contexts including allowing the protagonist to express his or her gratitude in their native tongue.
- In a group, it can benefit the protagonist and members due to the phenomenon of elevation.
- A VGV is a narrative intervention, a storytelling approach, amplified through role-playing. It could best be labeled as a narrative enactment.

5 Future Directions and Conclusion

As recent research and publications have confirmed (Rashid & Seligman, 2018), the need to extend positive interventions, particularly to difficult populations, such as those with chronic and persistent mental illness and intellectual and developmental disabilities, is necessary. Psychodrama has the tools to deliver new and modified versions of positive interventions as audiences and group participants are powerfully moved by watching the psychodramatically enacted vignettes of human goodness.

At the one end of the spectrum would be the use of VGV for people who cannot profit from the existing interventions requiring reading and writing, and at the other end for wide-scale impact through the use of video for broadcast on the TV and internet (Ben-Shahar & Tomasulo, 2017). VGV is but one example of using evidence-informed interventions in newly configured ways. Practitioners should continue this effort in extrapolating from the wealth of interventions proposed by making adaptations as is needed to fit the various cognitive, availability, and cultural needs of those being served. Outside of the clinical environment using broadcasted enactments of VGV would allow for audiences to profit through elevation from witnessing the protagonist. With such an abundance of negativity, violence, and sensationalized reality TV expanding a positive reality alternative could be both helpful and refreshing.

Paramount to this is the need for research on the VGV using different methodologies. Effectiveness in improving gratitude and subjective well-being when the VGV is employed, efficacy in a randomized control study when compared to alternate methods, and qualitative approaches such as case study, introspection, phenomenological, narrative, autoethnography, and performative approaches are just some of the procedures that need investigation. Historically, adequate research has been the greatest stumbling block in more widespread use and understanding of psychodramatic and role-laying methods. The next phase of growth in incorporating role-playing techniques will be meeting the demand for evidence-based practices. Not to do so, not to show the effectiveness of such powerful and impactful techniques will hide a potent light under a bushel—and these contributions have too much potential to let this happen.

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Positive Journal Writing Across Multicultural Contexts: A Protocol for Practice



Megan Christine Hayes and Llewellyn Ellardus Van Zyl

Abstract The purpose of this chapter is to offer a self-directed, evidence-based, positive psychological intervention protocol for *positive journaling*. Specifically, the chapter proposes that effective positive journaling interventions require at least four distinct phases: (1) exposure to a range of positive emotions and discussion of these emotions in context; (2) offering an initial guided/structured writing intervention over three days in the form of a ‘positive journal’; (3) follow up support and discussion of the intervention to evaluate suitability; and finally (4) if appropriate, directing the client towards self-directed ‘ownership’ of this tool by encouraging the maintenance of a regular positive journal practice. In recommending this protocol, the present chapter draws upon extant qualitative and quantitative studies in support of positive writing, as well as highlighting its potential value across multi-cultural contexts. Also offered is a theoretical reflection upon the ways in which such a tool might be further developed to incorporate broader aspects of the field of positive psychology, beyond positive emotions, such as self-compassion or character strengths.

Keywords Positive writing · Positive journaling · Positive psychological writing interventions

1 Introduction

For centuries, various forms of personally expressive writing have been used to aid individuals in developing deep self-insight, to manage negative emotions and to promote wellbeing (Wing, Schutte, & Byrne, 2006). On an individual level, research

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has shown that positively focussed, emotionally expressive writing aids in the development of emotional intelligence and life satisfaction (Wing et al., 2006), promotes improvements in general mood (Burton & King, 2004), and even enhances self-report physical health (Burton & King, 2009). Within organisational contexts, it has shown to decrease absenteeism and turnover intentions (Francis & Pennebaker, 1992), enhance leader-member exchange, motivation and lead to increased job performance (Allan, Fairtlough & Heinzen, 2002). A principal hypothesis for these effects is that expressive writing offers individuals a 'safe' vehicle through which to process/express latent or unexhibited negative emotions (Suhr, Risch, & Wilz, 2017). This may aid individuals in constructing meaning from—and making sense of—negative experiences, thus resulting in fewer intrusive or avoidant thoughts (Frattaroli, 2006; Smith, Thompson, Hall, Allen, & Wetherell 2018). It is therefore unsurprising that emotionally self-expressive writing is increasingly being used by practitioners and researchers to promote personal effectiveness and to enhance wellbeing (Hayes, 2018).

Within the positive psychological paradigm, various forms of emotionally expressive writing (such as 'the best-possible self' exercise or the gratitude letter) have been adopted to aid individuals in realising their strengths, enhancing their wellbeing or optimising personal resources (Gilbert, Foulk, & Bono, 2018; Reiter & Wilz, 2016). However, many positive psychological interventions incorporating expressive writing have produced mixed results (Bolier et al., 2013). In some cases, these types of 'self-help' interventions had small effect-sizes or were not able to affect the targeted dependent variable (e.g. decrease depression, enhance happiness) (Mongrain & Anselmo-Matthews, 2012). Van Zyl, Efendic, Rothmann and Shankland (in press) argued that this is because the utilised intervention does not specifically target the 'right' attributing factors (antecedents/moderating factors) in order to effectively impact the desired outcome variable. Metaphorically speaking, this means that one cannot reasonably expect that prescribing paracetamol (which is primarily employed to alleviate pain and manage fever) will proverbially cure a patients' cancer. The medication might impact the negative outcomes of cancer (pain) in the short term but has no significant effect on 'curing' the disease in the long run. As such, the correct 'medication', with the correct dosage, needs to be employed to treat the right 'disorder/disease/illness'. As expressive emotional writing, for example, has not been shown to be effective in managing anxiety, it can not be reasonably expected that it would alleviate these experiences in agoraphobic individuals. Consequently, researchers and practitioners require not only a clear understanding of when this type of intervention can be employed, but also *a clear framework on how to structure such interventions in order to achieve the desired results.*

Positive psychological practitioners currently lack a clearly structured model (or 'intervention protocol') for utilising and adapting such a tool in practice, especially when employing such within or across cultural contexts. This latter point is particularly pertinent given that recent studies have identified culturally distinct mechanisms in the effects of expressive disclosure that can moderate various psychological health, wellbeing and personal development outcomes (Tsai et al., 2015; Zhang, Duan, Tang, & Yang, 2014). Moreover, models for practice are particularly important when applying writing interventions across diverse contexts. Positive writing interventions

conducted in experimental conditions are typically regimented and controlled in a manner that may be difficult to recreate, replicate or reproduce in practice (i.e. with clients, or with groups) (Mongrain & Anselmo-Matthews, 2012; Van Zyl et al., in press). Experimental conditions will normally require highly structured participation that may be monitored or, at the very least, directed by a researcher.

Further, these experimental interventions are conducted outside of normal systems, and usually target specific attributes without considering the system, context or organisation in which the participant resides/functions (Bolier et al., 2013). Strict guidelines exist to assess the effectiveness of randomised control psychological intervention trials in order to ensure the effectiveness thereof (Bolier et al., 2013), however these are rarely applicable or replicable in practice (Efendic & Van Zyl, in press). Although practitioners are encouraged to adopt these guidelines to implement, measure and monitor the effectiveness of interventions, regulated writing may at times and in certain diverse contexts become inappropriate and limiting—for both client and practitioner (Hayes & Hefferon, 2015). Writing interventions that are time-bound, prescriptive, and narrow in scope are useful in many cases, yet potentially restrictive in others such as working across multicultural groups (Hayes, 2018). Indeed, in such groups the assumptions of our field—often gleaned from research with WEIRD populations, i.e. Western, educated, industrialized, rich and democratic (Henrich, Heine, & Norenzayan, 2010)—may come under question, and as such certain interventions may need to be duly adapted.

Researchers of positive modes of writing, who have themselves drawn upon convenience samples, have noted that those ‘from different cultural backgrounds or at different stages of [psycho-social] development, such as adolescence’ may have highly varied responses to interventions of this nature (Wing et al., 2006, p. 1299). Similarly, in community settings beyond the corporate environment, certain types of interventions may be inappropriate, particularly if a practitioner is presented with varied socio-economic backgrounds, levels of literacy, or experience of self-reflection (Theron, Mitchell, Smith, & Stuart, 2011).

Practitioners who utilise writing with groups or individuals are therefore likely to face a need to adapt expressive writing for diverse audiences. It would thus benefit practitioners to have clear models for practice that are flexible to the needs of various groups. As such, the purpose of the present chapter is to offer one such adaptable model for positive expressive writing for use in applied contexts, in the form of a *positive journal*. A four-phase evidence-based method for practice is proposed, including (1) exposure to a range of positive emotions and discussion of these emotions in context; (2) offering an initial, structured writing intervention over three days; (3) follow up support and discussion of the intervention to evaluate suitability; and finally (4) if appropriate, directing the client towards self-directed ownership of this tool by encouraging the maintenance of a regular positive journal practice. In proposing this model, the present chapter draws upon extant qualitative and quantitative studies in support of positive writing, as well as highlighting its potential value across multicultural contexts. Also offered is a theoretical reflection upon future directions for research and practice in this area.

2 From Expressive Writing to Positive Journal Writing

Personally reflective ways of writing have a substantial theoretical history, both anecdotal and empirical, across the sciences and the humanities (c.f. Wright, 2004). The scientific *expressive writing* paradigm of emotional disclosure regarding a trauma, as proposed and developed by James Pennebaker and colleagues (Pennebaker, 1997; Pennebaker & Beall, 1986; Pennebaker & Chung, 2007) has demonstrable emotional and physical health benefits (Baikie & Wilhelm, 2005). What has been evidenced by this extant research literature is that writing interventions, to be effective, should typically be both emotionally expressive *and* cognitively reflective. Yet asking clients to reflexively express their emotions in the regimented, time-bound conditions associated with standard expressive writing has many potential limitations that may in turn limit the successful impact of writing.

A well-documented limitation of expressive writing about trauma is that participants often experience increased negative affect immediately following the intervention, feeling potentially ‘worse’ and ‘sad, even weepy’ (Pennebaker & Evans, 2014, p. 11). Thus, this kind of writing can be challenging, particularly for populations who may be unsupported. Such increases in negative affect following expressive writing about trauma are perhaps unsurprising, given that this subject matter will likely be upsetting and uncomfortable for the writer to relive. The rationale for this approach stems from the common-sense notion that emotional disclosure is an inherently good thing, an idea that can be traced back to the model of talk therapy, and prior to this the notion of catharsis. Yet Pennebaker and Sexton have noted that ‘people do not benefit from writing simply because of a release of emotion’ (2009, p. 268). Indeed, a meta-analysis of expressive writing found little evidence for a ‘disinhibition’ hypothesis (Frattaroli, 2006). In fact, one study that tasked participants with writing about an *imaginary* trauma found demonstrable effects similar to typical expressive writing (Greenberg, Wortman, & Stone, 1996). This indicates that it may be ‘the psychological work to process such emotions’ (Pennebaker & Sexton, 2009, p. 267) that is paramount—the process of meaning-making—rather than whether what is written about is factually true. This thread of research renders creative, fictive, and non ‘literal’ (Pennebaker & Sexton, 2009, p. 268) forms of writing an interesting potential avenue for future study (discussed further in Sect. 4 of the present chapter). Moreover, the negative affect associated with typical expressive writing about a factually accurate trauma is—in some ways—directly counter to the aims of the field of positive psychology. Despite a recent turn in the field towards an investigation of ‘the darker side of life’ (Ivtzan, Lomas, Hefferon, & Worth, 2015), it remains a unique aspiration of positive psychology to prioritise flourishing rather than simply focusing on alleviating negative symptoms or manage pathology (Keyes, 2007; Seligman & Csikszentmihalyi, 2000).

There are ample ways to benefit from writing without facing a trauma directly. Indeed, a randomized control trial of markedly positive writing in participants with mood disorders had demonstrable effects equal to those of expressive writing as usual (Baikie, Geerligs, & Wilhelm, 2012). One hypothesis that may underpin this

finding is that, as already discussed, emotional writing is not a simple release or purge of emotion, but in fact offers a profound form of *self-affirmation* (Creswell et al., 2007; Crocker, Niiya, & Mischkowski, 2008) and provides an opportunity for self-reflection (Hayes & Hefferon, 2015).

A less documented potential limitation of personal writing—whether simply expressive or overtly positive—is that in beginning to write in this way many individuals may lack high levels of emotional intelligence, as defined by Salovey, Mayer and colleagues (1990; 2009). Such individuals may therefore be ill-equipped to label or even take note of their emotional experiences. Whilst writing expressively itself has been demonstrated to increase emotional intelligence (Kirk, Schutte, & Hine, 2011), it may be desirable in practice to supplement such interventions with an initial reflection on the participant's emotional life in context, in order to aid self-reflection. The present model of positive journal writing embeds such a step.

A further limitation of current research in both expressive writing and positive writing is that reflecting upon one's life is a process that may require markedly more time than the typical three or four-day paradigm permits, as previously proposed by Nicholls (2009). More recently, one meta-analysis of expressive writing with adolescents found 'a greater number of writing sessions enhanced the effects of writing' and that 'the spacing of the writing sessions was found to moderate the effects' (Travagin, Margola, & Revenson, 2015, p. 52). This indicates that different writing timetables, particularly those that encourage flexibility and longer-term modes of engaging with writing, may be beneficial across different populations. Writing over many weeks, months, or even years of a life is likely to yield far deeper personal reflection and meaning-making than is possible in a matter of days—and thus such extended ways of writing must be considered by practitioners, even if the inherent nature of such practices belies absolute scientific precision (Hayes, 2018; O'Connor et al., 2003; Suhr et al., 2017). Hence, the positive journal model is not a restrictive or time-bound intervention but should be presented instead as a long-term, flexible tool via which participants can reflect upon their own—continually changing and developing—life contexts.

In addition to issues with limited time frames for writing, limiting the subject matter of personal writing is also inherently problematic. Indeed, leading researchers have noted that 'the more that the topic or writing assignment is constrained, the less successful it usually is' (Pennebaker & Chung, 2007, p. 267). Despite this vital point, extant positive writing interventions such as writing about 'intensely positive experiences' (Burton & King, 2004) or a 'best possible self' (King, 2001) constrain participants both with precise timings and limited subject matter, which may dampen rather than promote both the complex emotional expressivity and cognitive reflection associated with successful writing interventions.

In summary of this introduction, the limitations raised here present a gap in the literature for a structured yet highly adaptable model of writing for greater wellbeing, appropriate to the aims and concerns of the field of positive psychology. This shift may help to lead researchers and practitioners in positive psychology beyond the model of expressive writing and towards a more fitting concept: *eudaimonic writing*—i.e. writing that is conducive to happiness and not understood as only curative.

Eudaimonic writing is a broadly defined term that invites investigation not only into the increases in positive affect that have been linked with positive writing, but also a deeper investigation of how writing in many forms—including the creative and imaginative—may incite the varied features of positive mental health (as per Ryff, 2014), also termed flourishing (as per Keyes, 2002). A protocol for facilitating a positive emotions journal, such as is offered here, then, is one step in a broader framework of research and practice into eudaimonic ways of writing.

3 When to Employ Positive Journaling

Understanding the conditions under which positive writing can be employed is imperative to the success of the intervention. Although the nature and content of the intervention can be tailored to the needs, context or culture of the client, it is vital to understand ‘when’, ‘where’ and for ‘what’ purpose it is most appropriate. Although not an exhaustive list, Table 1 provides a summary of the dependent or outcome variables which research has shown to be *largely* (i.e. large effect sizes; sustainable changes over time) impacted by ‘positive writing’ interventions. This is an important reference point for practitioners, in order to understand under which conditions positive writing has been shown to be effective.

When clients present either a need to develop (positive) or manage (negative) the emotional experiences as stipulated in Table 1, they are considered good candidates for the positive journaling interventions.

4 Model of Positive Journal Writing

As outlined, the paradigm of expressive writing involves detailing one’s deep thoughts and feelings on the page, typically concerning a trauma, challenge or struggle. This practice is more commonly and colloquially known as *journal writing*. Indeed, the notion of keeping a journal is a widely recognised practice amongst general populations who may have little or no knowledge of a scientific study of ‘expressive writing’.

A notable figure in the area of journal writing, and in many ways a predecessor to the expressive writing paradigm, is the late Jungian psychoanalyst, Ira Progoff. His seminal text, *At a Journal Workshop* (1992), systematised personal writing into a complex programme of expressive and creative exercises and meditations, typically undertaken over several weeks in a group setting. The present chapter, then, places Progoff’s broad claims about writing—i.e. that the journal offers a profound platform for psychological growth—alongside empirical research in positive psychology, to propose an alternative model of journal writing: the positive journal.

A pilot intervention of positive journal writing was previously been conducted, and its potential benefits were qualitatively analysed (c.f. Hayes & Hefferon, 2015).

Table 1 Positive outcomes of positive writing interventions

Positive outcome	Type of intervention	Reference
Life satisfaction ⁽⁺⁾	Mindfully reflecting upon a positive experience every day and unpacking such (in detail) in written form	(Burton & King, 2004; Wing et al., 2006)
Emotional self-regulation ⁽⁺⁾	Mindfully reflecting upon a positive experience every day and unpacking such (in detail) in written form. Participants were asked to further reflect upon how they could experience this specific positive experience more often	(Wing et al., 2006)
Flow and positive affect ⁽⁺⁾	Writing about one's best possible future self	(Layous et al., 2013)
Depression ⁽⁻⁾ and overall wellbeing ⁽⁺⁾	A structured positive diary intervention which required participants to answer a combination of 2 questions daily relating to three domains (a) their strengths, (b) aspects of their personalities which they were most content with and (c) things they were grateful for	(Reiter & Wilz, 2016)
Post traumatic growth ⁽⁺⁾	Write continuously for 15 min on three separate occasions about the most traumatic or distressing experience with as much emotion and feeling as possible	(Gable et al., 2014)
Relationship satisfaction ⁽⁺⁾	Daily diary entries relating to positive experiences, overall moods and interactions with spouses/partners	(Gable et al., 2004)
Hope ⁽⁺⁾	Setting clear goals and finding ways to attain them and finding the mental energy needed to maintain goal pursuits	(Cheavens et al., 2006)
Positive emotions ⁽⁺⁾ and enhancing general health ⁽⁻⁾	Writing about a peak positive experience for 20 min per day for 3 days	(Burton & King, 2004)
Happiness (Eudaimonic) ⁽⁺⁾	Writing and delivering a gratitude letter to someone one wants to thank but has never done before	(Seligman et al., 2005)

(+) = Improved/Enhanced; (-) = Decreased

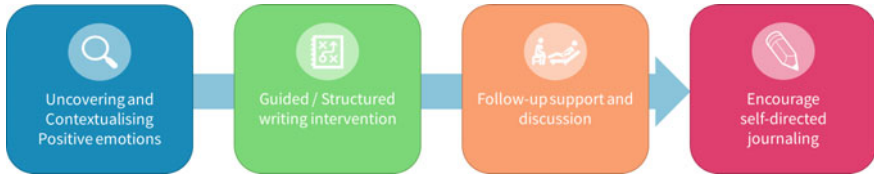


Fig. 1 Positive journaling process

This research actively built upon the quantitative work that had already been duly begun in this area (Baikie et al., 2012; Burton & King, 2004; King, 2001; King & Miner, 2000; Wing et al., 2006). The present model of positive journal writing has also been recently presented and trialled in a workshop setting with a group of positive psychology practitioners (Hayes, 2018). What follows here, then, is drawn from this extant research and practice. Outlined below is an adaptable model for practitioners to utilise positive writing in applied, diverse multicultural contexts.

The model offered includes four phases (*see* Fig. 1). These are, (1) cuing the client or group participant to uncover and contextualise the range of their positive emotions; (2) offering an initial guided/structured writing intervention over three days in the form of a positive emotion journal; (3) follow up support and discussion of the intervention to evaluate suitability; and finally (4) where appropriate, directing the client towards self-directed, autonomous ownership of this tool by encouraging the maintenance of a long term positive journal practice. Each phase will be systematically discussed in the preceding sections.

4.1 Uncovering and Contextualising Positive Emotions

The purpose of this stage is to address participant knowledge, or possible lack thereof, of their emotional landscape—particularly in regard to their positive emotions. Recognition and savouring of positive emotions has many benefits in and of itself (*see* Cohn & Fredrickson, 2010; Cohn, Fredrickson, Brown, Mikels, & Conway, 2009; Fredrickson, 2013). The aim of the recent positive journal writing study by Hayes and Hefferon (2015) was to consolidate research into the physical and emotional health benefits of expressive writing with research into positive emotions and the many associated benefits of experiencing these emotions. This research has built upon extant studies indicating that positive emotion words including ‘happiness’ and ‘enthusiasm’ in the writing of participants demonstrably mediates the efficacy of writing interventions (*see* Pennebaker & Chung, 2007).

This cue to reflect upon positive emotions may be achieved in multiple ways—perhaps simply through a conversation, or hand-out that includes a list of emotions. In the 2015 study by Hayes and Hefferon, this cue was offered in the form of a set of ten Positive Emotion Cards detailing ten of the most frequently experienced positive emotions as per Fredrickson (2013). This tactile element to the first phase of a pos-

itive journal practice was colloquially reflected upon by participants as a pleasant and useful mode of engaging with these emotions, many of whom noted they did not tend to think much about these emotions in their day to day.

In this phase, clients can develop the skills to recognise, correctly identify and understand their emotional experiences (Lopes, Salovey & Straus, 2003). In essence, clients are invited to expand their ‘emotional vocabulary’ (Poventud, Corbett, Daunic, Aydin, & Lane, 2015). Joseph and Strain (2003), as well as Sharp (2014), indicated that emotional vocabulary can be taught, and a larger or richer emotional lexicon could aid individuals in discriminating between feelings, communicating feelings more effectively to others and actively reflecting upon the causes/consequences of such feelings. Clients may expand their emotional vocabulary through systematically discriminating between emotions based on the emotional wheel proposed by Plutchik (1984; Fig. 2). Plutchik (1984) argued that there are eight primary emotions (joy, sadness, acceptance, disgust, fear, anger, surprise and anticipation); if individuals are able to correctly identify and distinguish between such, they are able to systematically enhance their emotional lexicon through emotional comparison and contrasts.

Clients can learn to understand how to correctly identify the primary emotions, and how to discriminate and differentiate between different levels of and between various emotions. This can be done through providing the client with a list of the primary emotions, with a set of diagnostic or identifying criteria that clients can then memorise. Client can be systematically taught how to correctly identify the various levels of intensity of these emotions via self-reflection, storytelling, employing emotional cards etc. Various other techniques could also be employed in order to aid the client to identify, or express their own positive emotions. Stander and Van Zyl (in press) argued that this could be done through the use of psychometric assessments, simulations (such as role-plays), emotional intelligence training or strengths-based self-reflection.

In order to effectively introduce this Phase and to enhance the emotional vocabulary of the client, the needs and demands of the cultural context in which he/she functions also need to be considered. Recent research has shown that, cross-culturally, many emotional experiences or expressions do not easily ‘translate’ (Lomas, 2016b). Although emotional experiences are similar between cultures, the expression of such differs between cultures (Sharp, 2014). Thus, it may be preferable, when working with individuals within multi-cultural contexts, to pre-define or co-construct a list of appropriate emotions along with the client, which could be used as a reference point for Phase 2; in which the positive expressive writing process begins.

4.2 Implement a Guided/Structured Writing Intervention

The purpose of this phase is to follow up the initial cue towards engaging with positive emotions in Phase 1 with a clearly defined initial writing intervention that utilises these emotions. The rationale for this phase is that beginning with clear goals for participants will likely help to direct their efforts and allow them to test out

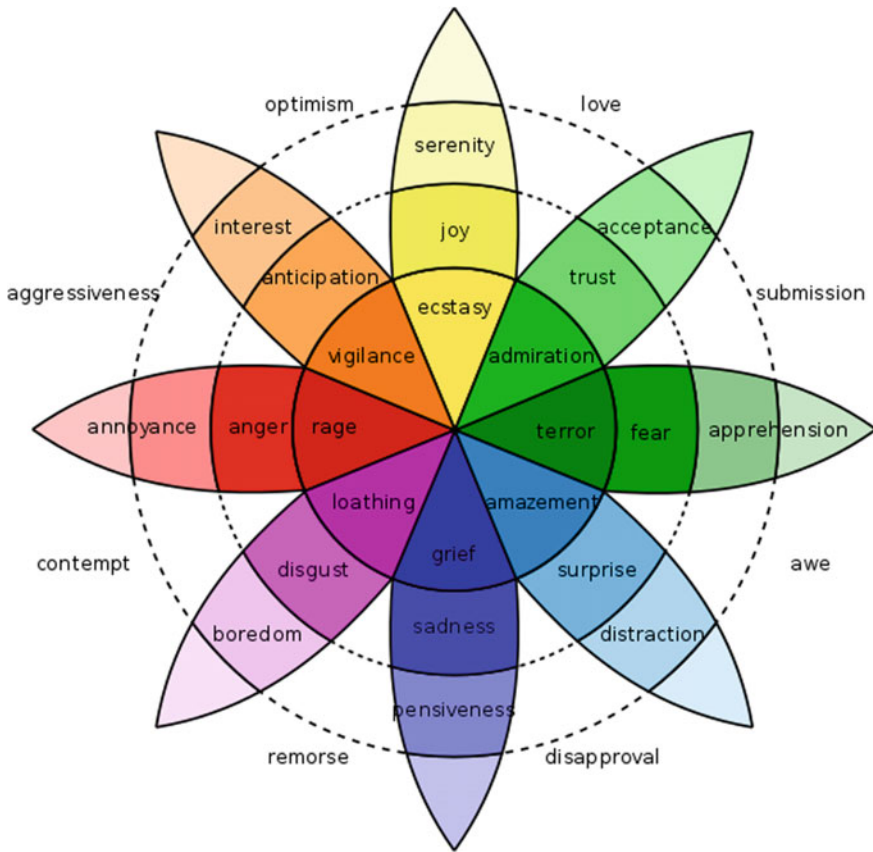


Fig. 2 Plutchik's wheel of emotions

this way of writing within helpful boundary conditions. Following this they can be supported to engage with more creative, freeform or longer-term ways of writing that move beyond these boundaries. Thus this phase invites participants to engage independently in a journal writing exercise of three days, as per the original pilot study into positive journal writing (Hayes & Hefferon, 2015).

This initial intervention aligns closely with the wording and instruction of a typical expressive writing task. This is, as has been stressed, in order to provide useful boundaries for beginning this practice—but it should not constrain writers if it does not fit their personal circumstances. There may well be some discussion at this stage between facilitator and participant around the flexible boundaries of this set task. The principal aim of Phase 2 is simply that participants begin to utilise and engage with the emotions raised in Phase 1 in their personally reflective writing, cued either via tactile cards, written notes, or from memory. Participants are therefore guided to choose one emotion per day over three days, which they feel is most fitting or

appropriate in order to reflect upon their day. Instructions provided in the original study were as follows:

For the next 3 days, write for 15 to 30 minutes each evening reflecting on your day. You may like to tie this in with your relationships with others, including parents, partners, children, friends or other relatives; to your past, your present or your future; or to who you have been, who you would like to be or who you are now. Each day, choose one of the ten 'Positive Emotion Cards' (PECs). Which PEC feels most relevant to your day, or would you most like to apply to your day? Sit with all the cards quietly until you have chosen one, and then begin writing. (Hayes & Hefferon, 2015, p. 83)

As is evident, these instructions aim to be as broad and inclusive as possible, allowing participants to write about a range of experiences, rather than be limited to only positive subject matter. Participants are free to follow these instructions in their own time at home, in advance of Phase 3.

4.3 Follow up Support and Discussion

Specific to any given helping profession are certain respective client expectations, needs, and modes of best practice. A common tenet essential to each of these contexts, however, is the creation of a supportive environment in which the client or participant can feel seen, heard, and supported. Thus the purpose of this third phase is to allow space for a supportive interpersonal interaction to occur following an initial intervention, in which any concerns can be aired before moving forward.

This phase is particularly pertinent to practitioners working across diverse multicultural contexts as it offers a key opportunity to contextualise both the benefits and limitations of a positive writing practice of this nature for diverse groups and individuals. Indeed, this phase embeds a step into the positive journal model whereby discussion that is ethically appropriate to the context of use may take place. This would potentially have particular utility with youth populations, as it has been noted that the emotional demands of expressive writing for adolescents may mean the intervention needs to be 'bolstered by interpersonal support from a parent, teacher, or counselor' (Travagin et al., 2015, p. 53).

Whilst it is imagined that the protocol outlined in this chapter would most likely be utilised by and adapted to the context of specialist modalities such as coaching, psychotherapy, or group therapy—there may be other contexts in which this practice could be helpfully applied, either one to one or with a group, in various community settings, facilitated by those self-identifying as practitioners of positive psychology. It is therefore the duty of such facilitators to assess the ethical and professional boundaries of using writing with others, and to consider how best to support this process for others as a 'positive psychology practitioner' (for a discussion of these ethical and professional boundaries see Lomas & Ivztan, 2016).

4.4 Encouraging an Autonomous Practice via a Self-directed Journal

The purpose of this phase is to support the client in developing an autonomous positive journal practice over the longer term, with a flexible timetable of writing that suits his or her own life context. The import of this phase is that it moves beyond the boundaries of a regimented intervention and—similarly to the aims of Proffoff (1992)—invites diverse groups and individuals to engage autonomously with the practice of writing over the longer term. The rationale for this phase is not least that prescriptive and time-bound interventions can dampen the effects of writing (as discussed in Sect. 2), but also that autonomy has been demonstrated as a major determinant in psychological well-being more generally (Ryff, 2014; Ryff & Keyes, 1995).

The development of a long term positive writing practice is supported by research wherein it has been noted that revisiting positive experiences after a period of time, even those that are ostensibly quite ‘mundane’, can stimulate positive affect—particularly curiosity and interest (Zhang, Kim, Brooks, Gino, & Norton, 2014). This is despite the fact that individuals often ‘underestimate the pleasure that rediscovery will bring them in the future’ (Zhang, Kim, et al., 2014, p. 1859). However, as a caveat to the model offered, it should be once again stressed that a strict regime of journal writing is not usually preferable, and the client or participant should be encouraged to write in their journal based on need or inclination rather than expectations of the facilitator. Indeed, leading expressive writing researchers note that ‘writing should be undertaken when the need exists, as opposed to becoming a forced routine’ (Pennebaker & Sexton, 2009, p. 269). Thus, this phase would involve setting out an initial plan for journal writing with the client and deciding upon a frequency of practise that will suit the individual or group.

Whilst emotions are the foundation of this practice, there is scope in this final phase to discuss with the client possible further practical uses for a positive writing practice over the longer-term. This might include encouraging multicultural groups to interpret this in context-specific ways. Additional uses for a positive journal might be to practice self-compassion (Neff, 2003), or to note and record character strengths. Importantly, this final phase takes into account recent research highlighting culturally specific responses to writing, such as one pilot study suggesting that Chinese individuals scoring high in the character strength of vitality may benefit more from expressive writing (Zhang, Duan, et al., 2014). Highlighting mediating factors with participants, such as individual strengths, could potentially enrich a positive writing practice and could therefore be assessed by practitioners on a case-by-case basis. Further research continues to be required in this area to understand how broader aspects of positive psychological theory might be incorporated into a regular writing practice.

5 Directions for Future: Towards the Research and Practice of *Eudaimonic Writing*

Written disclosure about positive emotions offers an evidenced-based first incarnation of the positive journal model. Yet this model sits within a wider framework that invites further investigation into positive forms of personal writing. In the present chapter, the broad term *eudaimonic writing* has been offered as a useful label for this area of thought. This broader vision invites additional research, theory development, and practice in positive ways of writing that move beyond the promotion of simple positive affect and towards other states associated with eudaimonia: self-acceptance, purpose in life, environmental mastery, positive relationships, personal growth, and autonomy (Ryff, 2014). Moreover, in investigating the relationship between writing and the broader features of eudaimonia, it may now be useful to investigate different ways of writing, such as those that are creative or imaginative. This is timely for positive psychology, as our field has recently taken a turn towards a discussion of the arts as a vehicle for flourishing (Lomas, 2016a; Pawelski & Moores, 2014; Wilkinson & Chilton, 2017). Thus, it is apposite that those researching in the field of expressive writing and positive writing alike dedicate further attention to examining more artistic and creative forms of writing as both therapeutic and conducive to flourishing.

This chapter has so far discussed two essential features of effective writing interventions: that they be both emotionally *expressive* and cognitively *reflective*. Yet *creative* ways of writing are also a growing area of interest to psychological researchers (see Kaufman & Kaufman, 2009), as well as therapists and counsellors (Bolton, Howlett, Lago, Wright, & MacMillan, 2004; Hunt & Sampson, 1998). One important facet of Proffoff's model of journal writing (1992) is that it is not limited to prosaic or factual writing but also incorporates more creative and imaginative writing tasks. Contemporary researchers have corroborated this idea. Sexton and Pennebaker write that 'it is not necessary to take on a literal or journal style of writing to find gains from written expression' (Hunt & Sampson, 2009, p. 268). Indeed, creative, imaginary, fragmented, sporadic, and non-linear styles of writing may be equally as effective (Pennebaker & Evans, 2014, pp. 94–95).

Introducing clients to creative ways of writing that are equally expressive does not require direct attention upon troubling personal material—an approach that has been shown to result in increased negative affect (as discussed above)—and yet may still yield similar benefits. This is because, as Greenberg and colleagues have shown, there are positive health benefits associated even with writing about fictional traumas (Greenberg et al., 1996). Furthermore, fictional ways of writing may be innately enjoyable in-and-of-themselves for participants, as they may incite flow experiences (Csikszentmihalyi, 2002). Mar and Oatley have also proposed fiction as a 'simulation' of real social experience (2008), arguing that fictional writing can be of direct social benefit in that we practise or 'try out' certain behaviours and scenarios. Creative ways of writing thus offer a novel opportunity for participants to reframe the events of their lives in new ways. This might occur simply through the aid of

metaphorical language to access deep feelings (Johnson & Lakoff, 2003; Lomas, 2018), or even through the fictionalisation of experience, whereby an appropriate reflective distance on personal material can be achieved that is potentially therapeutic (Hunt, 2008). Indeed, creative writing might encourage a more objective appraisal of one's personal circumstances; as Rosch writes, in a plea to unite the arts and cognitive sciences, 'the special province of the arts is to show people themselves in a mirror' (2001, p. 237).

To review these directions for future research and practice, it is clear that a broader investigation of eudaimonic writing that incorporates both personal and creative modes of writing could yield many interesting insights. Indeed, as Pennebaker and Evans write: 'the more you write about emotional and personal topics, the more you can appreciate the fine line between expressive writing and creative writing. You can't help but wonder where personal narrative ends and where fiction begins' (Pennebaker & Evans, 2014, p. 94).

6 Summary

In summary, the positive journal model presented here offers a simple, evidence-based tool that is nevertheless flexible and adaptable enough for use across diverse populations. The protocol offered is intended as an initial guide for practitioners in adapting positive psychological theory and research to the contexts of diverse groups of clients, recognising them as individuals able to interpret and unravel the events of own lives—in a positive context—with the aid of reflective writing.

The focus of the protocol offered here is on utilising positive emotions as guides or prompts for writing on *any* personal experience, positive or otherwise. In essence, these emotions offer a lens through which one can express and cognitively assess their varied life experiences. Yet, it is also timely for other aspects of positive psychological research to be united with research in expressive writing. This might include self-acceptance, purpose in life, environmental mastery, positive relationships, personal growth, and autonomy, amongst others. Further, it is timely that researchers and practitioners of positive psychology begin to investigate more creative ways of writing about life experiences, given the current trend in the literature to investigate the arts more generally as a major vehicle for human flourishing. Thus, looking ahead, this chapter has proposed a broader model of eudaimonic writing, with the aim to promote further research and practice in positive, expressive, cognitively reflective, and indeed more creative or imaginative ways of writing. The inherent adaptability and flexibility of a freeform journal to incorporate these diverse ways of writing makes it a practical and viable tool for use in many varied contexts. Therefore the positive journal model provides a convenient protocol that can be readily personalised to the specific needs of diverse multicultural groups.

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Flourishing Interventions 2.0: A Practical Guide to Student Development



Llewellyn Ellardus Van Zyl and Marius W. Stander

Abstract This chapter presents a practical guide for the development of flourishing students. Flourishing is defined as a positive psychological state characterised by positive emotions, engagement, positive relationships, meaning and accomplishments with various positive work/life outcomes. Within an academic setting, recent research has alluded to the relationship between flourishing students and academic performance. Similarly, flourishing students were less likely to procrastinate, had higher levels of self-control, adopted a mastery-approach towards their goals and reported higher levels of academic performance. Further, flourishing students has a higher probability to experience fruitful and rewarding careers. Therefore, it is imperative to equip students with the necessary skills to enhance flourishing early in their academic careers. This chapter aims to present the theoretical implications of flourishing as well as to provide a practical approach towards developing flourishing students.

Keywords Flourishing interventions · Student wellbeing · Positive educational interventions · Evidence-based interventions

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1 Introduction

Attracting, engaging, retaining and developing people will be one of the most important challenges for companies the next few years. One of the best ways to retain and engage individuals at work is to invest in their personal and professional development. People want to achieve and grow, but at the same time they want to be happy. Although almost half the world's population is relatively unhappy (Seligman, 2004), achieving and maintaining happiness at work is therefore an important life goal for many individuals (Dik & Duffy, 2008; Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011; Seligman, 2011). Happy people tend to be more helpful, creative, social and even earn more money (Biswas-Diener & Dean, 2007).

The concept of human flourishing (or the top-end experience of happiness) has recently become the focus of positive psychology (Keyes, 2007a, 2010; Seligman, 2011). Research suggests that less than 20% of adults report that they are flourishing in their lives and/or careers (Keyes, 2002, 2011). Yet, for most, flourishing at work is at the top of their 'bucket lists' (Lyubomirsky, 2011; Seligman, 2011). Various work-related interventions are mentioned in the literature that is aimed at re-crafting work in order to facilitate the development of flourishing (see Dik & Duffy, 2008; Wrzesniewski & Tosti, 2005). However, these interventions showed mixed results (Seligman, 2011; Sin & Lyubomirsky, 2009). Some researchers argue that these mixed results are attributable to various individual, environmental and organisational factors (Dik & Duffy, 2009; Kreitner & Kinicki, 2007; Parry, 2006) of which a shared belief exists that these interventions are implemented *ex post facto* (Amundson, Harris-Bowlsbey, & Niles, 2005; Brown, 2003; van Zyl & Rothmann, 2012).

van Zyl and Rothmann (2012) argued that most organisational interventions are implemented during the early to mid-career phases and are aimed at 'forcing a fit between the individual and the job' or to 're-craft the individuals work so they can derive more meaning from work-related tasks'. Hirschi and Freund (in press) argued that an imperative contributor to the success of these interventions is the time of its implementation. Seligman (2011) suggests that the experiences of fruitful and rewarding careers later in life can be traced back to the skills and abilities learned during late adolescences and early adulthood. Various researchers argued that interventions should be implemented at earlier stages in individuals' career development journeys in order to either (a) match the individual to a better fitting job (Dik & Duffy, 2009; Lyubomirsky, 2011) or (b) to provide individuals with the necessary skills, knowledge, abilities and attitudes to flourish in their later positions (Seligman, 2011; van Zyl & Rothmann, 2012). Therefore, it is important to implement these interventions, aimed at flourishing, at an early stage in the individuals' development (Seligman, 2011).

In order to ensure happy and flourishing individuals at work, research suggest that interventions should be developed and implemented during individuals' tertiary education (Dik & Duffy, 2009; van Zyl & Rothmann, 2012). These interventions have various short term (during the tertiary education) and long term (at work) benefits for the individual. Within the academic environment, recent research has alluded to

the relationship between flourishing students and academic performance (Seligman, 2011; van Zyl & Rothmann, 2012). Howell (2009) found that flourishing students were less likely to procrastinate, had higher levels of self-control, adopted a mastery-approach towards their goals and reported higher levels of academic performance. Within the work-related setting, Seligman (2011) argued that a flourishing labour force is more inclined to manage work-related stressors effectively, show higher levels of commitment to the organisation, show higher levels of performance and be generally 'happier' in their careers.

Therefore, the aim of this chapter is to present the theoretical implications of flourishing as well as to provide a practical approach towards developing flourishing students.

2 Flourishing

Flourishing has become an integrative theory which combines various theorems and approaches into a single multidimensional approach towards understanding and developing top-end happiness (Dunn & Dougherty, 2008; Fredrickson & Losada, 2005). From the literature it is apparent that there are two main approaches towards the conceptualisation of flourishing: Keyes' (2002) *mental health continuum* and Seligman's (2011) *flourishing*. Although there are theoretical differences in their conceptualisation of flourishing, both approaches agree that flourishing can be defined as living in an optimal range of human functioning, a life that is filled with goodness, generativity, personal growth and resilience (Dunn & Dougherty, 2008; Seligman, 2011; van Zyl & Rothmann, 2012).

In his conceptualisation, Keyes (2005) argued that human flourishing can be seen as a syndrome relating to an individual's subjective well-being with elevated levels of psychological, emotional, and social well-being. Keyes (2005, p. 7) summarised flourishing as "a syndrome of subjective well-being which combines feeling good (emotional well-being) with positive functioning (psychological and social well-being)". Keyes (2005, 2006, 2007a) operationalized flourishing as a theory of happiness combining three approaches. Firstly, drawing from the work of Diener, Suh, Lucas, and Smith (1999), emotional well-being accentuates the presence of positive emotions and a feeling that one is satisfied with life. Building on the framework developed by Ryff and Keyes (1995), PWB further relates to a positive evaluation of the self that includes a sense of satisfaction with one's achievements, having a purpose in life and developing/growing as an individual. Finally, building on his own work, Keyes (2005) emphasised the importance of social well-being (Keyes, 1998). This refers to the quality of the relationships one has with others, including positive appraisals of others and believing that one is making a constructive contribution to the larger system (Keyes, 1998, 2005).

Various studies regarding Keyes' (2002) conceptualisation of flourishing have been conducted since its development (Howell, 2009). Higher levels of flourishing have shown to have positive life and work outcomes, such as lower levels of absenteeism, higher levels of self-determination, internal motivation to perform (Keyes,

2006), increased levels of academic performance, lower levels of procrastination (Howell, 2009), increased energy, self-control and an increase in the experience of satisfying careers (Keyes & Westerhof, 2011). Furthermore, patients with higher levels of flourishing tend to recover faster from illness and are less likely to fall into a relapse (Keyes, 2010). Although Keyes' (2002) model integrates various perspectives on optimal development, there is limited research regarding the physical application of this model in applied science (van Zyl & Rothmann, 2012). While Keyes' model on human flourishing is widely accepted as an acceptable model for predicting top-end happiness or human flourishing, little applied research exists regarding its utilisation in intervention studies (Boyes, Girgis, D'Este, & Zucca, 2011). Therefore, the effectiveness of the model as a practical approach towards developing positive emotions through interventions is questionable (Giannopoulos & Vella-Brodrick, 2011a, 2011b).

To address these concerns, Seligman (2011) developed a new model for human flourishing built upon his original conceptualisation of authentic happiness (see Seligman, 2002). Seligman (2011) argued that individuals are at their happiest (i.e. Flourishing) when they have PERMA (see Fig. 1). PERMA is an acronym that stands for **P**ositive emotion, **E**ngagement, positive **R**elationships, **M**eaning and **A**ccomplishments (Seligman, 2011).

Positive emotions refer to emotions relating to the enjoyment of the here and now (Seligman, 2011). Seligman (2011) argued that the experience of positive emotion is vital to flourishing, as long as the other elements of PERMA are in place. Secondly, engagement entails being highly involved in the activities of one's life, which are coupled with a feeling that time stands still as one loses one's self in the current activity (Seligman, 2011). Thirdly, positive relationships are the most influential component in human happiness and well-being (Forgeard, Jayawickreme, Kern, & Seligman, 2011). Fourthly, meaning is concerned with a feeling that one is connected to something larger than one's self, serving a cause bigger than one's self (Seligman, 2011).

The final component is accomplishment/achievement (Seligman, 2011). Accomplishments can be defined in terms of the achievement or mastery of a particular domain at the highest level possible (Seligman, 2011). At an individual level, this can be defined in terms of achieving a desired state and realising pre-identified goals

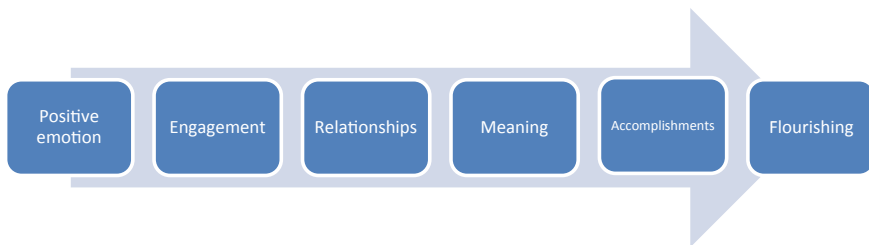


Fig. 1 The PERMA model for flourishing (Seligman, 2011)

(Forgeard et al., 2011; Seligman, 2011). Achievement has also been shown to correlate highly with aspects of perceived competence (Seligman, 2011). Seligman (2011) argued that the development of human flourishing through interventions should be structured around the development of these five elements. Facilitating the development of these components through career development strategies are imperative for enhancing individual well-being and organisational performance (van Zyl & Rothmann, 2012). Therefore, interventions need to be structured around PERMA in order to facilitate optimal career and personal development.

3 Flourishing and Career Development Interventions: Practical Implications

The concept, implication and perceptions of a *career* has changed dramatically over the past five decades (Amundson et al., 2005; Cleary, Horsfall, Muthulakshmi, Happell, & Hunt, 2013). Cleary et al. (2013) argued that careers in the modern era have become a 'life style concept'. From this perspective the career is defined as a course of events which builds up an individual's life or the total constellation of roles individuals play over the course of their life time. Post-modernists argue that a career is central to the identity of the individual, where work becomes central to one's perception of self (Alberts, Mbalo, & Ackermann, 2003; Amundson et al., 2005; Barnett & Napoli, 2008). This strong link between one's perception of identity and one's career indicates that the concept and implication of 'work' is central to one's perception of personal well-being (Alberts et al., 2003; Barnett & Napoli, 2008). Research argues that higher levels of career uncertainty, job/occupational dissatisfaction and lack of meaning in work are strongly correlated with heightened levels of psychological and physical distress (Barnett & Napoli, 2008; Constantine & Flores, 2006; Seligman, 2011). This implies that career development interventions could not only have an impact on individuals' work-related well-being but also on their general physiological and psychological health (Seligman, 2011).

Therefore, it is imperative that career development interventions, aimed at flourishing, be implemented during late adolescence to early adulthood in order to ensure that individuals have the necessary skills and abilities to cope with work-related demands (which impacts on career satisfaction) from an early age. Career development interventions should therefore be aimed at developing PERMA in students in order to ensure future success, well-being and performance (Seligman, 2011). Flourishing interventions should be aimed at developing the necessary skills and techniques required to develop a high level of self-awareness in order to translate experiences into optimal career related choices (Forgeard et al., 2011; Seligman, 2011). These interventions can be aimed at facilitating the individual to clarify his/her life-role salience, interests and values through PERMA in order to ensure optimal career related decision making and career satisfaction (Peterson, 2006; Seligman, 2006).

Enhancing Positive emotions

Although the affective responses associated with flourishing cannot be sustained indefinitely within any career, one must ensure that positive emotions (such as zest, pleasure, contentment and the like) are experienced often (Fredrickson & Losada, 2005; Seligman, 2011). Research suggests that a flourishing career is comprised of a ratio of 2.9 (or rounded off to 3) positive emotions to 1 negative emotion per day (Fredrickson & Losada, 2005). This positivity ratio provides a guideline for individuals to understand what is meant by a “healthy balance” with regards to affect (Fredrickson, 2009; Seligman, 2011). Increasingly, students enter into the job market with the unrealistic expectation that the given career should ad infinitum provide fun and pleasurable experiences (Fredrickson, 2009). However, one needs to facilitate the understanding that negative emotions are required in order to be contrasted with the positive. This is done to enhance the promotion of positive affect, and diminish the experience of negative affect within the career (Fredrickson, 2009).

Table 1 summarises practical techniques which can be used to enhance the experience of positive affect within a given career. These are general techniques which can be applied to an individual’s life or be adapted for the work context. If these techniques are applied or developed in one domain of the individual’s life, the effects is likely to spill over into the other domains (van Zyl & Stander, 2013).

Developing Engagement

From the flourishing perspective, engagement refers to a state in which an individual is actively involved in an activity or career, categorised by a feeling that nothing else matters (Seligman, 2011). Achieving engagement is a natural process especially when individuals engage in careers which they enjoy or find meaningful (Seligman, 2006). In order to develop engagement, study or work activities need to be brought in

Table 1 Techniques for enhancing positive affect

Technique
Express gratitude to fellow students and lecturers in written forms
Learn to forgive the mistakes of others
Avoid overthinking and social comparison at university
Be mindful and savour positive experiences at university
Cultivate optimism in difficult times
Build relationships with peers and lecturers to create developmental feedback loop
Learn from successes and mishaps
Expressing the positive experiences in written form
Try something new once a month
Create a mood tracker, and track the changes in your daily moods
Understand your emotions and how it affects your reactions
Ensure that you get quality (not quantity) sleep

line with an individual’s signature strengths (Peterson & Seligman, 2004; Seligman, 2011). Seligman (2011) defines a strength as a pre-existing capacity which affects the way an individual thinks, feels and behaves which is authentic, energising and enables optimal functioning, development and performance. These strengths are unique to the individual and upon activation, energizes the individual and results in a feeling that ‘time stands still’ (Peterson & Seligman, 2004). The closer the distance between an individual’s strengths and the given task, the higher the chance of experiencing engagement (Seligman, 2006). There are various tools available which can assist the individual in identifying his strengths, such as the VIA Signature Strengths Inventory (Peterson & Seligman, 2004; can be accessed at authentichappiness.org), or the Strengths Finder 2.0 (Rath, 2007).

One main deterring factor that influences the experience of engagement is ‘distraction’ (Forgeard et al., 2011). Distraction is a common problem for any student and employee, where phones, computers, distress and social pressures may influence the onset of engagement in a particular task (Seligman, 2011). It is therefore imperative that individuals be provided with the necessary skills to cope with the demands of life/work and how to channel their energies in such a manner that they can achieve this flow like state within a given career. Table 2 provides an overview of some techniques which can be used to enhance or establish engagement.

Table 2 Techniques for enhancing engagement

Technique
Set realistic goals setting, and commit to its achievement
Constructively dealing with distress and developing coping strategies
Nurture social relationships
Identify and act in accordance with one’s strengths
Seek out projects, jobs, careers and/or tasks which are in line with one’s signature strengths
Seek out mentorship and talk regularly about one’s own development
Develop strategies to minimize distractions and improve concentration
Compile personal growth and development plan
Draw from personal insight as well as career and job knowledge to recraft work
Seek out projects, jobs, careers and/or tasks which are in line with one’s work preferences and career anchors
Employ yearly ‘sense checks’ to see if you are still interested in your studies and if the degree still relates to your long term goals
Embrace the benefits of healthy competition
Reflect upon ‘failures’ and understand how you can learn from such
Unplug from technology and limit email interactions
Gamify your study experience

Cultivating positive Relationships

Establishing and maintaining positive relationships is crucial to the experience of flourishing in a career (Keyes, 2002, 2007b, 2010; Seligman, 2011). Individuals spend more than a third of their lives at work, therefore it is imperative to build meaningful and positive relationships in this domain (Seligman, 2006, 2011). Seligman (2011) and Warr (2007) argued that individuals with a ‘best friend’ at work is seven times more likely to be engaged in their jobs, is 11 times more likely to outperform others and 8 times more likely to experience heightened levels of satisfaction with their careers. Furthermore, Seligman (2011) suggests that individuals who have good relationships at work are more likely to be satisfied with other domains of their lives. Good working relationships have several other benefits: it makes work more enjoyable, less resistant to change, it provides opportunities for more creativity and innovation (Lyubomirsky, 2011). It is therefore imperative to cultivate positive relationships in life and at work.

In order to build and maintain positive relationships, one can utilise the techniques mentioned in Table 3.

Crafting Meaning

Many researchers argue that the concept of meaning is integral to the experience of flourishing in life, at work and in careers (Keyes, 2010; Seligman, 2011; van

Table 3 Techniques for cultivating positive relationships

Technique
Have meaningful and mindful conversations with people
Use active listening during conversations
Practice kindness and generosity at university
Utilise active constructive responding when engaging with others
Show gratitude and appreciation to peers and lecturers
Be authentic and facilitate mutual self-disclosure
Be friendly and supporting to others
Share and celebrate others victories
Build a network of expertise and personal development
Identify and contract a mentor
Enhance your communication skills and develop cross-cultural sensitivity
Show vulnerability and allow yourself to ask for help
Use conflict as a means to grow and to enhance collaboration
Create clear boundaries and understand your limits
Show empathy for others, even in times of high stress
Limit the use of technology when engaging with peers and lecturers
Clarify expectations with peers and lecturers

Zyl, 2012). Meaning refers to the extent towards which one feels connected to the larger socially constructed reality (van Zyl, 2012) and that one receives a return on investment in the energy exerted in activities (Seligman, 2011). The physical manifestation of meaning is different for each individual, and therefore the approach towards development which will differ from person-to-person. Warr (2007) argued that finding and experiencing meaning is an imperative life condition which affects one’s overall sense of well-being. Wrzesniewski, McCauley, Rozin, and Schwartz (1997) argued that meaning can be found in life and/or in a career. Meaning associated with a career tends to spill over into other domains, however meaning in other domains do not spill back into work (Steger, Beeby, Garrett, & Kashdan, in press; Wrzesniewski et al., 1997).

Unlike any of the other components of PERMA, meaning is the most difficult to develop (Seligman, 2011; Steger, Littman-Ovadia, Miller, Menger & Rothmann., in press; Wrzesniewski et al., 1997). Steger et al. (in press) argued that meaning is created by:

- (a) understanding what to do and how to do it (competence)
- (b) understand how work/career fits into the proverbial ‘bigger picture’
- (c) evaluate how these activities contribute to the life of someone else.

Despite the difficulty in developing or crafting meaning, there are some general guidelines for crafting or re-crafting meaning in life, work or careers. These guidelines is summarised in Table 4.

Attaining Accomplishments

Seligman (2011) argued that achieving accomplishments are an objective, external, fuel source for flourishing. There needs to be a balance between your current skill set and the goals and objectives one sets out for oneself (Peterson & Seligman, 2004). The goal or objective needs to be slightly more challenging than the individual’s

Table 4 Techniques for crafting meaning

Technique
Exercise the freedom to choose
View studies as something bigger than you are
Reflect upon the meaning of special moments in your life
Practice religion or spirituality
Engage in career related activities which are in line with your strengths and preferences
Make a list of all the ways you positively impact people (in life and at work)
Act as a mentor for someone and facilitate their development
Deepen social relationships in life and at work
Be curious and seek novelty in university tasks or part-time jobs
Take weekly photos of things that you find meaningful and try to identify re-occurring themes over the course of a month

Table 5 Techniques for attaining accomplishments

Technique
Set specific, measurable, attainable, realistic and time bound personal and professional goals
Visualise goal achievement
Make your goals known to others
Intermittently check the progress of the goal
Implement reward structures for attaining goals
Identify important competencies necessary for success and activate deliberate practice to enhance them
Praise and reward both effort and failures
Modelling the behaviours of successful people or rolemodels
Discover new interests, develop new skills and develop such actively
Give and ask continuous feedback

current level of competence. This discrepancy between the difficulty of the task and the level of competence needs to be large enough to be a “challenge” to the individual, yet not too large as to result in failure (Forgeard et al., 2011). This fine line needs to be balanced and the outcomes of accomplishments managed (Seligman, 2011) since accomplishments can be pursued for its own sake. If an individual is too achievement focused, the emphasis of the component (as part of flourishing) is lost in translation. Table 5 provides an overview of techniques which can be used to pursue accomplishments.

4 Practical Implications

In order to ensure productive and flourishing individuals at work, tertiary institutions should consider having a compulsory module “managing my career” for all final year students. This interventions can lead to academic performance, better relationships, less procrastination, higher levels of self-control, mastering goals (short term), and managing personal energy, experiencing a better “job-person fit”, feeling empowered, showing higher levels of work engagement, performance and be more satisfied with life in general (long term).

The content of such a program can consist of:

- *Enhancing Positive emotions*
- *Developing Engagement*
- *Cultivating positive Relationships*
- *Crafting Meaning*
- *Attaining Accomplishments.*

Topics in Tables 1, 2, 3, 4 and 5 could be used as detailed content.

Companies could consider integrating the above topics into their “on boarding” programs for newly joined employees.

5 Conclusion

Developing individuals is core to the role of managers today. Employees experience managers as genuine when they show interest in their development (Goleman, Boyatzis, & McKee, 2002; Knobel, 2008) and enable them to reach their full potential. The importance of the manager as coach are emphasised by Ladyshevsky (2010) who identified it as an important skill of managers. Therefore, equipping people developers (such as managers, lecturers, coaches etc.) with scientifically proven ‘tools’ to develop flourishing individuals, will have a profound effect on any organisation, team or group’s bottom line (Seligman, 2011).

As in the workplace, development processes, for example coaching, mentoring and self-development can play a major role in the development of students. According to Biswas-Diener and Dean (2007) coaching can be instrumental in optimising people’s potential, leading to flourishing.

This chapter attempted to provide developers of students (lecturers, guidance councillors and trainers) with a sound theoretical base as well as some practical techniques to create higher levels of flourishing. The theory is rooted in the positive psychology based on the work on flourishing by Keyes and Seligman. The practical techniques are anchored on a strengths-based approach and practical experience. A positive or strengths-based development where the student take accountability for his or her development is prosed.

When developers of people succeed in creating flourishing students one can expect that it will contribute to organisational (performance, retention, engagement) as well as personal outcomes (satisfaction with life, performance, career satisfaction).

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