

Melinde Coetzee
Alda Deas *Editors*

Redefining the Psychological Contract in the Digital Era

Issues for Research and Practice

 Springer

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Editors

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*We dedicate this book volume to scholars
and practitioners who are ardently
researching novel solutions for optimising
people's psychological contract fulfilment in
the unprecedented 2020s era of working and
living*

Preface

This book volume represents an attempt to bring together novel contemporary thought and scholarship on theory, research and practice that are currently emerging from inquiring the relevance and nature of the psychological contract in the 2020s post COVID-19 pandemic digital era. Prolific scholars such as Argyris (1960), Levinson, Price, Munden, and Solley (1962), and Schein (1965) firmly established foundational theoretical and empirical work on the psychological contract as a construct that encapsulates mutual expectations between employees and their organisations. In 1989, the work of Rousseau introduced a new era in psychological contract research by her accentuating the explicit and implicit promissory nature of the exchange relationship, individual-level perceptions or idiosyncratic views, and the role of the organisation in creating psychological contracts (Coyle-Shapiro, Costa, Doden, & Chang, 2019).

The present book volume expands upon past work on the psychological contract by scrutinising its nature and relevance in the context of the 2020s digital era. The book volume is an introduction to the multilevel digital era contextual influences that give rise to a new type of employer–employee relationship that are manifesting at the nexus between people and technology in a post COVID-19 world. The chapter contributions craft inspiring, novel narratives on the antecedents, consequences and facets of the new emerging psychological contract. These narratives are illustrated with theory and either case examples or empirical research, while also outlining suggestions for future research and practice.

The primary audience for this book volume is advanced undergraduate and post-graduate students in industrial and organisational psychology and human resource management, as well as scholars in both academic and applied work settings. Human resource managers and professionals will also have an interest in this book volume.

The book volume heralds a new beginning for psychological contract research by its rich compendium of reflections on the shifts in employer–employee expectations and obligations. A review of this volume’s table of contents shows that the authors have approached the psychological contract from a number of different angles. We have categorised them as moving from contextual issues that influence

the nature of the psychological contract (Part I), organisational practice issues to consider (Part II), and issues of diversity (Part III) in managing the digital era psychological contract. We end, in Part IV of the volume, with an integrated reflection and conclusion on emerging issues for research and practice.

The chapters offer refreshing and differing perspectives on the future of the psychological contract. No single chapter can present every aspect of the construct of psychological contract, but *in toto* they demonstrate the continued importance of the construct in contemporary and future employment settings. We highlight some of the overarching issues that are emerging in our introductory chapter (Chap. 1) and conclusion chapter (Chap. 17). The themes highlighted in Chaps. 1 and 17 may suggest to the reader new avenues for thinking about the psychological contract, and its implications beyond the domains discussed in each chapter.

Each chapter makes its own outstanding contribution within the framework of the multilevel contextual digital era psychological contract. Right now, the psychological contract construct is ripe for development and extension in ways we cannot foresee. The issues we have raised (in Chaps. 1 and 17) are intended to help the reader grasp the deliberation and deep structure of the construct as it appears in each cutting-edge chapter in this volume. We trust that the reader finds the book volume and its compendium of chapters on the construct inspiring, insightful, and brimming with possibilities for applicability in social science research and organisational practice for the 2020s world of work.

Pretoria, Gauteng, South Africa
 Pretoria, Gauteng, South Africa
 October 2020

Melinde Coetzee
 Alda Deas

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This volume arose from ongoing deliberations by scholars and practitioners across the globe on the future relevance and nature of the digital era psychological contract. The invaluable scholarly debates in published research and conference papers fostered the conceptualisation of this book volume. The global COVID-19 pandemic ushered people into the digital era, making the Fourth Industrial Revolution a reality that profoundly affects organisations and workers alike. Societies across the globe face unprecedented evolutionary times. Scholars and practitioners are seeking novel solutions for helping organisations and their workers find constructive ways of optimising the employer–employee relationship in uncertain changing times. This book volume reflects a snapshot of the new, emerging thoughts and directions for research and practice that organisations and practitioners may benefit from. We hereby gratefully acknowledge the views, insights and recommendations of the authors who contributed their valuable high-quality inputs to this book volume.

The book volume and its chapters have been independently peer reviewed by scholars before the publication of the volume. We gratefully acknowledge the contributions and recommendations made by the following reviewers:

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Chapter 1

Introductory Chapter: Quo Vadis the Psychological Contract?



Melinde Coetzee and Alda Deas

1.1 Introduction

Beginning with the work of Argyris (1960), Levinson, Price, Munden, and Solley (1962) and Schein (1965), and the subsequent expansion by Rousseau (1989), psychological contract research has a long and successful history of identifying the elements that constitute the construct. Drawing on social exchange theory (Blau, 1964) as a primary theoretical foundation (Tekleab, Laulié, De Vos, De Jong, & Coyle-Shapiro, 2020), the psychological contract, its antecedents and consequences in work settings, have been the subject of various literature reviews and empirical studies over the years (*see* for example, Bal, De Lange, Jansen, & Van der Velde, 2008; Bankins, Griep, & Hansen, 2020; Conway & Briner, 2005; Coyle-Shapiro, Costa, Doden, & Chang, 2019; Li, Rousseau, & Silla-Guerola, 2006; Tekleab et al., 2020; Topa, Morales, & Depolo, 2008; Zhao, Wayne, Glibkowski, & Bravo, 2007). The extensive body of empirical research has made significant contributions in not only clarifying the construct, but also firmly establishing its continued relevance in the work setting. However, some of the criticisms pertain to scholars neglecting to consider the context, that is, situational and environmental influences on the nature of the psychological contract (Coyle-Shapiro et al., 2019; Tekleab et al., 2020). Ignoring the context of the employee–employer exchange presents a constraint on the ability of employers to follow through on their obligations to employees

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(Coyle-Shapiro et al., 2019). This message also resonates through all the chapter contributions in this book volume.

With the advent of the digital era, especially in a post-COVID-19 world, scholars across the globe have embraced a contextual appreciation of a phenomenon such as the psychological contract. Contextual-thinking scholars advocate the importance of considering the extent to which the external and internal organisational context shapes worker behaviour, expectations, values and needs, and the subsequent manifestation of a construct (Johns, 2018). The Fourth Industrial Revolution, compounded by the global COVID-19 pandemic, brought new appreciation for contextual issues in social and behavioural science studies. This book volume promotes this change in direction to give specific attention to context when reviewing the manifestation of the psychological contract construct.

1.2 The Digital Era Psychological Contract as Multi-Level Contextual Phenomenon

In this book volume, the various chapters re-evaluate the relevance and nature of the traditional thought about the psychological contract within the context of the digital era. Although approached from unique perspectives, the various chapters clearly demonstrate to an extent the multilevel nature of work settings and their environments. In this regard, the book volume contributes to the sparse body of behavioural science knowledge on context (*see* Johns, 2018) in understanding the employee–employer relationship. In essence, the answer to our question, ‘Quo vadis the psychological contract?’, is simply to acknowledge the shift in understanding the new nature of the psychological contract within the digital contextual space.

One key take home insight from this book volume is that the digital era psychological contract is a multi-level contextual phenomenon. Although variations of the multi-level facet of the digital era psychological contract occur in each chapter, specific manifestations of the multi-level aspect of the psychological contract are evident in each chapter. The multi-level facets of the digital era psychological contract clearly emerge in the various narratives, research and case illustrations of the chapters. These facets include *inter alia*, the profound impact of technological advancements on the work and career values of workers and societies, the interface between societies, people and technology in performing and designing work, the increasing appreciation of the relational, i-deals and ethical aspects of the psychological contract, the unique psychological work needs, expectations and preferences of diverse generational cohorts and multi-cultural members of a work setting, and the role of HRM 4.0 and supervisors in ensuring appropriate organisational practices and policies. For a snapshot, we refer the reader here to Chap. 17 for a synopsis of key multi-level contextual research and practice themes that emerged from the various chapter contributions.

An interesting trend that we observed in the various chapters, is the sustained relevance of Rousseau's (1989, 1995) conceptualisation of the psychological contract as encapsulating employees' idiosyncratic perceptions of the reciprocal explicit and implicit obligations in the exchange relationship with their employers. In addition, various chapters allude to Knapp, Diehl, and Dougan's (2020) notion that the psychological contract is an inherently versatile construct that lends itself to the analysis of exchange relationships that transcend the specific circumstances of employment and organisational boundaries. We recommend that in future psychological contract work, scholars consider extending the conceptualisation of the digital era psychological contract to include its inherent multi-level contextual nature. In addition, we sincerely hope that the various chapter contributions in this book volume will stimulate the re-definition of the digital era psychological contract to capture the expectations of both the individual, employer and society.

The primary foundational theoretical lens in describing the dynamics of the psychological contract seems to remain the classical social exchange theory of Blau (1964). However, other theoretical lenses have been added to better explain the multi-level contextual nature of the digital era psychological contract. These include theories such as, inter alia, human capital theory, a resource-based view of the firm, and positive psychology (*see* Chinyamurindi, Chap. 3), the integrative social contracts theory (*see* Bankins & Formosa, Chap. 4), Protean career theory and employee relationship economy theory (*see* Coetzee, Chap. 6), conservation of resources theory, affective events theory and lifespan theory (*see* Holtom et al., Chap. 9), leader-member exchange theory (*see* Bussin, Chap. 12) and equity theory (*see* Deas, Chap. 16). The multiple theoretical lenses corroborate the inherent versatility of the psychological contract construct and the importance to approach it from a multi-level contextual perspective.

1.3 Outline of the Book Volume

To ease understanding of the shift to the multi-level contextual understanding of the digital era psychological contract, we have categorised (as illustrated in Fig. 1.1) the chapters in four core theme domains. Each of these sections provides the reader with a snapshot overview of the core focus and contribution of the relevant chapters.

1.3.1 *Part I: The Digital Era: Contextual Issues and the Psychological Contract*

The chapters by Dhanpat (Chap. 2), Chinyamurindi (Chap. 3), Bankins and Formosa (Chap. 4), Veldsman and Van Aarde (Chap. 5), Coetzee (Chap. 6), and Pereira-Costa (Chap. 7), present characteristics of the digital era context that affects the nature of

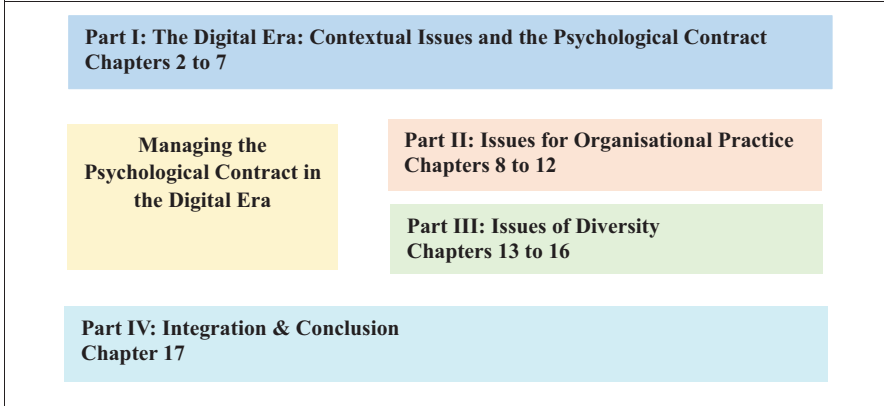


Fig. 1.1 Conceptual overview of the book volume

the psychological contract. The value of these chapter contributions lies within their critical reflection on core multi-level contextual issues that affect the inherent nature of the psychological contract.

1.3.2 Part II: Managing the Psychological Contract in the Digital Era: Issues for Organisational Practice

The chapters by Raeder (Chap. 8), Holtom et al. (Chap. 9), Bester and Stander (Chap. 10), Dhliwayo (Chap. 11) and Bussin (Chap. 12) touch on important multi-level contextual issues that affect organisational human resource practices. The value of these chapter contributions lies in their rich discussion of important human resource practices relevant to Industry 4.0.

1.3.3 Part III: Managing the Psychological Contract: Issues of Diversity

The chapters by Aderibigbe (Chap. 13), Snyman (Chap. 14), Bulinska-Stangrecka and Naim (Chap. 15) and Deas (Chap. 16) highlight the challenges and complexities of managing the multi-level contextual facets of the psychological contract for a diverse generational and multi-cultural workforce. The value of these chapter contributions lies in the exposition of the concept of diversity and psychological contract content that address the characteristics of the Generation Z and digital natives.

1.3.4 Part IV: Integration and Conclusion

The chapter by Deas and Coetzee (Chap. 17) brings together overarching issues for future research and organisational practices at this particular juncture in the re-examining of the psychological contract construct. The core themes that emerged in each chapter are presented as a synopsis for readers to consult when working through this book volume.

1.4 Conclusion

This book volume draws from the seminal psychological contract research literature and positions the construct within the digital era context. This chapter makes a case for the multi-level contextual nature of the digital era psychological contract that needs to be considered in future empirical-practice work. The reader is urged to contemplate this argument in the light of the cutting-edge insightful narratives presented by the various chapters of this book volume. Generally, we intend with this book volume to help close some of the knowledge gaps on the nature of the digital era psychological contract. The book volume is a starting point in developing a novel perspective on and approach to digital era psychological contract research and practice. We hope that the narratives, research and case illustrations shared by the authors will encourage many scholars to continue empirical work in this important knowledge field.

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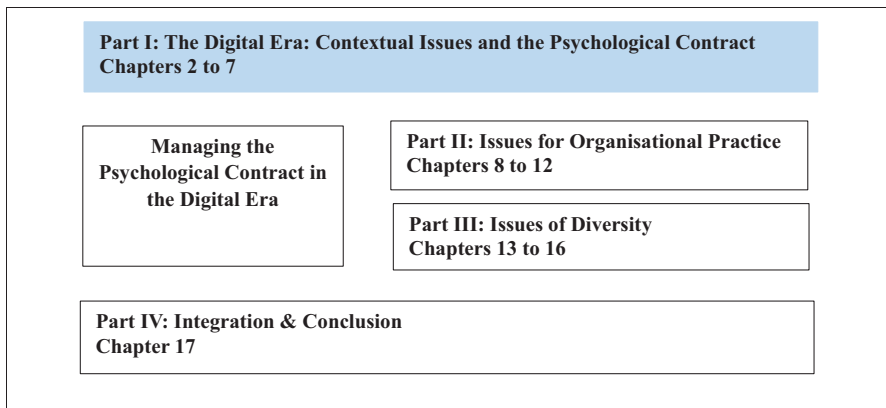
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Part I

The Digital Era: Contextual Issues and the Psychological Contract

Conceptual Overview of the Book Volume



Overview

Dhanpat's contribution (Chap. 2: *Psychological Contract: What to Expect?*) sets the initial scene and helps us to better understand the theory development of the construct of psychological contract since its original inception by Argyris (1960) to date. The chapter elucidates the social exchange theory of Blau (1964) as foundational lens for understanding the nature of the construct of psychological contract. Dhanpat reviews several conceptualisations of the construct, including trends in psychological contract research since the seminal work of Rousseau (1989). The author deliberates the characteristics of the digital era workplace and, based on an empirical study of research spanning from 2010 to 2020, makes a clarion call for human resource practices that allow for the renewal or adjustment of an employee's psychological contract.

The chapter by **Chinyamurindi** (Chap. 3: *[Re] defining the Psychological Contract Within Industry 4.0: An Expert Opinion Analysis*) investigates the relevance of the digital era psychological contract as seen from the perspective of a panel of subject experts in the technology and work psychology fields. Chinyamurindi's study highlights the perceived threat of a unionised workplace versus Industry 4.0 advancements as influencing factors of the psychological contract. The human resource management function is also seen to play an important role in establishing practices that balances the organisational need for technology within the confines of work with the psychological needs of workers.

Bankins and Formosa (Chap. 4: *Ethical AI at Work: The Social Contract for Artificial Intelligence and Its Implications for the Workplace Psychological Contract*) take a multi-level approach to understanding the formation of the psychological contract. The authors touch on the ethical dimension of implementing Artificial Intelligence (AI) and the extent to which technologically driven disruptions affect the employee–employer exchange. Drawing on the basic premises of integrative social contracts theory (ISCT), they outline an illustrative narrative to demonstrate the content of individuals' psychological contracts in the context of working with AI technologies.

Chapter 5 (*The Future of Work: Implications for Organisational Design and the Psychological Contract*) by **Veldsman and Van Aarde** enriches our understanding of the changing nature of the digital era psychological contract and the implications thereof for work design in the future. They build a powerful illustrative narrative around major technology-driven trends (2015–2030) in organisational design that will influence the psychological contract and employer–employee relations in the future. Based on a case example, they plead for a more human-centred organisational design approach that is centred around client needs and requirements, while also taking cognisance of the internal organisation through a targeted employee value proposition.

Coetzee (Chap. 6: *When Protean Career Values Intertwine with Employee–Employer Obligations: Exploring the Implications of Digital Era Work Mindsets for Modern Psychological Contract Practices*) adds to the scholarly work on the link between the psychological contract and modern-day career values. The chapter narrative elucidates the importance of negotiating employability/career development and flexibility i-deals for psychological security and engagement. Creating opportunities for employees to meaningfully contribute to the larger purpose of the organisation is seen as an additional important element of the 2020s psychological contract.

Pereira-Costa (Chap. 7: *New Psychological Contracts, Old Breaches?*) add new insights on the changing nature of work as well as the evolution of the psychological contract in the digital era. The chapter highlights the changes from the old to the new psychological contract and emergent forms of psychological contracts in new digitally enabled work arrangements, especially gig work. The chapter narrative centres especially around the extent to which technological advancement applications in new work arrangements impact employees' perceptions of breach. Noteworthy is the author's reflections on how different employment relationship types bring additional challenges to manage the workforce.

Chapter 2

Psychological Contract: What to Expect?



Nelesh Dhanpat

2.1 Introduction

Organisational scholars have long been interested in the employer–employee relationship and employee expectations (Randmann, 2013). Understanding this relationship is essential to understanding the scope of the psychological contract in the contemporary world of work. Such a relationship exists and evolves over time, based on the notion of performance of tasks and services in exchange for payment (Guest, 1998). Traditionally, employee relationships were shaped by legal contracts (Baruch & Rousseau, 2019). Further understanding of the employee relationship has been characterised as an exchange relationship shaped by mutual understandings and arrangements by the organisation and its employee, which are mainly encapsulated within the terms and conditions of the psychological contract (Coyle-Shapiro & Parzefall, 2008; Persson & Wasieleski, 2015; Rousseau, 2001a, 2001b).

Within the last decade, research on the psychological contract has expanded. Initially, the research was predominantly influenced by the works of Rousseau. Although the origins of the psychological contract can be dated back to the early 1960s, notions of expectations and research on the employment relationship can be noted in earlier research (see Barnard, 1938; March & Simon, 1958). According to Cullinane and Dundon (2006), research on the psychological contract was developed outside the field of human resource management, though is now used in explaining and exploring the nuances of the employer–employee relationship within this field. Although there is much interest in—and renewed attention to—the psychological contract, there is scant research providing insights into psychological contracts in a digital workplace (see Deas, 2019).

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Continuous changes have reshaped organisations and the way in which work is performed at present (Cascio, 1995; Cascio & Aguinis, 2008). It is known that psychological contracts are renewed and adjusted over time (Rousseau, 1995). Thus, the present study aims to provide recommendations for future research on psychological contracting in a digital era, based on past and present research. In light of these significant changes in the workplace (Chernyak-Hai & Rabenu, 2018), namely new ways of work, new forms of employment, differing work schedules, data analytics, automation, and robotics, the terms and conditions of the psychological contract should be studied within this space, referred to as the Fourth Industrial Revolution. This is likely to raise an interplay between employees' expectations, obligations, and promises towards their employer. Rousseau (1995) and Guest (2004) suggest that over time, psychological contracts continue to change. In light of the changes presented by Industry 4.0, never before has it been so essential to understand the current employer–employee relationship, given that this is changing continuously. Therefore, there is importance in studying the contemporary employment relationship within a digital workplace.

2.2 Chapter Objective

The chapter sets out to review quantitative and qualitative studies regarding psychological contract within the South African context during a 10-year period from 2010 to 2020. The review will assist in determining the future direction for the research of the psychological contract in a digitalised workspace. This chapter establishes the changes that have occurred in the encapsulation of the terms and conditions of the psychological contract. This literature review is intended to (a) provide a summary of psychological contract theory and outcomes and (b) provide recommendations for future research on psychological contracting in a digital era. To this end, the digital workplace is discussed, and the way in which psychological contract may be negotiated is elucidated. Subsequently, the methodology designed to meet the dual objectives of the study is described. The results related to psychological contract theory, its associated terms and conditions, and changes to these over time are discussed. As part of the analysis, an overview of the systematic review is presented, and a summary of the overall findings with regard to the psychological contract is tabulated. In addition, employer–employee expectations in a digital workplace are discussed. The research addresses the limited scope of research on the psychological contract in a digitised workspace and provides recommendations for future research in this regard.

2.3 Psychological Contract Theory

Literature on psychological contract was introduced with the formative works of Argyris (1960). Subsequently, other researchers such as Levinson, Price, Munden, Mandl, and Solley (1962), Schein (1970), and Kotter (1973) are also cited as having introduced the psychological contract. Since their early conceptualisation, psychological contracts have centred on beliefs and mutual expectations that accounted for the exchange relationship between the employee and employer, as conceptualised by Argyris (1960). The advancement of psychological contract theory has significantly assisted in our understanding of the employment relationship (Robinson, 1996; Rousseau, 1995). Early psychological contract theory in the 1980s and 1990s was mainly based on Rousseau's empirical research (Freese & Schalk, 2008). A primary definition of psychological contract, suggested by Rousseau (1989), is 'an individual's beliefs regarding the terms of conditions of a reciprocal exchange agreement between the focal person and another party' (p. 123). The inception of psychological contract theory has assisted in explaining the relationship that exists between employees and organisations (Rousseau, 1995, 2001a, 2001b) and provided insights on outcomes such as job security (Costa & Neves, 2017; Dhanpat, Nemarumane, Ngobeni, Nkabinde, & Noko, 2019; Niesen, Van Hootegem, Vander Elst, Battistelli, & De Witte, 2018), employee retention (De Vos, Meganck, & Buyens, 2005; Dhanpat & Parumasur, 2014), organisation identification (Mutendi, De Braine, & Dhanpat, 2019), citizenship behaviour (Priesemuth & Taylor, 2016), employee performance, and loyalty (Bal, Kooij, & De Jong, 2013; Lee & Taylor, 2014).

Early theories of the psychological contract were ascribed to employer–employee exchanges (Argyris, 1960; Schein, 1965) and the beliefs in terms of the mutual expectations encapsulated in this relationship (Argyris, 1960; Levinson et al., 1962; Schein, 1965). The psychological contract is based on social exchange theory (SET), describing the reciprocal exchanges of each party (Blau, 1964), which suggests that employers and employees participate in an exchange relationship and hence, create a series of reciprocal obligations made by the other party. Based on SET, if obligations are not fulfilled, this will result in negative consequences (Le Roux & Rothmann, 2013).

2.3.1 *Conceptualisations of the Psychological Contract*

Over the last two decades, the advancement of the employment relationship research has been based on psychological contract (Robinson, 1996; Rousseau, 1995). The psychological contract sets out to describe individuals' perceptions regarding the terms and conditions of the exchange relationship between themselves and their organisations (Argyris, 1960; Schein, 1965) and encompasses individual contractual beliefs (Conway & Briner, 2005). A study by Kotter (1973) operationalised

mutual expectations, whereas early research by Rousseau (1989, 1995) contributed to the lack of empirical research on psychological contracts. Her 1995 study redefined psychological contracts by capturing employees' perceptions of reciprocal obligations. Her subsequent studies later emphasised that psychological contracts are characterised by promises and based on perceived obligations. Earlier studies of the psychological contract included notions of employment expectations. Subsequently, contemporary literature placed emphasis on the concepts of promises and obligations (Bankins, 2015; Rousseau, 2011).

The psychological contract includes terms and conditions that comprise employee obligations and employer obligations (Mutendi et al., 2019). The scholarship of psychological contract has evolved to include various conceptualisations through empirical research. These have been operationalised through terms such as obligations (Bordia, Restubog, Bordia, & Tang, 2017), employee beliefs (Sutton & Griffin, 2004), and promises, and expectations (Woodrow & Guest, 2017). Many of the aforementioned conceptualisations of the psychological contract share commonalities. Varying research has attributed the psychological contract to include promises and expectations, and from this, obligations that regulate employee behaviour arise (Roehling, 2008; Rousseau, 2001a, 2001b). When promises do not exist, psychological contracts then encapsulate beliefs that are based on general expectations (Montes & Zweig, 2009). The psychological contract further explains the fundamental processes regarding expectations (Curwen, 2011).

Based on the make-up of the psychological contract, it can be characterised as a reflection of employee beliefs regarding mutual obligations (Lub, Bal, Blomme, & Schalk, 2016) and thus involves a degree of subjectivity, particularly in relation to promises and obligations (McGrath, Millward, & Banks, 2015; Zhao, Wayne, Glibkowski, & Bravo, 2007). The make-up of implicit and explicit promises also results in the subjective nature of the psychological contract (Bordia et al., 2017; Lu, Capezio, Restubog, Garcia, & Wang, 2016; Van den Heuvel, Schalk, Freese, & Timmerman, 2016). The psychological contract is underpinned by employees' subjective employment experiences, which can be considered as making a unique contribution in gaining an understanding of this construct and the employer–employee relationship (Rousseau, 2011).

The psychological contract is set to include obligation, and an employer's fulfilment is needed as this impacts employees' perceptions of their own obligations (Coyle-Shapiro & Kessler, 2002; De Vos, Buyens, & Schalk, 2003). Psychological contract fulfilment (PCF) refers to the degree to which an organisation meets its obligations to an employee, from the vantage of an employee. PCF is built upon a social exchange element and, as a result, leads to positive employee behaviours (Karagonlar, Eisenberger, & Aselage, 2016) and contributes to increasing employee's trust and promoting positive behaviour and attitudes, which includes their satisfaction, performance, and commitment (Collins, 2010; Rodwell, Ellershaw, & Flower, 2015). Non-fulfilment results in psychological contract breach. When employees perceive that their employer's obligations are unmet, this results in psychological breach (Van Hootehem & De Witte, 2019) and yields negative effects on the relationship between the employee and employer.

2.3.2 Trends in Psychological Contract Research

Research on psychological contract has increased over the years since the seminal work of Rousseau (see Rousseau, 1989, 1990, 1995). The psychological contract is considered a popular construct of study, which can be seen by the extensive research produced that includes (but is not limited to) contextualisation of the psychological contract (Conway & Briner, 2005; Cullinane & Dundon, 2006; Rousseau, Hansen, & Tomprou, 2018), psychological contract breach and violation (Bal & Jansen, 2016; Henderson, Welsh, & O’Leary-Kelly, 2020; Robinson & Wolfe Morrison, 2000), the changing nature of psychological contracts (Rousseau et al., 2018), and advancing the future direction of psychological contract research (Coyle-Shapiro, Pereira Costa, Doden, & Chang, 2019; Deas & Coetzee, 2020).

2.4 The Current Workplace

Organisations are currently embracing the advancements of technology by the Fourth Industrial Revolution (4IR). Currently, South African organisations have found themselves in discussions of 4IR transformations (Oosthuizen, Tonelli, & Mayer, 2019) and are currently working towards embracing the onset of 4IR (van Rensburg, Telukdarie, & Dhamija, 2019). Within the modern workspace, and with organisations at the forefront of 4IR, a fundamental driving force behind the revolution is digital technology (Schwab, 2016).

Digital technology may be presented in four clusters, namely the internet of things, big data and cloud computing, artificial intelligence and machine learning, and digital platforms (Li, Hou, & Wu, 2017). The accelerated revolution of technology plays a vital role in maximising productivity of organisation and wealth creation (Schäfer, 2018). According to Rana and Sharma (2019), the impact of digitisation on human capital results in redundant skills. Hence, the acceleration of technological capabilities in organisations can result in an increase in unemployment as jobs become automated. This presents changes to the nature of work and the workforce based on digitisation, underlying trends in technology, and the acceleration and increased presence of job automation (Rana & Sharma, 2019; Shava & Hofisi, 2017).

Based on these changes brought upon by digitisation, organisations need to adapt their human resource activities to meet the needs of the labour market. Human resource strategies that address this include the attraction of a new workforce targeted at talent needed for Industry 4.0, retaining and developing employees, and developing and introducing new organisational and work models (Rajnai & Kocsis, 2017).

Consequently, such practices mean a renewal or adjustment of an employee’s psychological contract. Psychological contract theory suggests that employees’ reactions arise from organisational changes (Zhao et al., 2007).

2.5 Research Design

The study is qualitative in nature and employed a systematic review to analyse and review the most relevant articles dealing with the psychological contract. This approach is considered useful as it provides the researcher with an opportunity to gather, evaluate, and analyse documented research. This approach is broadly accepted (Kable, Pich, & Maslin-Prothero, 2012; Schachtebeck & Thabane, 2017) and aims to provide an impartial summary of literature available through the discovery of research material addressing a particular research interest (Nightingale, 2009). Thus, this systematic review was guided by the question, 'What encapsulates the psychological contracts within the South African context?' Systematic reviews most often include the following steps: (a) data collection, (b) analysis of data, and (c) data synthesis.

2.5.1 Research Setting

In the context of the present study, the research interest of psychological contract was targeted to accomplish the objectives of the present study. The study is positioned in an academic and research domain and focuses on psychological contract within the South African context.

2.5.2 Data Collection and Analysis

A systematic review was conducted of the literature on psychological contract in South Africa. Data were collected through an online search involving targeted keyword searches through three South African journals and two prominent electronic databases. The parameters of the systematic review include documented research on psychological contract in South Africa which included keyword search 'psychological contract' and refined the search to South Africa. To locate the relevant studies the selected keyword best captures the phenomenon under study. This included 19 articles published between 2010 and 2020 from four Department of Higher Education and Training-accredited South African scientific journals, namely (a) the *South African Journal of Human Resource Management* (SAJHRM), (b) the *South African Journal of Industrial Psychology* (SAJIP), and (c) the *South African Journal of Economics and Management Studies* (SAJEMS), and one South African database Sabinet and one international database Emerald. The review was conducted in March 2020 and inclusion criteria were established to govern the study and ensure quality. Data were extracted based on the aforementioned parameters. As a first criterion, a publication timeframe was applied, which, as previously mentioned, limited the review to recent literature of the last decade. Thus, only articles

published between 2010 and 2020 (inclusive) were included in the study. The systematic review included full-length peer-reviewed journal articles of an empirical nature. A further criterion was that the articles had to have been published in peer-reviewed journals to ensure the reliability and validity of information collected. Non-empirical research such as case studies, textbooks, book chapters, and book reviews was excluded, as were dissertations. Articles that did not include the term psychological contract in the title was excluded.

The systematic review involved extracting the data which included information of the authors, publication years, and the definition of the psychological contract construct, design and sample employed and key findings. Systematic reviews employ a rigorous methodology in screening original and relevant research, using evidence-based knowledge, aligned to the research objectives (Kyngäs, Mikkonen, & Kääriäinen, 2019).

2.6 Findings

The literature search was undertaken to obtain articles on the psychological contract within a South African context. A search using the term *psychological contract* was used in the South African journals (SAJHRM, SAJIP, and SAJEMS), while the search in the database of Sabinet and Emerald included *psychological contract* with *South Africa*. The search yielded 1955 studies. Of the 1955 studies, 1933 were not accepted for analysis as they did not meet the requirements—mostly, they did not include the term *psychological contract* in the title. Of the remaining 22 articles, three were excluded as they were duplicates. The remaining 19 articles were used for analysis. Table 2.1 presents the breakdown for the literature search.

Table 2.2 presents the 19 articles extracted from the literature review in terms of definitions, methods, and findings. The studies range from a period of 2010 to 2019. Of the 19 studies, seven followed a qualitative research design, and 12 studies used

Table 2.1 Preliminary literature search

Concept	Database/ journal	Discovered	Not accepted for analysis	Accepted for analysis
Psychological contract	SAJHRM	66	59	7
	SAJIP	61	59	2
	SAJEMS	11	9	2
‘Psychological contract’ + South Africa	Sabinet	961	953	8
‘Psychological contract’ + South Africa	Emerald	856	854	3
Total		1955	1933	22
Less duplicates				3
Total				19

Source: Author’s own work

Table 2.2 An overview of psychological contract definitions, methods and findings

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Botha and Moalusi (2010)	The psychological contract can be defined as a set of beliefs or perceptions of what one party (the employee or the employer) expects to receive from and is obliged to provide to the other party (Roehling, 1997)	Qualitative interpretative methodology	Laddering interview	No example in article	<ul style="list-style-type: none"> The data revealed lack of promotion, poor interpersonal relations between colleagues, and bad treatment by seniors as three main breaches of the contract, and social recognition, world of peace and sense of accomplishment as three dominant values that underlie perceptions of contract violation 	7 participants
Corder and Ronnie (2018)	The concept was used to describe the implicit obligations that characterise the exchange relationship that exists between employer and employee (Conway, Kiefer, Hartley, & Brimer, 2014)	Qualitative study	Semi-structured interviews	Please describe the relationship you have with your manager	<ul style="list-style-type: none"> The psychological contract of nurses was balanced in nature, contained predominantly relational elements, and was characterised by the need for manager support, leadership, and autonomy Motivation was a by-product of fulfilment and was enhanced by a combination of tangible and intangible rewards 	16 nurses

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Deas and Linde (2013)	Rousseau (1995) defines the psychological contract as 'individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization' [p. 9]	Quantitative, longitudinal design	Psychological contract questionnaire	'To provide you with challenging tasks'	<ul style="list-style-type: none"> The results indicated no correlation between the psychological contract and perceived performance; however, a strong correlation was found between institute obligations and player obligations 	A team of rugby players
Dhurup et al. (2015)	It fundamentally emphasises the role of reciprocity in understanding exchange relationships between the employer and the employee (Conway & Coyle-Shapiro, 2012)	Quantitative, cross-sectional design	PSYCONES	Has your organisation promised or committed itself to provide you with interesting work?	<ul style="list-style-type: none"> The findings reveal that violation of the psychological contract and work-related anxiety of sport coaches predicted intention to quit This study advocates the notion that, as in other organisational contexts, it is essential for employers in the sporting industry to identify and fulfil the psychological contracts of sport coaches in the management of employee relationships between coaches and their employees 	151 sports coaches

(continued)

Table 2.2 (continued)

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Grobler and Grobler (2016)	Psychological contract refers to the mutual expectations of employers and employees and the relationship between them (Shruthi & Hemanth, 2012)	Quantitative, cross-sectional design	Rousseau (2000)	To what extent has the organisation implicitly or explicitly made promises to you?	<ul style="list-style-type: none"> A strong positive relationship exists between the person–organisation fit factors (direct fit, person–job fit, and indirect fit), while a positive relationship (although small) exists between the psychological contract factors (psychological contract adherence–organisation and psychological contract adherence–employee himself/herself) A positive relationship was also identified between the person–organisation fit factors and the psychological contract factors, which supports the literature presented in this article Negative correlations were reported between the turnover intention construct and all the factors (and total scores) of the person–organisation fit and psychological contract 	1917 employees from 32 organisations

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Isabirye and Dhurup (2013)	According to Rousseau (1995), a psychological contract refers to employees' beliefs concerning mutual obligations between the employee and the employer	Qualitative	Semi-structured interviews	No example in article	<ul style="list-style-type: none"> They did not only expect their employers to assist them advance to higher levels of coaching (career development), but also wanted some amount of freedom that allowed them to make decisions regarding their teams independently (autonomy) The respondents felt that their employers were obligated to give them yearly salary increments that were in line with the inflation rates (financial rewards), while at the same time creating supportive working environments (management support) for them They felt that management needed not only be mindful of their personal family circumstance (personal issues) but should also constantly involve them in any decisions concerning the teams they trained 	15 coaches

(continued)

Table 2.2 (continued)

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Linde and Henderson (2010)	Schein (1987) defined the psychological contract as an 'unwritten set of expectations operating at all times between every member of an organization and the various managers and others in that organization' [p. 22]	Qualitative, thematic analysis	Semi-structured interviews	Please list up to ten expectations that you have of your union (union obligations)	<ul style="list-style-type: none"> • This study identified nine themes comprising the mutual expectations and obligations that govern the member–union relationship • These themes may aid understanding of the underlying functioning of the relationship, as well as the phenomena occurring within this relationship • Union members feel that it is the responsibility of their respective unions to provide legislative services in the form of negotiations, legal protection, individual and workplace representation, and the protection of their basic human rights • Respondents also perceived direct, two-way, frequent communication as an obligation of their union • The way the union conducts itself, as well as the provision of training and development programmes and supplementary services to members, were also regarded as important union obligations. These perceptions were supported by the views of union officials 	56 teachers

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Magano and Thomas (2017)	The psychological contract refers to the exchange agreement between the employee and employer (Rousseau, 1990) and involves perceived obligations that centre on seeking agreement on employment terms (Vantilborgh et al., 2014)	Qualitative, case-study design	Semi-structured interviews	Can you provide an example of a time that a promise made to you was broken by the company?	<ul style="list-style-type: none"> Seven themes emerged regarding the impact of change on the psychological contract during periods of mergers and acquisitions: lack of communication, an absence of planning, lack of employee engagement, less than optimal human resources involvement, lack of preparation of the organisational culture, and poor change management processes It was suggested that these factors need to be addressed to strengthen the psychological contract of employees during periods of change 	12 senior managers purposefully selected
Naidoo et al. (2019)	These expectations of the employee form an unwritten contract referred to as a 'psychological contract' (Aggarwal & Bhargava, 2009, p. 238)	Quantitative, cross-sectional	Self-administered questionnaire	Dimensions measured: fairness, trust, the deal, transactional and relational elements, breach, violation	<ul style="list-style-type: none"> A positive psychological contract exists Both transactional and relational elements of the psychological contract appeared to be essential to academic employees 	400 academic staff members

(continued)

Table 2.2 (continued)

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Onuoha and Idemudia (2018)	Psychological contract refers to the mutually held beliefs of an employee and an employer on the terms of an agreement between them. These beliefs shape the existing and future work relationship (Gakovic & Tetric, 2003; Kotter, 1973; Rousseau, 2001a, 2001b)	Quantitative, cross-sectional	Psychological Contract Breach: developed by Robinson and Wolfe Morrison (2000)	My organisation has broken many of its promises to me even though I've upheld my side of the deal	<ul style="list-style-type: none"> The results showed that perception of psychological contract breach positively predicted workplace deviance among public secondary school teachers 	299 teachers
Pelser-Carstens and Surujlal (2013)	The perceptions of the reciprocal expectations and obligations implied in the employment relationship (Isaksson et al., 2003)	Quantitative, cross-sectional design	PSYCONES The Employer Obligations Questionnaire (Isaksson et al., 2003) Violations of Psychological Contract Questionnaire (Isaksson et al., 2003)	Has your organisation promised or committed itself to help you deal with problems you encounter outside work?	<ul style="list-style-type: none"> The findings reveal that employer obligations showed practical significant correlations with fairness and trust, but a negative relationship with violation of the psychological contract The findings indicate that temporary employees tend to trust the employer more than permanent employees, and perceive violation of their psychological contract more than temporary employees 	151 sports coaches

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Penfold and Ronnie (2015)	The mutual expectations existing between the employee and the employer (Argyris, 1960)	Qualitative, case-study design	Semi-structured interviews (critical incident techniques)	Where an employee or the organisation went beyond or fell short of what could reasonably be expected of them in their treatment of the other party	<ul style="list-style-type: none"> Findings indicated support for the existence of peer-to-peer psychological contracts and noted the valuable influence of a suitable conduit individual on the relationship between employees and their employer 	19 long-standing and 5 recently employed permanent staff
Poisat et al. (2018)	Rousseau (1990) defines a psychological contract as the individual's beliefs in terms of reciprocal obligations between employees and employers	Quantitative, cross-sectional design	Meyer and Allen's (1997) scale measuring employees' emotional attachment to, identification with, and involvement in the organisation served as proxy for measuring employees' psychological contract (PC)	No example in article	<ul style="list-style-type: none"> A significant relationship between the work environment and the psychological contract on retention exists 	711 public and private sector professionals

(continued)

Table 2.2 (continued)

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Scheepers and Shuping (2011)	Psychological contracts refer to beliefs people hold about promises others make to them and which they accept and rely on (Rousseau, 1995)	Quantitative, cross-sectional design	Rousseau's PCI (2000)	To what extent have you made the following commitments or obligations to your employer?	<ul style="list-style-type: none"> The findings showed that most participants have relational contracts with the organisation The study suggests that there are relationships between these psychological contracts and specific human resource practices The study found that training and development was the most important human resource practice for developing relational and balanced contracts 	302 mining organisation employees
Seopa et al. (2015)	The psychological contract is based on the concept of reciprocity in that people engage in social exchanges and anticipate that their efforts will be reciprocated by the other party (Bal et al., 2008)	Quantitative Cross-sectional design	Millward and Hopkins (1998) Rousseau (2000) to address the employer obligations of the psychological contract	No example in article	<ul style="list-style-type: none"> The study shows that being part of the talent pool has a positive impact on the relational psychological contract and organisational commitment but does not necessarily translate into trust and the intention to stay with organisations 	195 employees from automotive and financial services
Snyman et al. (2015)	Forms the foundation of the employment relationship and comprises the expectations of employees regarding the benefits that they believe they are entitled to (Wärmich, Carrel, Ellbert, & Hatfield, 2015)	Quantitative	PSYCONES	No example in article	<ul style="list-style-type: none"> Employment equity legislation and practices do not have a significant effect on employees' psychological contract and intention to leave 	339 HEIs employees

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Solomon and van Collier-Peter (2019)	Rousseau defined the PC as 'individual beliefs regarding terms of an exchange agreement between individuals and their organisation' (Rousseau, 1995, p. 9)	Exploratory qualitative research	Semi-structured interviews	No example in article	<ul style="list-style-type: none"> Coaching can enhance the psychological contract between young millennial professionals and their organisations, particularly with regard to career development Alignment in expectations regarding career development may result in improved performance; enhanced affective commitment and lower turnover 	5 coach participants
Van Niekerk et al. (2019)	The employer–employee relationship is built on both a formal contract of employment and an implied contract, referred to as the psychological contract (Montes & Irving, 2008)	Quantitative, content analysis	Content analysis	Inducements and expectations conveyed on organisations' websites	<ul style="list-style-type: none"> Inducements and expectations published on organisations' websites (three most common: organisational policies, career development, and job content) More organisations publish information about inducements (except for work–life balance) compared to expectations. The inducements, organisational policies and career development differed significantly between the manufacturing and financial services industries. <p>Organisations with dedicated career pages convey significantly more inducements and expectations</p>	98 JSE-listed organisations

(continued)

Table 2.2 (continued)

Study	Definition	Design	Data collection tool	Example item	Findings	Sample
Van der Vaart et al. (2015)	A promise made by the employer is generally referred to as the content of the psychological contract (CIPD, 2006; Rousseau, 1995)	Quantitative, cross-sectional design	PSYCONES	Has your organisation promised or made a commitment to provide you with interesting work?	<ul style="list-style-type: none"> Results also indicated that the state of the psychological contract does not moderate the relationship between perceived employability, employee well-being, and intention to leave The study stresses the importance of fulfilling promises made to employees ensuring that promises are fair and continuing to fulfil promises 	246 participants

Source: Author's own work

a quantitative research design, one of which was a longitudinal study (see Deas & Linde, 2013). The contexts in which each study was undertaken varied.

The quantitative studies used pre-established questionnaires to measure various aspects of the psychological contract, namely commitment (see Poisat, Mey, & Sharp, 2018). Rousseau's (2000) psychological contract inventory was used in three studies (see Grobler & Grobler, 2016; Scheepers & Shuping, 2011; Seopa, Wöcke, & Leeds, 2015) to measure the content of the psychological contract. The PSYCONES (psychological contract across employment situations) instrument was used in three studies to measure the state of the psychological contract (see Dhurup, Keyser, & Surujlal, 2015; Pelsler-Carstens & Surujlal, 2013; van der Vaart, Linde, de Beer, & Cockeran, 2015). One study used Robinson and Wolfe Morrison's (2000) scale to measure psychological contract breach (see Onuoha & Idemudia, 2018). Two other studies opted to use measures developed by themselves (see Deas & Linde, 2013; Naidoo, Abarantyne, & Rugimbana, 2019). Van Niekerk, Chrysler-Fox, and van Wyk (2019) undertook a different approach and conducted a quantitative content analysis.

In terms of qualitative research, all studies under review used interviews as a strategy, with a laddering interview technique used by Botha and Moalusi (2010). These studies provided insight on changes of the psychological contract (see Magano & Thomas, 2017), psychological contract fulfilment (see Linde & Henderson, 2010; Naidoo et al., 2019), psychological contract experience (Penfold & Ronnie, 2015), coaching and psychological contract (Solomon & van Coller-Peter, 2019), and psychological contract breach (see Botha & Moalusi, 2010).

It was established that some studies operationalised the definition of the psychological contract through Rousseau's (1990) definition (see Magano & Thomas, 2017; Poisat et al., 2018). The majority of the other studies framed their conceptualisation of the psychological contract using Rousseau's, 1995 definition (see Corder & Ronnie, 2018; Deas & Linde, 2013; Isabirye & Dhurup, 2013; Scheepers & Shuping, 2011; Solomon & van Coller-Peter, 2019; van der Vaart et al., 2015).

The contexts in which (or participants among whom) the psychological contract was studied varied from sports (see Deas & Linde, 2013; Dhurup et al., 2015; Pelsler-Carstens & Surujlal, 2013), professional employees (see Magano & Thomas, 2017; Penfold & Ronnie, 2015; Poisat et al., 2018; Seopa et al., 2015; van der Vaart et al., 2015), nurses (see Corder & Ronnie, 2018), teachers (see Linde & Henderson, 2010; Onuoha & Idemudia, 2018), and higher education institutions (see Naidoo et al., 2019; Snyman, Ferreira, & Deas, 2015).

2.7 Discussion

The objective of the study was to review the literature of the psychological contract within the South African context over a period of 10 years, ranging from 2010 to 2020. Various studies (19 in total) were analysed through a systematic review. Based on the existence of these studies (and bearing in mind the inclusion criteria for the

present study), this suggests that research on the psychological contract in the South African context is in good shape, and ongoing in terms of its theoretical, empirical, and methodological contributions. Although none of the studies identified are based on a digitised workplace, this provides insight into the way forward and the direction in which psychological contract research should take place.

Overall, the review indicated that psychological contract was predominantly conceptualised in previous studies using Rousseau's (1990, 1995) definitions. This conceptualisation of the psychological contract encapsulates beliefs concerning mutual obligations between the employer and employee. Bearing this conceptualisation in mind, it is essential to understand in the present digitised workplace the types of beliefs that may be presented by employers, resulting in the exchange agreement between the employer and employee.

The accelerated changes presented by Industry 4.0 have resulted in changes within workspaces, namely digitisation, automation, and artificial intelligence (Jesuthasan, 2017). The presence of digital technologies increases digitisation and brings about changes in the connection between individuals and their behaviours (Gimpel & Röglinger, 2015). While these non-human modifications are taking place, it is essential to note the changes they nonetheless bring about in the relationship between employees and their employers. As organisations become digitised employees level of connectedness and new digital capabilities need to be adopted (Kohnke, 2017). More so, digitisation fosters innovation and employees will be required to use new technologies and develop new skill sets to meet the complex need of digital systems (Gimpel & Röglinger, 2015; Kagermann, 2015; McAfee & Welch, 2013).

According to Guest (2004), psychological contracts are said to evolve and be adjusted over time. In addition, the effects of a digitised workplace yielding optimum results will be seen as they progress into the future. Essentially, employees are aware that, as time goes on, their perceptions of their employer's obligations are likely not be fulfilled, and therefore adjust their expectations accordingly. In light of this, the psychological contract is considered to be dynamic (Persson & Wasieleski, 2015).

Research on the psychological contract has generated fresh insights within varying contexts. While such studies have extended the scope of research in terms of the psychological contract, a gap remains in terms of addressing the nuances of the psychological contract within a digitised workplace and consequently, how the construct will be measured. Alternate methods for the effective measurement of the psychological contract in a digitised workplace should be proposed to include an updated content. The emergence of novel forms of organisations and different work arrangements leads to changes in employment relationships (Guest, 2017; Petriglieri, Ashford, & Wrzesniewski, 2019). The context in which the psychological contract is researched will assist in shaping its future direction within the digital era. Research conducted within organisations that have embraced digitisation and the opportunities presented by the Fourth Industrial Revolution will assist in gaining perspective on the content of the psychological contract in a digitised workplace.

2.8 Limitations and Recommendations for Future Research

All studies have some form of limitations. The current study reviewed literature from a period of only 10 years ago until present and as a result excluded any core research conducted prior to this date. It is recommended that future researchers extend this search using a systematic review. The review was based on three journals specific to the South African context and used two databases to source additional literature, which may have limited the scope of South African studies uncovered by the search. It is recommended that future research includes other databases in the search for relevant literature. Coupled with this, it is also recommended that future researchers provide high-level themes attached to their research.

2.9 Implications for Future Research

According to Lu et al. (2016), research on the psychological contract has already explained differences in the types of psychological contracts and associated work outcomes. The review presented limited details regarding psychological breach; it would therefore be interesting to gain insight into the way in which breach and violation occur within a digitised workspace.

Through the systematic review, it is evident that South African psychological contract research has made significant contributions to the dearth of empirical research globally. It is important to note that contextual factors have the potential to shape employee reactions towards the fulfilment of the psychological contract (Tekleab, Laulié, De Vos, De Jong, & Coyle-Shapiro, 2019). With this foresight, there is however limited research on the psychological contract within a digitised workplace. Technological acceleration and digitisation are likely to be considered contextual factors influencing employee work. Hence, there is a need for current researchers in the domain of psychological contracts to actively pursue such research. Qualitative insights will assist in conceptualising the terms and conditions of employee expectations, which include their beliefs and obligations brought about by a digitised workspace. Likewise, such research will allow for the understanding of employers' promises and obligations.

Quantitative research should ensure clear empirical exploration into the way in which psychological contracts are perceived by the employer and employee during Industry 4.0. Consequently, current measurements should be adapted to measure the psychological contract. Research on psychological contract is characterised by cross-sectional designs and qualitative insights. There is a need to consider the potential of measuring the psychological contract over time, making use of time-based and panel studies, making use of longitudinal data. It will be interesting to establish how employees expectations fluctuate during a time of change and more so with the advent of Industry 4.0. In light of Industry 4.0 and the opportunities and challenges it presents, it would be interesting to develop a measure that takes into

consideration the unique inducements brought on by this technological revolution. The psychological contract is considered as an essential concept in understanding apparent changes towards the employment relationship, which is normally brought by new organisational circumstances (Lub et al., 2016).

2.10 Implications for Organisational Practice

The shift towards Industry 4.0 has implications on the way in which work is performed today. The acceleration of technology and the creation of digitised workspaces are at the fore. The findings of the study are deemed beneficial for organisational practices, more so for organisations currently operating within a digital workspace or about to embark on such a journey. As the nature of work changes, it is likely that the psychological contract between the employer and employee will shift. Consequently, the inducements perceived by employees, along with their expectations and obligations, will shift. Employers now need to remain cognisant of the influence of a digitised workspace on the employment relationship. It is known that the psychological contract evolves over time and, as such, will hence see changes with regard to psychological contract fulfilment, breach, and violation. In terms of practice, human resource departments should take heed of employees' subsequent expectations and an employer's response to these. There will be a need to manage such during this time, as there is a likelihood that, if not managed well, this has the propensity to lead to decreased job satisfaction, commitment, and engagement, and result in an increase in labour turnover.

2.11 Conclusion

The psychological contract acts as an elixir towards the employment relationship. We know that over time the psychological contract evolves. It is for this reason that the expectations, promises, obligations, and mutual beliefs are likely to be renewed and adjusted accordingly within a new workspace characterised by the acceleration of technology. In the last decade, a vast amount of research has been conducted on the content and terms and conditions of the psychological contract. As such, current researchers in the field need to take heed and assess such relationships. Overall, the review contributes to the literature in several ways. It provides insights through a systematic review of the conceptualisation of the psychological contract. This was addressed through the literature review on what encapsulates the psychological contract. Subsequently, the way in which studies have established the research design in measuring and gaining insight to the psychological contract were reviewed. This assisted in providing clarity for delineating future research on this topic and the way it is measured. It is known that employees' expectations are located within the psychological contract, and this has been prolifically researched (Guest, 1998; Herriot,

Manning, & Kidd, 1997; Rousseau, 1990, 1995, 1998; Schein, 1978); however, the time is now to provide insights into how this construct is renewed and adjusted based on Industry 4.0.

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Chapter 3

[Re] defining the Psychological Contract Within Industry 4.0: An Expert Opinion Analysis



Willie Tafadzwa Chinyamurindi

3.1 Introduction

There is noted emphasis on the drive towards a more industrialised society led by technological development (Haug, 2011). This era of technological growth is also promoted especially on the African continent with a young population group that is adopting the technology (UNECA, 2016). There is also an observation of the influence of globalisation inclusive of technological advancement in shaping the experience of work (Chinyamurindi, 2016; Suutari, Brewster, Mäkelä, Dickmann, & Tornikoski, 2018). Also affected by this are those who are engaged in work inclusive of employees and even managers. In essence, technology potentially plays a pervasive role in contemporary society (Rosenblat & Stark, 2016).

Calls exist within the Human Resource Management (HRM) literature to focus on understanding how new forms of work within the technological era manifest with emphasis on technologies such as artificial intelligence within the Fourth Industrial Revolution (4IR) (Klein & Potosky, 2019; Tambe, Cappelli, & Yakubovich, 2019). Such an understanding could contribute to addressing challenges experienced with an Industry 4.0 context and how these relate to the experience of work. Such studies are noted to have potential benefits in also improving not just the experience of work but also those engaged in such work (Naidoo, Abarantyne, & Rugimbana, 2019). A focus on such studies becomes important especially when there is evidence showing the role that the work environment has on the psychological contract (Poisat, Mey, & Sharp, 2018). The role of senior managers in all this becomes essential as well (Magano & Thomas, 2017).

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3.2 Chapter Objective

The chapter explores the role of the psychological contract within the context of Industry 4.0. This objective stems from three salient gaps within the literature. First, calls stemming from the international literature for a more expansive understanding of the concept of the psychological contract in view of Industry 4.0 (Braganza, Chen, Canhoto, & Sap, 2020; Yang, Chen, Roy, & Mattila, 2020). Second, given the rapid changes happening within the South Africa context, there is also a need for a continued inquiry into the relevance of the psychological contract albeit the noted and rapid changes happening (Solomon & van Coller-Peter, 2019; van Niekerk, Chrysler-Fox, & van Wyk, 2019). Finally, from a methodological point of view borrowing from the international and local literature, the psychological contract has mostly been researched utilising a positivist-quantitative research approach relying on surveys. Researchers have mostly opted to rely on established measures in seeking to understand psychological contract as a construct. Though this is laudable in generating objective data, there is a need to be expansive also in terms of methods in understanding the concept of the psychological contract. There is growing evidence of the value that qualitative methods potentially can play in leading to this needed appreciation and understanding of the psychological contract. This research is prefaced within these identified gaps.

The chapter follows a specific structure. First, the psychological contract as one of the variables under-study is given attention. Second, the emphasis is also given on the Industry 4.0 context. Third, the theoretical and empirical literature is presented, bearing in mind the variables under study. Fourth, the research methodology and design are presented. A discussion of the findings of the research follows thereafter given the extant literature. The chapter concludes by presenting the implications of the research findings to both theory and practice given the context in which the study was located.

3.3 Psychological Contract

The psychological contract is deemed a psychological variable of relevance especially in contemporary society, hence its popularity (Windle & von Treur, 2014). The psychological contract is viewed as the fulfilment and non-fulfilment of organisational relationships in terms of mutual obligations, expectations, and promises (Savarimuthu & Racheal, 2017). In essence, the psychological contract concerns those individual beliefs around the obligations expected within an employment relationship (Lester, Turnley, Bloodgood, & Bolino, 2002). These expectations could include inducements related to aspects of work such as remuneration, opportunities for further development, and equity (Botha & Moalusi, 2010; Lester & Kickul, 2001). In South Africa, psychological contract inducements are flagged to be

needing to be well-known and hence them being advertised on company websites (van Niekerk et al., 2019).

Despite this empirical focus, gaps still exist within the literature. O'Donohue, Hutchings, and Hansen (2018) note the need to be expansive in understanding the psychological contract. This considers sectors of work and sample groups that often do not receive much theoretical and empirical attention. This appears to be a wider clarion call within the management sciences discipline especially given the changing nature of work brought about by technology. Chung and Tjinders (2013) call for more empirical focus in such a context on unusual and under-researched organisational, industrial, and cultural environments bearing in mind the new way of working (Chung & Tjinders, 2013).

3.4 Industry 4.0

There is a renewed emphasis on aspects of Industry 4.0 considering digital technologies and the fourth industrial revolution (4IR). At the core of such an industry is the use of technology to proffer smart and intelligent ways of interaction within the social and business setting (Haenlein & Kaplan, 2019). This has led to some popular concepts emerging within the experience of work notably: (a) the Internet of Things, (b) cloud computing, (c) big data, and (d) analytics (Li, Dai, & Cui, 2020). Within businesses, these aspects of digital technologies related to the 4IR are believed to improve not just business efficiency but also aspects related to connectivity, communication, and automation (Ardolino et al., 2018). Such digital technologies related to the 4IR potentially present opportunities not just for human but also for economic development (Li et al., 2020). At the core driving such aspects are people in the organisation (Ivanov, Dolgui, & Sokolov, 2019) in seeking to achieve economic rent (Dubey et al., 2019).

The emergence of Industry 4.0 is largely influenced by changes happening to world economies. These changes include (a) include organizational for innovation especially in a knowledge driven economy (Acs & Autio, 2011) and (b) pressure to make the experience of work not only flexible but innovative (Bakker, 2010; Burke, 2011). However, the emergence of such an industry is met by scepticism and a potential threat, especially towards employees. For instance, given the collaboration that can exist between humans and machines in such a context (Barro & Davenport, 2019), questions can be raised as to what extent such a partnership poses a threat towards employees especially given that much of the problem solving is left in the hands of the machine. In such a context, a need will continually exist to assist employees in managing the change that is brought about by technology (Agar, 2020; Daugherty & Wilson, 2018). In the South African context, there is an argument for HRM professionals to embrace the opportunities brought about by Industry 4.0 and address challenges that may come with this (Dhanpat, Buthelezi, Joe, Maphela, & Shongwe, 2020).

3.5 Theoretical Consideration

3.5.1 Human Capital Theory

The first theoretical consideration is human capital theory. Focus on human capital is viewed as prioritisation of skills and knowledge for the purpose to enhance career advancement and productivity (Becker, 1964). In such a context, focus is given on quests for individual development inclusive career development and mobility (Vance, 2005). The development of generic skills and human capital is argued to aid this process (Gibbons & Waldman, 2004). This, in turn, promotes career success (Becker, 1964). In turn, the development of human capital is crucial in outcomes such as salary, promotion opportunities, job success, and even a heightened experience of work (Ng & Feldman, 2010). This can also link with ideas of the dynamic capability theory (Teece, Pisano, & Shuen, 1997). Emphasis is placed on how a firm adapts and integrates with the view of changes internally and externally. In essence, this either results in the creation, extension, or modification of a firm's resources (Helfat et al., 2007). The role of human capital in driving all this becomes important.

3.5.2 The Resource-Based View of the Firm

A second theoretical consideration is the resource-based view of the firm (Barney, 2001; Wernerfelt, 1984). The emphasis is not just on the existence but utilisation of resources towards a sustained competitive advantage. A critical aim enterprises strive for is around optimum performance (Roxas, Ashill, & Chadee, 2017) and this is a subject continued inquiry (Hashim, Raza, & Minai, 2018). Given this, there is a continued inquiry into the role of the environment, organisational processes, and managerial actions in assisting in the realisation of strategy (Marín-Idárraga, Hurtado-González, & Cabello-Medina, 2016). The role that human resources can play in all this becomes an important empirical angle of focus (Lavie, Stettner, & Tushman, 2010).

3.5.3 Positive Psychology

Finally, considering a focus on the psychological contract, the research is also informed by the branch of psychology referred to as positive psychology. This is the "science of positive subjective experience, positive individual traits, and positive institutions" (Seligman & Csikszentmihalyi, 2000, p. 5). Within the field of organisational behaviour, the concept of positive psychology is viewed as crucial in enhancing understanding of those human resource factors that exist as strengths (Bouzari & Karatepe, 2018) in the formation of psychological capacities for

effective improvement (Luthans, 2002). In essence, this can be useful in understanding those factors that assist individuals and organisations to flourish (Cameron & Caza, 2004).

3.6 Empirical Literature

The concept of the psychological contract has received much empirical attention. In Ghana, the psychological contract is linked to commitment (Agbozo, Anasa-Bonnah, Hoedoafia, & Atakorah, 2018). The thinking here is that through employers and employees fulfilling their perceived expectations, the working relationship is made better. However, due to the entrance of technology, especially considering aspects of Industry 4.0 some challenges may exist that threaten the psychological contract. For instance, technology may threaten the employment relationship given concerns around job loss, social insecurity, and continued widening inequality (Friedman, 2014). Despite these concerns, negative they appear, others (Kirven, 2018) posit technology assisting improve work and giving control to employees. A point to cite here is the gig economy where digital platforms can be used to connect directly to consumers and clients (Harris, 2017). This has seen popularity in platforms such as Uber and offering more control around aspects of work. The role and value of the psychological contract in such a setup may be questioned.

Another threat towards the psychological contract could be the changing nature of work, especially within the Industry 4.0 context. For instance, Kossek and Lautsch (2018) note the changing context of work with the adoption of aspects such as remote working or even telecommuting. Others (Sundararajan, 2017) note issues of microwork, allowing work to be done on-demand through the internet defying traditional norms of work. This change is not only noted from the employee side but also affecting management. The current climate of work has witnessed the emergence of changes in management styles and equally organisational structures and forms (Cappelli & Tavis, 2018; McIver, Lengnick-Hall, & Lengnick-Hall, 2018). This has seen a need to even re-visit traditional understanding of work considering this contemporary tide driven by technology (Cañibano, 2019).

A further challenge rooted in seminal work (Argyris, 1964) concerns seeking to strive for a balance between the values of the individual and those of the organisation. A challenge that may have to be addressed within an industry 4.0 era is how this can be done especially given often competing for values and varying stakeholders (Guest, 2017).

Based on the presented literature, the research aims to understand the experience of the psychological contract within the Industry 4.0 era using the vantage point of experts within the work psychology and technology disciplines.

The following research question was set: *How do a panel of experts within the work psychology and technology disciplines frame the psychological contract within an Industry 4.0 era, what implications can be drawn from such framing?*

3.7 Research Design

The study adopted a qualitative exploratory research approach to understand the way the psychological contract within an Industry 4.0 discipline is framed. There is an acknowledgment of scant focus being given to qualitative methods especially within management research (Americo, Carniel, & Clegg, 2019). Given this, there appears to be a breakaway from studying issues around the psychological contract from a quantitative lens to also incorporate a qualitative focus in understanding internationally (Sewpersad, Ruggunan, Adam, & Krishna, 2019) and in South Africa (Solomon & van Coller-Peter, 2019). A qualitative research approach was deemed useful in understanding such experience (Chinyamurindi, 2018) and allowing for individuals to be able to express themselves given the presented topic (Levitt et al., 2018) and understand any complexity around a phenomenon (Thanh & Thanh, 2015). Through this research approach, participants were able to articulate and express themselves openly around the presented subject of focus (Marshall & Rossman, 2011).

Data collection was done through semi-structured interviews. Interviews allowed for interaction in the acquisition of information (Bantom, de la Harpe, & Ruxwana, 2016). The aim of the entire process using the experts was through a conversation to generate meaning and understanding based on the interview questions asked. In addition to the transcribed interviews, notes were also made during the interview. With permission from the participants, all the interviews were audio-recorded. The length of the interviews varied from 50 to 80 min.

Concerning sampling, a non-probability sampling approach was used relying on a purposive sampling technique. The aim here is to narrow focus only on those characteristics needed in the sample (Etikan, Musa, & Alkassim, 2015), i.e. experts within the work psychology and technology disciplines. A total of 25 experts took part in the research where data was collected over 32 months. A non-probability sampling method with a convenience sampling technique was employed in selecting participants (Cohen, Manion, & Morrison, 2011). The following inclusion and exclusion criteria were used to select participants: (1) a participant had to be working within the disciplines of work psychology and technology; and (2) a participant had to be classified as an expert. These criteria were further used by the key informants in the recruiting process. This ensured consistency in the information gathered from the participants' experiences. The participants' demographic characteristics are illustrated in Table 3.1.

3.8 Data Analysis

An interpretivist approach was adopted for data analysis in this study. A qualitative thematic analysis approach was utilised. Over the 32 months of data collection, the interviews were transcribed soon after each interview. The transcripts were then

Table 3.1 Demographic characteristics of participants

Participant	Gender	Years of experience	Discipline	Category of work
1	Male	12	Technology	Industry
2	Male	11	Technology	Industry
3	Male	8	Work psychology	Academia
4	Male	9	Work psychology	Academia
5	Female	11	Work psychology	Industry
6	Female	9	Work psychology	Industry
7	Female	12	Work psychology	Industry
8	Male	8	Technology	Industry
9	Male	7	Technology	Industry
10	Male	11	Technology	Industry
11	Female	12	Work psychology	Academia
12	Male	13	Work psychology	Industry
13	Male	14	Technology	Industry
14	Male	12	Work psychology	Academia
15	Male	15	Work psychology	Academia
16	Male	8	Work psychology	Academia
17	Male	9	Work psychology	Industry
18	Female	11	Technology	Academia
19	Female	10	Work psychology	Academia
20	Male	8	Technology	Industry
21	Female	11	Technology	Industry
22	Female	8	Work psychology	Academia
23	Female	9	Technology	Academia
24	Male	10	Technology	Industry
25	Female	10	Work psychology	Academia

Source: Author's Own Creation

entered into the QSR NVivo 9 data analysis and management software (Reuben & Bobat, 2014). The software was used to code each of the transcripts' paragraphs into themes and sub-themes. The coding was done using the participants' own words wherever possible. However, the researcher did not only rely on the software to develop the themes but it was used as a complementary method to develop themes. Thematic analysis was utilised to analyse the qualitative data through identifying and examining common patterns within the data (Vaismoradi, Turunen, & Bondas, 2013). In analysing the data through thematic analysis, the six steps advocated by Braun, Clarke, Hayfield, and Terry (2019) were utilised:

- Step 1: Familiarising yourself with your data—actively reading and re-reading data to obtain an overall understanding
- Step 2: Generate initial codes—noting important aspects of data
- Step 3: Searching for themes—identify codes and form codes into themes
- Step 4: Reviewing themes—relating the themes to codes and the entire data set

- Step 5: Defining and naming themes—producing clear definitions and names for themes
- Step 6: Producing the report—final analysis of themes relating to the initial research question.

3.9 Strategies to Ensure Data Quality and Reporting

There is a need to ensure data quality and reporting. Data quality was ensured by referring to literature suggestions from the work psychology and technology disciplines, and also guided studies within located with promoting ideals of Industry 4.0 (Ardolino et al., 2018; Dubey et al., 2019; Ivanov et al., 2019; Li et al., 2020). First, in terms of credibility, all interviews were conducted on the side-lines of local and international conferences. All participants at such conferences were registered through the conference. This provided some legitimacy and also a platform that can allow for the researcher and the research participants to meet. This also made it easy to build trust between the researcher and the participants. Second, after the data had been collected, transcriptions were made and sent back to the participants to correct if the need existed. Third, data were collected over 32 months and this allowed for data collection work inclusive of transcriptions to be done without pressure.

3.10 Findings

Two main themes emerged from the data analysis. First, the panel of experts expressed concern as to the threats on the psychological contract infused by the Industry 4.0 context. Second, the panel experts called for HRM function to play an important role, a balancing act between the need for technology within the confines of work but bearing in mind the importance of people. These findings are discussed next.

3.10.1 *Theme One: Threats Posed Quests for Industry 4.0 on the Psychological Contract*

The panel of experts was able to identify a range of challenges posed by quests of the Industry 4.0 and how these subsequently affected the psychological contract. Given that the experts were mostly from industry and academia, the nature of these challenges reveals also these spectrums. These challenges include (a) difficulty to manage 4IR ideals within a unionised context and (b) internal capability challenges.

From a human side, some experts bemoaned the challenge around the unionized context in South Africa:

We are a unionized country, the driving force behind the fourth industrial revolution is technology. If you follow the history, labour and technology have always had a cat and mouse race. On one side, we want to make sure the people keep their jobs. On the other be productive by embracing some of these technologies. In our country, unions will win. This will preserve the psychological contract. [Participant 12]

A related threat was also expressed by another expert who complained at the rate at which calls have been made for South Africa to embrace the 4IR. The issue of concern here appears to be a neglect of the many challenges that exist within the current context of work.

South Africa has serious labour challenges. Cutting through these labour challenges are social issues, serious social issues. Given these challenges, work becomes important, any kind of work. The adoption of 4IR technologies benefits capital and has a potential disadvantage for the workforce. So we can't talk of the psychological contract, the relationship is skewed towards capital. [Participant 21]

A related threat was also expressed by another expert who complained at the rate at which calls have been made for South Africa to embrace the 4IR. The issue of concern here appears to be a neglect of the many challenges that exist within the current context of work.

Some experts expressed challenges that may result in 4IR technology adoption through a lack of internal capabilities to support such ideas. Internal capabilities expressed by the experts appear to be those that align the need for skilled human resources as well as the technology to drive such. The misalignment as expressed by the experts appears due to challenges such as the skills component within the workforce. One expert using an example explains this challenge:

Organisations may need to have a strong internal architecture. This means having the necessary technology in place to support 4IR adoption. This is an expensive undertaking requiring resources. As this happens, there needs an upskilling of those who may be behind such architecture. In a country like ours, we have a serious skills challenge. So if a psychological contract were to exist in such a setting, it needs to address concerns of employees. Upskilling becomes important. [Participant 6]

This view was also supported by another expert, who appealed for a phased-in approach from organisations concerning 4IR adoption. The caution appears to be guided by the need to also preserve aspects of work that are deemed important especially with a South African context. One such aspect concerns saving jobs.

South Africa organisations are positioned better than some of their counterparts on the African continent. So these organisations need to be realising that they are pioneering especially on the African continent within Industry 4.0. We often train middle managers and make them aware of their important role in such a context. However, the same middle managers must be key in promoting and preserving human relations. I guess this is why need an alignment and making priorities not only straight but balanced. [Participant 11]

Table 3.2 presents additional quotes to summarise the presented challenges posed by Industry 4.0 and how the psychological contracts fit within all this.

Table 3.2 Challenges of Industry 4.0 on work and the psychological contract

Difficulty to manage 4IR because of unions	Internal capability challenges	How this affects the psychological contract?
<p>“Much of the debate around the introduction of and adoption of 4IR is derailed by concerns around keeping jobs. This is the union view. However, maybe we need to encourage jobs to be created within 4IR”. Participant 19</p>	<p>“For the success of 4IR, there needs to pay attention to systems inside the organisation. These may need to be aligned with what needs to be achieved. Sadly, in South Africa, we do not have a good record of this”. Participant 25</p>	<p>“Perhaps within industry 4.0, the psychological contract becomes more important. Due to threats imposed by technology, the expectation within the employer-employee relationship becomes key”. Participant 5</p>
<p>“A message that needs to be conveyed is not just the need for industry 4.0 but a need to also address concerns that may come with such a drive. We need to advance but at the same time keep and save jobs”. Participant 21</p>	<p>“People drive internal capabilities. Do you think it will be easy to drive those capabilities deemed a threat to the human experience? This may prove to be a difficult balancing act”. Participant 18</p>	<p>“Expect to see more demands for job security from employees. The psychological contract will stand, emphasis more on security”. Participant 17</p>
<p>“At the core is mechanization and technology. In turn, it may mean replacing humans with machines. How this will work in a country like ours is not only interesting but difficult”. Participant 3</p>	<p>“A need exists to buttress the management capability to realise the effective success of the 4IR especially in a country and a continent is known for challenges around management. It does not mean we are just going to change just like that”. Participant 1</p>	<p>“The psychological contract is enduring—I am sure before 4IR, it was still needed. What is key is not its removal but constantly prioritizing it”. Participant 20</p>
<p>“Unions play an important role in South Africa. Judging by the resistance shots being fired by unions like COSATU, quests for 4IR will have to co-exist with making sure workers are prioritized”. Participant 20</p>	<p>“If I were to pick two key functions especially operational, I pick the information systems capability and the human resource capability. Surprisingly, the two must work together, despite the history of the challenge”. Participant 24</p>	<p>“I see the need and value for a contract of this nature. Employee voices become crucial especially when there is a chance of job losses in the horizon”. Participant 7</p>

Source: Author’s own work

Given the presented challenges, the experts were asked to try and position solutions bearing in mind also the role of the psychological contract. This forms the next thematic finding of the research. Second, the panel experts called for HRM function to play an important role, a balancing act between the need for technology within the confines of work but bearing in mind the importance of people. These findings are discussed next.

3.10.2 Theme Two: HRM Playing a Strategic Role Within the Industry 4.0 Context

The panel of experts was unanimous in affirming the important role that the HRM function should play within the Industry 4.0 era. At the core, there is a need for HRM to be more strategic rather than passive. In so doing this, priority is placed on affirming the psychological contract as a vehicle through which the employment relationship is not only enhanced but kept alive albeit the macro-environmental changes affecting work.

One expert narrated this view succinctly:

Given our concerns around the social aspect of work, it only is necessary to make sure that the function dedicated to improving aspects of work is at the forefront. In all this, we still need a psychological contract. Only a lot stronger. [Participant 20]

This strategic role of HRM within the Industry 4.0 era is needed and a move away from the more passive role:

HRM played a passive role in the past. This passive role was merely reduced to fulfilling an administrative function. What we now need is a more strategic nuanced role—this means more voice and active participation especially in the future direction of the firm. The psychological contract is merely a pact through which this strategic role can find expression. [Participant 3]

Other participants see Industry 4.0 as the most heightened expression of technological advancement. Constant at each stage of various industry epochs are people driving this:

We have moved through various industry levels. As this movement has happened, the management of people has been an important feature. I think within the Industry 4.0 era we witness this to be at the peak. So the HRM function must step and be counted. Part of the challenge appears to be a comfortability by the HRM function to be that corner function. This must change. [Participant 14]

Table 3.3 presents additional quotes to summarise the presented opportunities that HRM can play as a strategic function within Industry 4.0 and how the psychological contracts fit within all this.

3.11 Discussion

The chapter reports on research that aimed to understand the experience of the psychological contract within the Industry 4.0 era using the vantage point of experts within the work psychology and technology disciplines. Two thematic findings are reported. First, the findings reveal the threats posed towards quests for Industry 4.0 and how they impact the psychological contract. Focus here is given to challenges around a highly unionized South African context and challenges around internal capabilities. The second finding of the study reveals the need for the Human

Table 3.3 HRM being strategic within Industry 4.0 and the psychological contract

HRM as a strategic player within Industry 4.0	How this relates to the psychological contract?
<p>“There needs to be an investment in developing people especially within Industry 4.0. People become an important currency. HRM needs to be more visible and always abreast”. Participant 13</p>	<p>“A strategic HRM needs glue to hold things together. I guess this is where the psychological contract comes in to keep things together”. Participant 4</p>
<p>“We have international case examples of organizations thriving within the 4IR. The success appears to be intertwined between the technology and the people”. Participant 24</p>	<p>“Managing expectations of stakeholders is crucial. Some aspects of expectations may be unreasonable. The issue is managing these expectations in a bounded manner. In South Africa, this is often difficult given the relationship between unions and capital”. Participant 3</p>
<p>“More Human Resource executives need to start speaking more business language. Instead of just supplying us with a workforce. We need total involvement and role”. Participant 10</p>	<p>“The psychological contract offers the opportunity to also keep the employment relationship in check. For instance, in some of our work, we observe that failure to this relationship in check is a recipe for disaster. The role of the HRM function remains key in this”. Participant 6</p>
<p>“Agility and alignment of the HR function are needed. This is a constantly changing context. HRM can’t settle for less in such rapid change. Step up and be counted”. Participant 1</p>	<p>“Contracts are all about trust and agreement so is the psychological contract. Enforcing this trust is needed especially within such a context. The opposite is true, disaster will happen when this contract is not upheld”. Participant 23</p>

Source: Author’s own work

Resource Management function to continually play an important strategic role especially within Industry 4.0. In playing this role, the role of the psychological contract is argued as still necessary.

From the views of the experts, the role of technology is argued as important (Rosenblat & Stark, 2016). Given the challenges experienced around work, quests for the 4IR become important in changing the landscape concerning how work is done. In achieving such ideals, there is a need not to negate the important role played by the psychological contract as a platform in which employers and employees can work together to realise individual and organisational benefits (Botha & Moalusi, 2010; van Niekerk et al., 2019).

The findings show a balance between concerns and opportunities within the Industry 4.0 era. This something that has been argued to be prevalent especially considering the role of context in how technology is experienced (Li et al., 2020). The study and its findings appear to also argue for the role that people can play within such a context (Ivanov et al., 2019). Uniquely, the findings position the continued relevance of the psychological contract within such a context. Despite the pressures mounted on the context and experience of work (Bakker, 2010; Dubey et al., 2019), the role of the psychological contract is argued as still necessary. The thinking could be that such a contract proffers a way for the HRM function to not only be relevant but also manage the varying expectations experienced within the Industry 4.0 context.

The study sought to understand the experience of the psychological contract within the Industry 4.0 era using the vantage point of experts within the work psychology and technology disciplines. The study advances knowledge in a stream of research deemed as new and important not just theoretically but also practically (Haenlein & Kaplan, 2019). Uniquely, the study argues for the importance of psychological contact even with an Industry 4.0 argued to change the landscape of how work is done. The contribution here is in advancing knowledge (especially within a developing nation context) by paying attention to the issues of Industry 4.0 and the psychological contract. The contribution fits within the identified gaps in the Industry 4.0 literature (Li et al., 2020) and also considering the role of people in such a context (Dubey et al., 2019; Ivanov et al., 2019). Second, the study answers calls for an expansive understanding of the psychological contract (O'Donohue et al., 2018). The study does so by showing how the psychological contract is framed within an Industry 4.0 context. This becomes important especially considering the new way of working driven by technological advancement (Chung & Tjinders, 2013).

3.12 Implications for Organisational Practice

Given that the study is located within the HRM context, some implications can be made based on the findings of the research. There is a heightened focus and need to continually position the importance of the HRM within the Industry 4.0 context (Chinyamurindi, 2016; Suutari et al., 2018). Technological innovation features predominantly with Industry 4.0 but so should a focus on paying attention to people-related issues. This positions the importance not just of the HRM function but also issues such as the psychological contract. A priority and balance are needed for the realisation of benefits that accrue from technological innovation while also paying attention to people's issues and expectations. Some suggestions for interventions. First, there is a need to continually valuing the role of employees within the Industry 4.0 era. This can be done through efforts that show employees they are deemed critical in such a context. Second, there is a need for the HRM function to play a more prominent visible role in not only fighting for employee rights but also to be seen advancing a cause that promotes to make the work experience better. This is a balance that is needed bearing in mind concerns as expressed in this study around job security.

3.13 Limitations and Future Research

Some limitations and suggestions for future research can be noted in the study. First, the study is located within gauging expert opinion on the subject of Industry 4.0 and the psychological contract. The views of these experts are valued as they also represent a framing of an experience borrowing from participant experience. This can

also be a limitation. Future research can solicit the views of managers and employees working within the Industry 4.0 context and gauge their experiences. In essence, there is a need for an expansive focus in terms of the unit of analysis and also gauge the views of those working in the sector. Second, caution should be exercised when trying to generalise the findings of the research. Future research, using recently designed scales of 4IR attributes (Li et al., 2020) can measure these against already established measures of the psychological contract. This can be useful in advancing understanding objectively, considering the variables and the sector under-study. Further, future research can pick certain technological advancements with the Industry 4.0 era and link them with HRM-related constructs. For instance, Industry 4.0 technologies such as (a) the Internet of Things, (b) cloud computing, (c) big data, and (d) analytics (Li et al., 2020) may need to be linked to HRM-related constructs. This could be an avenue for future research.

3.14 Conclusion

In conclusion, the chapter gives focus to views and concerns experts have around the move towards Industry 4.0. Steps towards this industry are meant to assist in improving the competitiveness of South Africa. However, guided concerns should be considered bearing in mind the South African labour market environment. The HRM function can play an important role within such a context, especially paying attention to the role of the psychological contract. The findings, subjective as they are, represent a contribution from a community of experts in an area deemed important especially within a developing nation context. In such a context, empirical focus on the issues given attention to in this study has at best been under-researched.

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Chapter 4

Ethical AI at Work: The Social Contract for Artificial Intelligence and Its Implications for the Workplace Psychological Contract



Sarah Bankins and Paul Formosa

4.1 Introduction

The current fourth industrial revolution is significantly disrupting the world of work (World Economic Forum, 2018). One driver of this disruption is the increasing use of artificially intelligent (AI) technologies in workplaces. As these technologies change how work tasks are completed and which tasks are done solely by humans, which are done solely by AI technologies, and which are completed by both in collaboration, this will alter how employees view their employment relationships. Examining the psychological contract (PC) and what shapes it in such contexts offers one way to assess the implications of AI technologies for the employee–employer relationship. The PC constitutes “a cognitive schema, or system of beliefs, representing an individual’s perceptions of his or her own and another’s obligations, defined as the duties or responsibilities one feels bound to perform” (Rousseau, Hansen, & Tomprou, 2018, p. 1081). Individual perceptions of PC fulfilment (met obligations) or PC breach (unmet obligations) generally lead to positive employee responses in the case of the former (Parzefall & Hakanen, 2010) and negative employee responses in the case of the latter (Zhao, Wayne, Glibkowski, & Jesus, 2007). Overall, understanding the factors that shape the formation of the PC, its subsequent content, and its degree of fulfilment can help to explain the attitudes and actions of employees at work (Conway & Briner, 2005).

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As the nature of work has changed over time, such as through economic and labour market deregulation, researchers have utilised the PC to examine the impact of such disruptions on the employment relationship (Schalk & Rousseau, 2008). However, despite a new raft of changes being driven by the expanding role of AI at work, PC research is yet to widely engage in examining the implications of these changes, or arguably the role of technology more broadly, for the employment exchange. This is despite evidence that intelligent technologies such as social robots (Banks & Formosa, 2020) and smartphones (Obushenkova, Plester, & Haworth, 2018) will influence the employee–employer obligations underpinning the PC and may even drive technology itself to be viewed by employees as a contracting partner (or counterparty) to the PC (Banks, Griep, & Hansen, 2020). In particular, employers’ decisions regarding how they implement AI alongside, or in replacement of, their employees are increasingly recognised as having ethical dimensions. This generates sets of obligations upon employers to deal with such decisions appropriately. In this theoretical chapter, we offer one pathway for addressing this ‘technology gap’ in the PC literature.

4.2 Chapter Objective

Our chapter focuses on examining the growing range of factors that are encouraging an ethical application of AI at work to then argue, and demonstrate how, these factors are likely critical inputs into individuals’ PC content. In outlining these factors, operating at multiple levels, we suggest how they will shape organisational implementation of AI, how they will influence groups’ and individuals’ views of AI in the workplace, and how they will feed into employees’ workplace PCs. Specifically, we utilise Integrative Social Contracts Theory (ISCT) to outline the key multilevel influences shaping the ethical use of AI in the workplace, as well as the notion of technology frames at the organisational and individual levels, and their links to the PC. We begin the chapter by briefly outlining the nature of AI and how it is being used in workplaces. We then outline ISCT and detail what the macrosocial and various microsocial contracts for the ethical creation and use of AI at work look like. Finally, we explain how these various social contracts act as a normative background that will inform the individual PCs of workers, before demonstrating our account through an illustrative example. We conclude by outlining theoretical and practical implications of our work.

4.3 Artificial Intelligence at Work

Artificial intelligence refers to “the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings (i.e. humans) ... such as the ability to reason, discover meaning, generalise, or learn

from past experience” (Copeland, 2020). Functionally, AI refers to technology that does intelligent things, such as tasks that would require the use of intelligence were a human to perform them (Boden, 2016; Floridi & Cowls, 2019; Walsh et al., 2019). Machine learning through supervised, semi-supervised, or unsupervised training is a common feature of many AI systems. This training allows AIs to perform a range of tasks, such as natural language processing (speech recognition and production), image recognition and classification (including facial recognition), and goal-directed reasoning and decision-making activities such as planning, scheduling, and optimising the use of resources (Walsh et al., 2019). All current AI applications are examples of different forms of artificial *narrow* intelligence, which can perform intelligent functions only within restricted domains and which lack the ability to quickly transfer learned skills to other domains. For example, Deepmind’s *AlphaGo* is expert at the game GO, but it cannot hold a conversation or recognise cats (Robbins, 2019). In contrast, artificial *general* intelligence refers to an AI that can perform at a similar level to humans across all intelligent activities (Bostrom, 2014). However, given broad disagreement about how imminent artificial general intelligence is (Bostrom, 2014), we restrict our focus to artificial narrow intelligence as a technology that is already widely used and being continually improved (Boden, 2016).

Currently, AI is predominantly used in workplaces to automate specific tasks rather than to replace whole occupations, except where jobs, often in manufacturing, involve simple and repetitive tasks that can be wholly automated (Walsh et al., 2019). The varied skill sets of narrow AI are already widely utilised across many industries (Bekey, 2012; Walsh et al., 2019). For example, in the service sector AI is deployed at customer-facing points of contact in the form of chatbots and virtual assistants. The optimisation abilities of AI are used across farm and mine management, logistics, resource allocation, and in military contexts to manage resources effectively (Walsh et al., 2019). Artificial intelligence also powers autonomous vehicles for use in transportation, mining, farming, and manufacturing. In healthcare, AI can support diagnoses, generate health insights, and offer personalised patient care by drawing on large data sets (Walsh et al., 2019), while in the legal and criminal justice sectors AI technologies help locate legal precedents and advise on parole and sentencing decisions (Angwin, 2016). In defence and security contexts, AI supports intelligence collection and analysis (including the use of facial recognition), cybersecurity operations, and autonomous weapons systems (Sharkey, 2013). Artificial intelligence use is also prevalent in the FinTech sector for fraud detection, risk management, compliance checks, and for intelligent share trading agents (Wellman & Rajan, 2017). It is also increasingly used in human resource management for recruitment and selection (Albert, 2019) and work allocation (Lee, Kusbit, Metsky, & Dabbish, 2015).

The use of AI in workplaces differs from other technologies in two key ways. First, the capabilities of AI technologies are already impressive, as they can surpass human capabilities in tasks such as synthesising and analysing data and generating predictions across large data sets (see Walsh et al., 2019). This has extended the scope of work that AI can undertake into areas that traditionally required human cognition (Copeland, 2020). Second, and relatedly, AI capabilities are now shifting

the mix of what organisations understand to be human work and machine work (World Economic Forum, 2018), thereby changing the type and amount of work humans do. For example, by 2030 it is forecast that up to 375 million workers will have switched occupational categories as a result of automation (Yaxley, 2019) and by 2022 over half of all employees will require significant skill changes due to the use of AI at work (World Economic Forum, 2018).

Taken together, this implies that AI will significantly change what workers do in their jobs, how they experience their employment, and what they understand to be reciprocal employee–employer obligations (i.e. their PCs). The potential scale of AI’s impacts on human workers also raises ethical questions regarding its application, such as for what purposes it is used in workplaces. That is, while the use of AI offers many potential benefits to workers, such as improving decision-making and talent management (e.g. Colson, 2019; Guenole & Feinzig, 2018), its deployment can also generate harms. For example, biased data feeding machine learning recruitment algorithms can negatively discriminate against job applicants based on gender or race (Tambe, Cappelli, & Yakubovich, 2019), the design of algorithms may fail to deliver fair outcomes across different contexts (Selbst, boyd, Friedler, Venkatasubramanian, & Vertesi, 2019), and algorithmic management may exert new forms of control over workers (Kellogg, Valentine, & Christin, 2020) that ultimately restricts their autonomy. To examine the impact of AI use on the employment relationship through an ethical lens, we draw on ISCT (Donaldson & Dunfee, 1994, 1995) and technology frames (Orlikowski & Gash, 1994) to develop a model of the cascading effects of multiple forces, or different forms of contracts, that will shape the individual-level PC in workplaces that are deploying AI technologies.

4.4 Overview of Integrative Social Contracts Theory

Integrative Social Contracts Theory (ISCT) has been used extensively in the field of business ethics to examine the ethical implications of organisational actions and has been applied to many types of decisions, such as downsizing (Van Buren, 2000). It is a social contracts theory, positing the existence of macrosocial and microsocial contracts. Applied organisationally, the terms of these contracts bind the behaviours of actors, such as leaders, and guide them when making decisions with ethical implications.

The macrosocial contract is a hypothetical social contract comprised of “the set of principles regarding economic morality to which [rational] contractors would agree [to]” under conditions where universal consensus by all affected persons is required (Donaldson & Dunfee, 1994, p. 260). The macrosocial contract sets the “hypernorms”, which are likened to universal human rights, that create an “ethical floor” for subsequent microsocial contracts (Van Buren, 2000, p. 210). In the domain of employment, authors have drawn on the work of international organisations, such as the United Nations, the Organization for Economic Cooperation and Development (OECD), and the International Labour Organization, to suggest a macrosocial

contract focused on organisations providing, among other things, meaningful work, “a living wage and a healthy and fair work environment” (Wright & Schultz, 2018, p. 5).

The microsocial contract is a context-specific and community-based social contract that is limited and informed by the underlying macrosocial contract. “Community” is understood here to refer to “a self-defined, self-circumscribed group of people who interact in the context of shared tasks, values, or goals and who are capable of establishing norms of ethical behaviour for themselves” (Donaldson & Dunfee, 1994, p. 262), such as organisations (Smith, 2000). Within the boundaries set by the macrosocial contract’s hypernorms, different communities may develop their own sets of detailed context-specific norms through microsocial contracts which reflect the ethical life of these communities and the preferences of their members (Donaldson & Dunfee, 1999). However, such norms must be grounded in informed consent (individuals can meaningfully agree to them) and a right of exit (individuals can remove themselves from that contract). Where various microsocial contracts exist and their norms conflict with one another, ISCT offers six rules of thumb to help resolve such conflicts, such as giving priority to norms that are grounded in larger communities, norms that are consistent with other norms, and norms that are well defined (Donaldson & Dunfee, 1994). In a workplace context, the microsocial contract can be likened to what the PC literature terms a normative contract, which develops where groups of employees form a shared understanding of the obligations their organisation has towards them as a group (Rousseau, 1995). The content of the normative contract has been shown to influence how employees develop and evaluate their individual PCs (Cregan, Kulik, Metz, & Brown, 2019; Estreder, Rigotti, Tomás, & Ramos, 2020).

The content of the macrosocial and microsocial contracts guides the ethical behaviour of agents in a community by shaping their degree of “moral free space” (Dunfee, 2006, p. 315). That is, macrosocial and microsocial contract norms provide rules by which members must abide, and to which they are held accountable by stakeholders, when taking decisions and actions. This constrains the types of decisions and actions actors can take. “Unoccupied moral free space” exists when there are no clear hypernorms (at the macrosocial level) or legitimate other norms (at the microsocial level) that can be applied to the decision at hand, meaning the decision maker must then rely on personal views or values (Dunfee, 2006, p. 315). The norms constituting the microsocial contract are needed to help overcome the vagueness and generality of hypernorms and to allow communities to fill in some of the moral free space that those hypernorms create (Donaldson & Dunfee, 1994).

The idea that the PC is embedded within these wider contracting processes has gained currency over time (e.g. Thompson & Hart, 2006; Van Buren, 2000). That is, while the PC, as an individual-level construct, sits below the macrosocial and microsocial contracts, PCs will be “strongly influenced by ... norms” within each of these sets of contracts (Thompson & Hart, 2006, p. 239). This is because these universal and community-based normative contracts will help inform the perceived obligations employees hold regarding their individual treatment, which will in turn constitute the content of their individual PCs. Conversely, PCs can feed back into, and

help to re-define, microsocial contracts through their impacts on the everyday lived experiences of individuals (Thompson & Hart, 2006). Overall, it is recognised that both higher-level contracts (macrosocial and microsocial) will inform the content of individuals' PCs. We now turn to applying the ISCT framework to the context of increasing AI use at work.

4.5 Applying ISCT to the Ethical Use of AI at Work: From Macrosocial to Microsocial to Psychological Contracts

In the following sections we sketch the emerging content of the higher-level contracts (macro- and microsocial) regarding the ethical use of AI that we argue will input into, and help us to understand, the PCs of employees whose workplaces are increasingly integrating AI technologies.

4.5.1 Macrosocial Contract

We begin our framework by drawing on recent work (e.g. Floridi et al., 2018; Winfield, Katina, Pitt, & Evers, 2019) formulating broad principles, or the highest level set of basic norms, for ethical AI to sketch an emerging macrosocial contract for the ethical use of AI *in workplaces*. Ethical AI refers to the fair and just development, use, and management of AI technologies. While many competing guidelines for ethical AI have been developed in several countries, leading to concerns about “principle proliferation” (Floridi & Cowls, 2019, p. 2), several recent literature reviews have systematised and grouped these principles (Floridi & Cowls, 2019; Hagendorff, 2020; Jobin, Ienca, & Vayena, 2019). The strong overlaps between these reviews suggest that a global consensus regarding ethical AI principles is emerging, providing a promising basis for a macrosocial contract for AI (see also Rahwan, 2018, for a related discussion).

Floridi and Cowls (2019) argue for five ethical AI principles: beneficence; non-maleficence; autonomy; justice; and explicability (cf. Floridi et al., 2018). According to these principles AI should: benefit people, promote well-being, and be environmentally sustainable (beneficence); respect privacy and not harm people (non-maleficence); allow people the power to decide what to do where possible (autonomy); be fair and equitable, avoid bias, and preserve solidarity (justice); and its decisions should be intelligible to us and accountability for its decisions should be clear (explicability). Jobin et al. (2019) thematically analyse various international ethical AI documents and argue that these contain 11 overarching ethical values and principles which are, in order of frequency: transparency; justice and fairness; non-maleficence; responsibility; privacy; beneficence; freedom and

autonomy; trust; dignity; sustainability; and solidarity (for a similar review see Hagendorff, 2020). Although these reviews group principles in different ways, they significantly overlap. For example, Jobin et al.'s separate principles of "solidarity" and "justice and fairness" are together grouped under Floridi and Cowls' broader category of "justice". Given their greater simplicity and generality, we use Floridi and Cowls' (2019) five principles for ethical AI in our framework.

From an ISCT perspective, we argue that the emerging consistency of such hypernorms serves to constrain the moral free space of organisational leaders, even if only thinly (Smith, 2000), regarding their implementation of AI in workplaces, and therefore what employees believe their organisation's obligations are in this regard. At a macrosocial level, it is reasonable to position these hypernorms as broadly and universally endorsed, and therefore organisations will be bound to implement AI within them. However, the broadness of hypernorms leaves plenty of moral free space which must be filled in via norms and obligations at the microsocial contract and, ultimately, PC levels. For example, what counts as "environmentally sustainable" within the "beneficence" hypernorm needs further specification, and indeed may vary, in different communities. Such clarification of the macrosocial contract for the ethical use of AI can occur through codes, policies, and practices designed to specify authentic implementations of these background ethical principles in discrete contexts.

4.5.2 *Microsocial Contracts*

When microsocial contracts operationalise hypernorms within community contexts, they also significantly shape the moral free space of the actors within them. Therefore, the microsocial level is a key site for understanding moral free space as it relates to shaping organisations' decisions and actions towards the ethical use of AI, which will influence how employees' experience AI at work. The scope of potential communities that develop the concrete norms at this level is large, ranging from the national level to organisational teams. We argue that microsocial contracts will likely develop at three key levels, although these may overlap or merge in some cases: national; industry; and organisational.

Microsocial contract: National-level norms. Many countries, and in some cases regional blocs such as the European Union, have developed norms through guidelines and discussion papers focused on the ethical use of AI, including in the workplace. For example, Hagendorff (2020) contrasts the privacy principles of national- and regional-level ethical AI documents from the United States of America, the European Union, China, and the OECD. While these largely overlap and cluster around the five principles identified above at the macrosocial level, they nonetheless differ significantly in length and technical detail (ranging from 22,787 words to 766 words) and emphasis (e.g. privacy is a key issue in the European Union document but is less important in the US document) (Hagendorff, 2020). National and regional governmental initiatives can place further constraints on how AI is used by

organisations in those nations, thus generating a community-specific (national-level) microsocial contract. This will either further constrain or leave open, beyond the macrosocial contract, organisations' moral free space regarding AI adoption within workplaces. However, some authors argue that governmental regulations will be targeted towards AI implementation in specific sectors (Dasgupta & Wendler, 2019), meaning that industries can also constitute an important community for microsocial contract development.

Microsocial contract: Industry-level norms. Where industries or sectors have been early adopters of AI and automation, we suggest that this will likely, as the below examples show, generate industry norms that will further shape the moral free space for individual organisations' implementation of AI. These industry norms can be expressed through formal documents that organisations explicitly sign up to, or informal and de facto norms that arise implicitly. An example of the former is the *Partnership on AI* which has over 100 partners across 13 countries, including global technology leaders, such as Amazon, Apple, Facebook, Google, and Microsoft, non-profit organisations, such as Amnesty International, and university and media organisations, such as *The New York Times*. Partner organisations endeavour to uphold eight ethical AI tenets, such as using AI to “benefit and empower” people (aligned to the beneficence hypernorm), being “accountable to a broad range of stakeholders” (aligned to the explicability hypernorm), and protecting the privacy and security of individuals (aligned to the non-maleficence hypernorm) (Partnership on AI, n.d.). This creates pressure on partner organisations to be seen to be abiding by these tenets.

An example of informal industry norms can be found in the mining sector, which is recognised as an early adopter industry for AI and automation, where ethical AI principles appear to have emerged informally through practice. The nature of some types of mining work means it can be occupationally hazardous, with the industry accounting for up to 5% of workplace fatalities globally (or roughly 15,000 deaths per year) (Amin, 2018). As a result, it could be argued that AI and robotic technologies have been implemented with a focus on automating “dull, dirty, and dangerous” work and work in highly remote locations (Marr, 2017). For example, at mine sites in the Pilbara in Western Australia, fully autonomous (or robotic) vehicles conduct activities such as haulage, an activity that has historically caused significant workplace injuries (Amin, 2018; Marr, 2017). While the application of automation in this way is likely designed with efficiency in mind, it also increases worker safety and limits the extent to which dangerous work is undertaken by humans (Amin, 2018). This is an example of operationalising, in an industry context, the macrosocial contract hypernorms of beneficence and non-maleficence through using AI to protect workers' safety and well-being. Therefore, it could be argued that in sectors such as this, with established or emerging patterns of workplace AI use, general industry norms develop that guide how other organisations in that sector adopt the same technologies. Indeed, studies of information system adoption more broadly note such isomorphic pressures that organisations face (Pal & Ojha, 2017). Whatever way such norms emerge, explicitly or implicitly, we suggest they generate a

community-level microsocial contract that either constrains or leaves open an organisation's moral free space for AI implementation.

Microsocial contract: Organisational-level norms. The individual organisation is a key location for microsocial contract development. Just as at the industry level, these norms can form either explicitly or implicitly. An example of explicit organisational-level norms are Microsoft's (n.d.) six AI principles, which include "Fairness" and "Inclusiveness" (aligned to the justice hypernorm), and "Transparency" and "Accountability" (aligned to the explicability hypernorm). The associated videos explain where and how, at an organisational level, these principles are implemented. For example, the organisation shows how the Accountability, Fairness, and Privacy and Security principles limit how Microsoft develops and sells facial recognition technology, and how the Inclusiveness principle requires that speech recognition software is trained to work for minority groups (Microsoft, n.d.). Drawing on our ISCT framework, we can see how these explicit organisational-level microsocial norms in turn sit under relevant industry norms (the industry-level microsocial contract), such as those expressed in the *Partnership on AI's* tenets of which Microsoft is a partner, which in turn (where applicable) sit under relevant national documents (the national-level microsocial contract), as well as ultimately under the universal macrosocial contract's hypernorms.

Organisational norms regarding ethical AI use can also be developed implicitly, and we suggest that group-level technology frames can help to create informal organisational norms regarding AI use at work. Technology frames refer to one's assumptions and knowledge about technology and its uses (which can become shared at a group level), and these beliefs shape how people make sense of and respond to technology in organisations (Orlikowski & Gash, 1994). As such, technology frames can be conceptualised at both the group and individual levels. Such frames can centre on views about: technology-in-use (views on how technology is used on a daily basis and the conditions and consequences of use); technology strategy (views about why the organisation implements certain technologies and the motivation for and vision behind implementation); and technology nature (general views of a technology and its capabilities and functionality) (Orlikowski & Gash, 1994). Such frames help explain how and why employees respond to certain technologies and help to capture the day-to-day experience of enacting explicit organisational technology-related norms. This will likely inform group-level norms about AI use within organisations. For example, employees' beliefs regarding the appropriate use of AI ("technology-in-use" frame) could translate into the belief that their employer is obligated to only implement AI for some tasks and not others, thus generating relevant norms at the organisational level. Wright and Schultz (2018) also offer examples of workers collectively voicing dissent towards the use of robots, automation, and algorithmic management in their workplaces (again related to the "technology-in-use" frame).

While the content of these informal organisational norms, driven by group-level technology frames, could potentially be wide and different across organisations, we suggest that such norms will cluster around three broad categories: *AI receptive*; *AI neutral* (indifferent); and *AI resistant*. For example, an informal norm may develop

amongst employees that they are “receptive” to the automation of monotonous tasks, but “resistant” to having AI undertake customer-facing tasks that are viewed as requiring human involvement. This means that each organisation will likely have different combinations of informal norms around receptivity, resistance, and neutrality to AI being integrated into various aspects of work. However, it is up to the organisational community in the microsocial domain (or potentially multiple communities within it) to set such norms. Taken together, we suggest that the nature of these norms will shape the moral free space of organisations and their leaders regarding how and in what ways they use AI.

We do, however, place a caveat on our arguments. The extent to which group-level technology frames exist and drive informal organisational norms can depend on the homogeneity of employee groups in an organisation. That is, the extent to which individuals in the organisation do similar forms of work and have similar organisational experiences. Research on shared team perceptions of PC fulfilment suggests that such perceptions are more likely to develop when members experience similar events and regularly interact and share information (Laulié & Tekleab, 2016). For example, in workplaces largely staffed by high-skilled, white collar professionals undertaking similar work, consistent group-level technology frames are more likely to emerge than in workplaces where diversely skilled workers undertake very different types of work. Amazon provides one example of such a diversified organisation, as the technology (i.e. robotics) deployed in warehouses alongside lower-skilled, blue collar workers is not similarly deployed alongside head office workers (e.g. Sainato, 2020). Overall, this means that where there is higher homogeneity in work, and thus similar experiences across employee groups, there are likely to be more consistent group-level technology frames and so more likely to be a singular microsocial contract regarding norms for AI use. However, where there is less homogeneity (e.g. Amazon), there are likely to be more fragmented group-level technology frames and so multiple, potentially conflicting, microsocial contracts regarding norms for AI use. It has also been found that differences in technology frames can exist across different organisational groups, such as managers and lower-level employees (Orlikowski & Gash, 1994). To resolve such conflicts, as identified earlier, ISCT stipulates rules of thumb to help prioritise any conflicting norms in different microsocial contracts.

4.6 Psychological Contracts

By providing a normative background, the relevant macrosocial and microsocial contracts are important inputs into the content of individuals’ PCs and their evaluation of them (Thompson & Hart, 2006; Van Buren, 2000). In this section, we focus on exemplifying how these higher-level norms may cascade into the individual-level PC. For example, the macrosocial hypernorm of explicability (i.e. AI decisions must be intelligible and accountable) might be contextualised within an industry that commonly uses AI algorithms to determine employees’ bonuses and

promotions to mean that workers can request a timely human review of these algorithmic determinations (industry-level macrosocial contract). This in turn could be further clarified through, for example, organisational-level microsocial norms to mean that workers may appeal to their line manager within 30 days to have an algorithmic decision reviewed and explained. This normative background will likely then shape the PC (individual level) obligations that employees perceive between themselves and their employer about, in this case, the explanation and review process they can expect when subject to an algorithmic decision. When these PC beliefs are not met, such as when an inadequate explanation for an algorithmic decision is given or no recourse to human review is provided, then a PC breach will likely be perceived from which negative employee responses may ensue (Morrison & Robinson, 1997). More generally, we suggest that the various macrosocial and microsocial contracts around ethical AI will help to drive the technology-specific components of individuals' PCs, such as perceived obligations regarding re- and up-skilling in the use of AI technologies, expectations for supporting workers displaced by AI, and future organisational plans for AI implementation across individual tasks and roles.

However, individual uptake and incorporation of these macrosocial and microsocial norms into individual PCs will likely vary depending upon individual endorsement of those norms. As identified earlier, the strength of group-level technology frames, which we argue are important elements of the organisational-level microsocial contract for ethical AI use, may vary (Treem, Dailey, Pierce, & Leonardi, 2015) or may not exist at all when individuals have highly dispersed views of the role of AI in the workplace. Where group-level technology frames are strongly held and generate clear organisational-level microsocial norms, we suggest those frames will feed into individuals' PCs. However, where group-level technology frames are inconsistent or dispersed, we suggest that individuals will likely develop more individualised views of the role of AI in the workplace, through individual-level technology frames, which will inform their PCs. Because the exact content of any particular PC in regard to the use of AI technologies will depend on the individual and their experiences, their industry, their organisation, and the nature of their work and interactions with AI (see Rousseau (1995) for the range of potential PC inputs), we now offer an illustrative example to demonstrate how our framework may unfold in practice.

4.7 Illustrative Example: Telenor

This example aims to show how the different levels of contracts we have derived through an ISCT-based assessment of ethical AI use in the workplace will influence the individual-level PC. It should be noted that the example is not intended to be exhaustive as the data used to generate it are derived from secondary sources, particularly the focal company's website and other publicly available communications.

The example company is Telenor, a telecommunications company based in Norway (see Telenor Group, 2019a).

Because ISCT positions the macrosocial contract as universal, we do not outline it again here, but instead take for granted the five ethical AI principles outlined earlier. At a microsocial level, we suggest that multiple communities exist that are relevant to Telenor's implementation of AI and thus the PCs of its workers. At a national level, Norway has developed a strategy for the development and implementation of AI through its "National Strategy for Artificial Intelligence" launched in January 2020 (NORA, 2020). Interestingly, and aligned with ISCT, the Norwegian government acknowledges that such a strategy cannot, and does not aim to, guide every aspect of AI development and use in Norway, but instead "will give a direction and thus serve as a framework for both public and private entities seeking to develop and use Artificial Intelligence" (NORA, 2020).

Such a national strategy demonstrates alignment with the wider macrosocial contract for AI, by explicitly identifying the need to respect "ethical principles" and "human rights", safeguard individual privacy, and operate in accordance with "the principles for responsible and trustworthy use of Artificial Intelligence" (NORA, 2020). The strategy also notes that the development and use of AI is critical for organisations' ongoing competitive advantage, thus leaving open some moral free space for specific organisational norms for the uptake of AI. The national strategy also supports widening educational opportunities for upskilling in the understanding and use of AI, for example through the #AIchallenge which (in part) tasks large companies with supporting employees in completing an online AI course (Telenor Group, 2020). Such work is supported within the European Union through the bloc's efforts to develop a pan-European approach to supporting ethical AI development and use, including through cross-organisational and cross-country data sharing (European Commission, 2020). Telenor is thus situated in a national and regional bloc that is active in developing explicit regulations and guidance for the development and ethical implementation of AI for national advantage. This constitutes the regional- and national-level microsocial contracts within which Telenor operates.

At an organisational level, a microsocial contract for Telenor itself can be sketched (although we acknowledge its limitations as it is solely based on the company's public communications). Telenor aims to become "a data-driven company, where AI/ML (machine learning) capabilities will be an asset, and ... create a competitive advantage" (Telenor Group, n.d.). The company is explicit regarding where it will target the use of AI, such as for "optimizing network operations, automating customer interactions, personalizing marketing and sales campaigns", as well as areas of ambition in the deployment of AI such as strengthening existing data analytic capabilities and extending into new areas like IoT (Internet of Things) (Telenor Group, n.d.). The norms within this community-level contract also extend to fostering collaborations with academia and public and private sectors (creating a "*dugnad*" or joint work for collective benefit) to strengthen the development of AI capabilities in the Norwegian population, including Telenor employees (Telenor Group, 2020). Telenor is also a signatory to, and a leading developer of, a Norwegian "Declaration for the Responsible Use of AI in Working Life", which is an

industry-level initiative to embed ethical principles for the use of AI into workplaces, including ensuring that “AI-supported decisions and recommendations (are) fair, non-discriminatory and transparent” and that data privacy is protected (Telenor Group, 2019a). While, given the nature of the data we are using, we refrain from articulating any group-level technology frames, we do suggest that the organisational-level microsocial contract at Telenor seems to be generally *AI receptive* across a range of the technology’s potential deployments.

Aligned to our framework, we suggest that each of these contracts will then input into individual employees’ PCs. We focus particularly on the idea of AI upskilling, which feeds through from the national- and organisational-level microsocial contracts. The expectation for employees to upskill is clear through organisational initiatives, such as adding AI competencies to the Telenor Campus (an employee training initiative), Telenor’s “40-hour challenge” where employees can access 40 hours of training to upskill in AI (Telenor Group, 2020), and a belief that “lifelong learning (is) the new normal” (Telenor Group, 2019b). This suggests that ongoing and lifelong employee skill development regarding AI appears to be important within the employment exchange. More broadly, at the individual level of the PC, we suggest that reciprocal employee–employer obligations will be largely *AI receptive* and likely centre on beliefs around: expected privacy of one’s data when it is used in AI applications by the company (aligned to the non-maleficence hypernorm); expectations around the skills, and ongoing up-skilling, required to understand and use AI (aligned to the beneficence hypernorm); the specific areas of the workplace in which AI will be deployed (aligned to the justice hypernorm); the explainability of AI’s decisions when they impact workers (aligned to the explicability hypernorm); and that AI implementations will be respectful of employees’ rights and freedoms, such as levels of autonomy, when it is used (aligned to the autonomy hypernorm).

4.8 Implications for Theory

We offer here several theoretical extensions for the PC literature. First, the fourth industrial revolution is driving the integration of increasingly sophisticated forms of workplace technologies. These already, and promise to increasingly do so in the future, shape employees’ work experiences and the technology-specific components of their PCs. However, PC literature is lagging in its examinations of these impacts. By centrally positioning AI technology and its use as a key driver of PC beliefs, we show how its influence will increasingly shape the nature of the employee–employer exchange. To this end, we also demonstrate the utility of integrating technology-specific frameworks into the study of PCs, particularly by outlining the role of technology frames in driving norms of AI resistance, neutrality, or receptivity amongst employees, which we argue will flow through to beliefs about employer–employee obligations.

Second, early PC theorising (e.g. Rousseau, 1995) recognises that the content of these contracts will develop from many sources, including extra-organisational sources. Recent contemporary work reinforces this with, for example, Rousseau et al. (2018) suggesting that normative expectations, often derived from sources beyond the organisation, will be important inputs into the PC. However, PC research is yet to clearly articulate what these sources may be in a given context. Without this specificity it can be difficult for researchers to know which sources of information may be most influential for informing the PC and so which to focus their analyses upon. In the context of increasing use of AI technologies in the workplace, and by utilising ISCT, we specify those sources of information at various levels and we argue that these will function as inputs into individual-level PCs. Indeed, when AI is newly implemented into organisations, it may primarily be global macrosocial and national- and industry-level microsocial contracts that inform employees' technology frames and PCs. Overall, our framework highlights the need to embed PC research in the multilevel contexts in which it is situated, particularly when analysing the impacts of a global phenomenon such as AI.

Third, while the PC is largely studied as an individual-level construct, its shared nature is increasingly recognised (e.g. Laulié & Tekleab, 2016). Our work helps extend this line of investigation by highlighting the need to investigate multiple microsocial contracts amongst diverse employee groups and, when technology in the workplace is the focal context, to examine the role of group-level technology frames as a form of shared cognitions that will also inform individuals' PCs. As the microsocial level is where multiple and potentially competing contracts may emerge, future PC work could also examine how groups of employees compare and contrast their different microsocial contracts and how this informs perceptions of breach at both group and individual levels.

As a theoretical chapter, our work comes with limitations. While we have sought to ground our use of ISCT with evidence-based examples, the actual content of the norms within the macrosocial and microsocial contracts can only be determined through empirical work. Such norms, as we identify, are also likely to differ across countries, sectors, and organisations, meaning our framework is designedly broad to capture this contextual diversity, but with trade-offs regarding specificity to any one context. Also, while we have argued that macrosocial and microsocial contract norms will input into the PC (supported by others, such as Thompson & Hart, 2006), it becomes an empirical question as to whether employees are actually cognizant of, and therefore draw upon, these higher-level norms in ultimately formulating and evaluating their PCs.

4.9 Implications for Organisational Practice

Several organisational implications also stem from our work. For example, the evidence we have drawn on suggests that macrosocial and microsocial contracts for ethical AI, particularly at the national and industry levels, remain quite "thin". This

means that the moral free space for many organisations and their leaders regarding how they operationalise these norms within these contracts remains comparatively large. Practically, such thinness means companies can have little guidance on the ethically optimal ways to implement AI in their workplaces. The macrosocial hyper-norms of justice or beneficence, for example, are intentionally broad and do not, in isolation, fully determine where and how an organisation should use AI or, notwithstanding ISCT's rules of thumb, suggest how best to deal with any conflicts between hypernorms. For example, a company may seek to tailor employee training opportunities by utilising sensitive employee performance and historical training attendance data, thus increasing employees' benefits (beneficence hypernorm) but at the cost of lowering their privacy protections (non-maleficence hypernorm). Thus, when higher-level contracts are left fairly thin this leaves scope for potentially positive, but also potentially more detrimental, applications of AI in the workplace. It may be that national- and industry-level microsocial contracts are particularly important to have in place early in the adoption of AI across sectors to help inform organisational microsocial contracts and ultimately shape employees' PCs.

Further, as organisations implement AI in their workplaces, leaders should be mindful that employees' pre-existing views of this technology, both individually and collectively, will shape where and how they believe AI should be adopted and how its use will alter reciprocal employee–employer obligations. In understanding employees' responses to AI use, it will be beneficial for leaders to identify what group-level technology frames may be operating and whether those norms are clustering around AI receptivity, neutrality, or resistance. They could then seek to either influence those frames, or shape AI implementation to align with them, to minimise the potential for individual-level PC breaches and the negative consequences that often flow from these.

4.10 Conclusions

Overall, we seek to contribute to a growing body of literature recognising that the PC is developed within an organisational, national, regional, and global context. With a focus on the increasing use of AI in the workplace, we argue that the macrosocial and microsocial contracts for the ethical use of AI will be important inputs to the PC, and we outline the factors contributing to such higher-level contracts. From a practical perspective, our work should inform both policymakers and organisational leaders regarding how higher-order sets of norms will ultimately influence the micro-level reciprocal obligations between employees and employers (the PC).

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Chapter 5

The Future of Work: Implications for Organisational Design and the Psychological Contract



Dieter Veldsman and Ninette van Aarde

'It is not necessary to change. Survival is not mandatory.'

—W. Edwards Deming

5.1 Introduction

As we entered 2020, none of us could have predicted that the work landscape would be changed forever. Authors on the future of work, who often focused on the rise of the Fourth Industrial Revolution, could not have foreseen that a global pandemic in the form of COVID-19 would change the global economy and the world of work in a matter of only a few weeks. Traditional organisations were forced to implement work-from-home policies using unsupportive and ageing technology, retailers were forced to explore online avenues of sales, and entire industries, such as the hospitality industry, are now facing an existential crisis. As humans, we have been focusing on 'the rise of the robots', while we should have spent more time devising incremental improvements by accessing and implementing new ways of working that would have prepared us to be sustainable amidst this crisis.

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5.2 Chapter Objective

The purpose of this chapter is to explore the changing psychological contract and the implications thereof for work design in the future. The chapter starts with an overview of current and future trends, followed by the impact these will have on the way in which organisations are designed. The chapter further explores three questions within this context:

- What are the major trends in organisational design that will influence the psychological contract and employer–employee relations?
- How are these trends already impacting the workforce, and how will this change our understanding of organisational design and the psychological contract?
- What are the critical lessons we need to take into the future to optimally design organisations to enable human flourishing, aligned to the reality of a changing psychological contract?

The chapter concludes with a discussion of a case study that highlights a more integrated, human-centred organisational design process. The method used was the creation of representative employee personas from information collected through interactions such as focus groups and interviews, which provided the basis for the revised organisational design method. The chapter draws conclusions about our view of what the new normal could entail and evaluates these circumstances against the backdrop of an organisational design process within a global insurance business.

5.3 The Changing World of Work and Its Impact on Work

Since the year 2000 and the establishment of the World Wide Web, the nature of work and industry has changed significantly (Nasereddin & Faqir, 2019). New business ventures came to the fore, and traditional industries, such as retail, have had to adapt in order to become more relevant in a new market and to a consumer with vastly different expectations. Looking ahead, various trends are predicted for the coming 20 years, trends that will again have a major impact on how we view the world and, importantly, how employers need to respond to this changing external context. Figure 5.1 (adapted from Atkinson, 2017; World Economic Forum, 2020) highlights some of the predicted trends that will play a role in setting the tone for what the future world of work will entail and speculates on how these will change the world of work going forward:

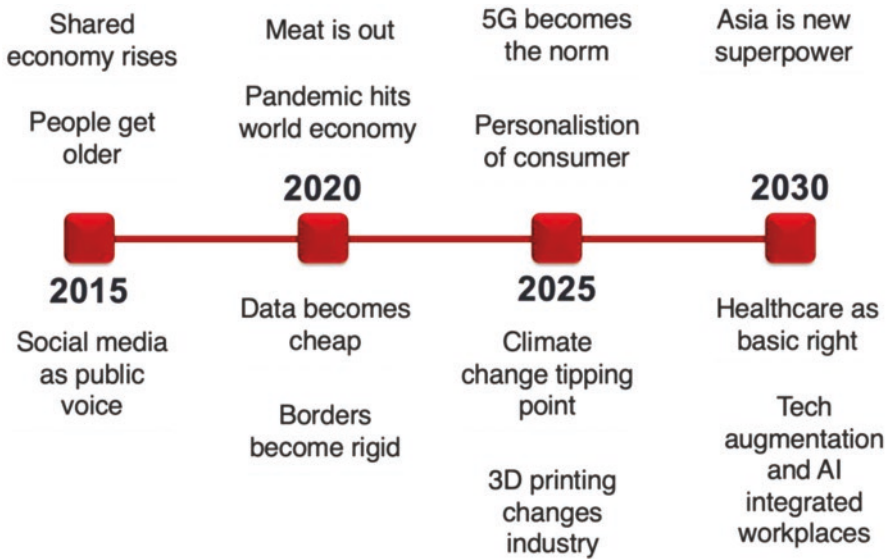


Fig. 5.1 Trends impacting the future of work. (Source: Authors' own work)

5.3.1 2015 to 2020

This period saw three major trends that influenced the way we work. Firstly, the shared economy came to the fore, with companies such as Uber and Airbnb fundamentally disrupting the traditional taxi and hotel industries (Ritter & Schanz, 2019). We were also faced with an ageing population, with most countries increasing the age of retirement (Makarski & Tyrowicz, 2019) or implementing additional measures to care for the ageing population, whilst also being faced with the challenge of growing youth unemployment (Kola, Abdulrahman, & Azeez, 2019). Social media probably had the biggest impact during this time, with an exponential increase in human connections through online platforms. The dark side of this movement was concerns regarding data privacy. Scandals such as Cambridge Analytica demonstrated that current regulatory and governmental policies were not able to keep up with the ever-increasing speed of change (Venturini & Rogers, 2019).

During this period, the impact on the world of work was profound, with the new shared economy resulting in a range of new jobs. Owning a car made you a potential Uber driver, owning property could make you a rental host, and the rise of digital work led to a distributed workforce of employees, starting the gig economy (short-term contract or freelance work). Traditional employers started changing their perception of the employment contract, resulting in multi-pronged workforces made up of permanent staff, sub-contractors, and gig workers (Lo Presti, Manuti, & Briscoe, 2019). The first implications of the Fourth Industrial Revolution were also evident in the greater augmented technologies and automation of processes replacing

routine jobs, whilst skills within the arena of big data, as used in data science and machine learning, came to be considered scarce.

5.3.2 2020 to 2025

A global pandemic (predicted in recent years) has hit the global economy and will have a fundamental impact on how organisations operate (Rose & Wei, 2020). Working from home due to forced self-isolation and restrictions on gatherings will not only change industries but will also fundamentally shift our thinking about how work gets done (Christensen, 2019). Organisations will be challenged to rethink physical workplaces and will have no alternative but to engage via digital platforms. During this time, platforms such as Zoom, Skype, and Microsoft Teams will become the way in which organisations communicate internally, and innovative applications (apps) such as House party will change how human beings connect and interact with one another. Competition will force telecommunications providers to reduce data prices—Vodacom South Africa has already been forced to do so (Meyer, 2020). Even before the global COVID-19 pandemic hit, a bent towards rigid borders saw countries starting to close their borders, and the refugee crises in North Africa and the Middle East were intensifying. In Syria alone, millions of people became refugees when they left the country in search of greener pastures, while countries such as the United States of America, under the Trump administration, and the United Kingdom, with Brexit, adopted a nationalistic approach, first tightening their borders (Born, Müller, Schularick, & Sedláček, 2019).

This period will see dynamic shifts in how organisations think about traditional workplaces, with a rise in ‘hot desking’ (desks assigned to employees as needed) and ‘co-working spaces’ (organisations sharing office space and equipment). Organisations that offer such spaces, such as Regus, will become popular, and, within these hubs, freelancers and entrepreneurs will meet, engage, and collaborate. Always-connected employees will become the norm, and this period could spell the end of the traditional nine-to-five workplace (Spreitzer, Bacevice, & Garrett, 2019). Political instability around the world will make talent mobile, but, rather than immigration, talent will start considering opportunities that are location-agnostic, working anytime and from anywhere.

5.3.3 2025 to 2030

This period will see the introduction of 5G across the world, which implies that the era of ‘unconnectedness’ will start coming to an end, and that the online industry will experience a second boom in terms of capacity (WEF, 2020). The race towards 5G will be contested between Chinese and American providers and will be an important milestone in solidifying the next superpower from a global economy

perspective (Hsu, 2019). The consumer will demand more personalisation, with on-demand services becoming the norm. Organisations will need the ability to customise products to clients' personal needs, as well as technological interfaces able to learn and adapt to habits (Custers 2019). Already in the early 2020, we saw the use of these technologies on the rise in companies such as Amazon, Apple, and Netflix, to name a few.

Consumers will become accustomed to tailored solutions that can be delivered on demand, in real time, and to personal specifications. The climate change crisis will also reach a tipping point (Aron, 2019), and the results of actions taken in the preceding 20 years will come to fruition—the jury is still out as to whether these will result in a positive or negative outcome for the planet. The green economy, however, will be in full swing, with most organisations already having converted to this agenda in 2015. Traditional industries such as big oil companies, supply chains, and manufacturing will feel the impact of these changes the most, and a global world demanding change will become the norm, driven by a youthful global movement, initiated by Greta Thunberg in 2020 (Thunberg, 2020), to address climate change through a green economy. Aligned to these shifts, the consumerisation of 3D printing will also change various industries, such as medicine and manufacturing, with a knock-on effect on the transport industry. The ability to 'print' machine parts, organs, and everyday necessities will change how logistics industries operate and how goods are moved across the world. Digitally, the application-based economy will create new ecosystems where organisations have to work together to produce products and services—owning the end-to-end value chain will become a thing of the past.

From a work perspective, these changes will have a considerable impact on a number of jobs. Logistics, manufacturing, and repetitive and routine jobs will disappear, and many organisations will start co-opting parts of their value chain. A new economy of business-to-business (B2B) transactions will come to the fore, which will be largely driven by digital progress brought by the Fourth Industrial Revolution.

In conclusion, events in the years leading up to 2030 will have a significant impact on the concept of work and how organisations design business models to accommodate changes in the operating ecosystem. From an individual point of view, new jobs will be introduced, some jobs will become obsolete, and the manner in which organisations contract with employees will change forever.

5.4 Responding to These Changes from an Organisational Design Perspective

While various schools of thought exist on the concept of organisational design, there is agreement that it refers to the process of aligning the organisation's structure to its strategy (Defee & Stank, 2005). This includes looking at the relationships between tasks, workflow, accountability, responsibility, and authority, and aligning

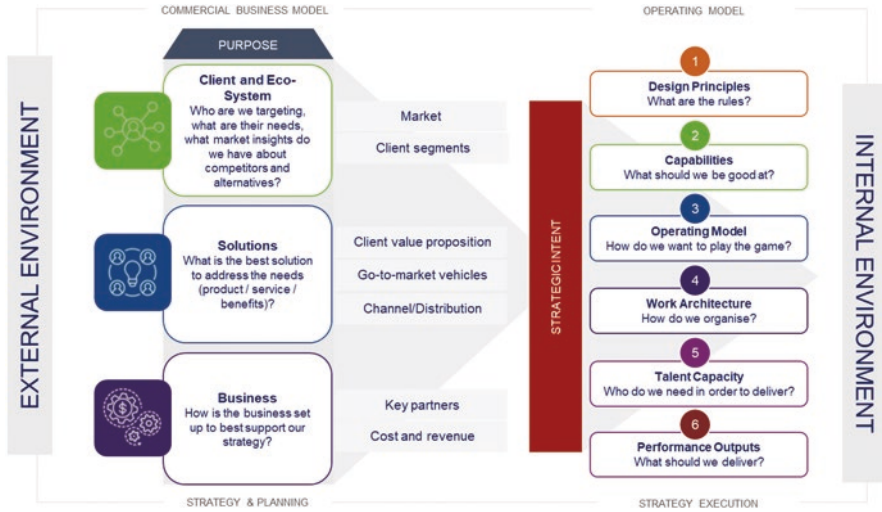


Fig. 5.2 The organisational design canvas. (Source: Authors’ own work)

these within the context of the business objectives and strategy, all with consideration of the external environment (De Sousa, 2019). The purpose of this chapter is not to discuss the various methodologies related to organisational design, but rather to take a holistic perspective on how this discipline needs to respond to remain relevant amidst the expected changes. From a macro-perspective, the organisational design canvas below is an end-to-end depiction of the key considerations that will now form part of organisational design processes. Figure 5.2 is discussed in terms of the external environment and how this translates to the internal way of work.

5.5 The External Environment as Influencing Factor

The organisational design canvas starts (on the left of the figure) with an outside-in perspective that first acknowledges the reason for the organisation’s existence in the context of the client and the ecosystem within which it operates. This shift in focus brings to the fore the following key questions that need to be answered in embarking on the design process: ‘Who is the client?’, ‘What need are we fulfilling (our client value proposition)?’, and ‘How do we optimise the client experience?’. Go-to-market channels (digital channels enabling online sales) will be multi-pronged, with these digital channels becoming both direct-sales vehicles and enablers of back-office support for traditional face-to-face engagement with clients. The cost of doing business will become key, as only a few players will own an end-to-end value chain, with most organisations starting to operate in the application program interface (API) economy (where two programs communicate with each other), where a company is a specialist in a small part of the value chain and partners with others to provide solutions.

This approach is vastly different from traditional approaches, which often took an internal, process-driven perspective in organisation design. While this led to efficient organisations, it often neglected clients' needs and experiences, as well as partnerships, which should be the starting point in designing the internal organisation model. This change in perspective has also seen a shift away from the traditional 'process-orientated' organisation model to an experience-driven model that, at its core, focuses on creating memorable moments and interactions, in order to drive loyalty and engagement. Modern organisations already adopting this type of model include Amazon, Zappos, and Southwest Airlines.

5.6 Defining the Internal Way of Work

The right-hand side of the figure lists the fundamental design choices that organisations need to make during the design process, all while exploring the external context. First, the philosophy underpinning the organisation's strategic intent needs to be determined. This philosophy determines the organisation's world view and guides decisions-making in order to enhance its competitive advantage. These choices are vast and will have long-term implications, as the design philosophy will become embedded in all organisational practices. Table 5.1 indicates how these decisions influence the way in which the organisation is structured. The list is not comprehensive but provides an indication of how the parameters of product, market, and client influence the design philosophy. Designing an organisational model that is in contrast with the philosophy is a recipe for failure, and, while there is no ideal solution, it is important that the organisation obtain clarity on how this decision will influence the way work is done.

Table 5.1 indicates how organisational design choices influence the ultimate model.

Once an organisation's strategic intent has been clarified and its design philosophy determined, the following six questions need to be asked, the answers to which will then inform its design (Table 5.2):

The internal (right side) and external (left side) of the model are then connected, to determine if the organisational model and decisions are consistent, which is required to deliver on organisational purpose. This is a continuous process of design-thinking in order to ensure alignment in terms of who the organisation is (identity), why it exists (purpose), and how it operates (design).

At a micro-level, this design process has fundamental implications for how work at the individual level will be designed. As the concept of work changes, so does the psychological contract and how the expectations between employee and employer are managed.

Table 5.1 Underpinning organisational philosophy

Choice 1	Choice 2	Choice 3	Type of organisation	Example
Product	Client	Market	This organisation creates impressive products to sell to a client in a particular market. Its competitive advantage lies in its product design, and such organisations tend to possess high-level technical expertise. While the organisation’s products may be superior to those of the competition, it has a potential blind spot: poor client service and sales engagement	Microsoft
Client	Product	Market	This is a client-centric organisation that operates very close to the client ecosystem and competes in the domains of client service and sales. The organisational expertise lies in client engagement. Its products are comparable to those of competitors, but the external narrative is focused on clients, not product features. This model has a blind spot: product innovation, and the organisation will probably not enjoy the first-mover advantage	Starbucks
Market	Product	Client	This organisation has expertise in terms of a particular market persona, e.g. high-income individuals, and builds niche products only for this market. These products meet the needs of a particular client segment and may not be transferable to other segments. This organisation’s value proposition lies in exclusivity, as opposed to scale. The blind spot of this organisation is that it is not equipped to expand into other segments and build scalable products and has to protect its client segment from takeover by the competition	Investec

Source: Authors’ own work

Table 5.2 Design questions

Design choice	Design question	Example
Design principles	What are the rules we don’t want to break?	Client care is more important than efficiency
Capabilities	What do we want to be good/best/equally good at?	Competitive product design and access to the skills required
Operating model	How do we want to play the game?	Choosing an operating model blueprint, e.g. hub-and-spoke blueprint
Work architecture	What does work look like?	Team and role design, and how the organisational model is applied between functions
Talent demands	Who will deliver the work?	View of external and internal talent requirements to determine what the organisation wants to own, borrow, in-source, or contract in terms of workforce requirements
Performance outputs	What does success look like, and what do we measure?	Method of delivering; outcomes of success in line with performance requirements

Source: Authors’ own work

5.7 How the Changing World of Work and Organisational Design Canvas Are Changing the Psychological Contract

The psychological contract has its origin in social exchange theory and refers to the power of perception. In essence, it is the sum of expectations between employee and employer of each other (Cullinane & Dundon, 2006). Given the changes covered in this chapter at the macro- (environmental trends), mezzo- (organisational design), and micro- (individual work) level, certain changes to the psychological contract are to be expected.

5.8 How Environmental Trends Will Impact the Psychological Contract

As global trends unfold, we can expect that the psychological contract will be impacted in various ways. Table 5.3 recaps global trends and indicates the influence of these, over time, on the psychological contract.

On the mezzo-level, the organisational canvas will impact the psychological contract by extending the definition of what employment entails. The definition of talent capacity will include gig workers, cross-located employees, contractors, and in-sourced employees who form part of the organisational ecosystem only for a limited period. In this context, the employee contract will become more choice-orientated and personal in nature. This implies that elements such as office space, safe work environments, employee benefits, and other inherent hygiene characteristics that used to form part of the psychological contract will become irrelevant. At best, organisations will have to provide access to the resources that employees require in order to deliver expected outcomes, but this will not be permanent in nature, and, as such, employee care will shift to the individual. This will give rise to a new type of organisation, one where temporary employees can feel they belong and, for a fee, enjoy some of the benefits that traditional organisations used to provide. Employees could become nomads, and the rise of platforms such as [Freelancer.com](#) and Nomadnow are already examples of how ‘skills for hire’ will become the norm. Organisational models are not geared to manage this type of complexity in the workforce and will have to adapt or risk losing access to the talent of the future.

At the micro-level, the expectation of individuals in terms of work will also change. Careers will be built around experiences, hierarchies will become a paper-based exercise that carries no real authority, and development will be based on on-demand and just-in-time models whereby individuals take responsibility for their own development. Employment will become temporary, and individuals will belong to more than one organisation at the same time and will also exercise choice in terms of how, where, and how much they want to work. At an organisational level, the employee experience will become paramount and will need to evolve in terms of contents of the job, the design of the work itself, and how the work is positioned as

Table 5.3 The impact of global trends on the psychological contract

	2015–2020	2020–2025	2025–2030
External environment	<ul style="list-style-type: none"> • Shared economy • Ageing population • Organisations used social media as a public voice 	<ul style="list-style-type: none"> • Vegetarianism/veganism • Pandemic hits the world economy • Data becomes cheap • Borders become rigid 	<ul style="list-style-type: none"> • 5G becomes the norm • Personalisation and customisation of products • Climate change reaches the tipping point • 3D printing changes industry
Impact on contents of psychological contract	<ul style="list-style-type: none"> • Public and social image became important, and employees wanted to understand its moral purpose and what it stands for • The ageing population necessitated changing policies on retirement, career management, and career progression, to allow for a multi-generational workforce with different needs 	<ul style="list-style-type: none"> • Remote work will become a basic right and not a privilege • Employee well-being and care will become paramount, and employers will be evaluated in terms of their ability to care for all employees and ensure their physical, financial, and mental well-being • Employers will need to cater for changing needs of employee groupings, and will be forced to take a stance on environmental issues • Diversity will become a key focal point • Organisations will need to have a voice in the public domain • Sense of belonging will become important as nationalism becomes topical, and cross-border identities of organisations will become important 	<ul style="list-style-type: none"> • Digital ways of work will become paramount, and location will no longer be a key job criterion, with time zones starting to play a more prominent role • Organisations will have to become socially conscious and show how they are being responsible; sustainable investment and business will become the new normal

Adapted from Atkinson (2017), NIC (2020), and World Economic Forum (2020). (Source: Author’s own work)

part of a longer-term plan for growth. Organisations will have to meet employees’ needs in different ways in order to gain access to a talent pool, members of which will have their choice of membership of various organisations at the same time. The term *employee* will be replaced with terms such as *associate* and *member* as a neutral way to refer to the partnership between organisation and individual, as individuals will no longer be employed by organisations in the traditional sense.

5.9 Practical Implications for the Future

This section provides an overview of the new normal that every organisation will face in the coming years—a changing external context that will lead to a redefinition of work, the employer–employee relationship, and the concept of organisational membership and belonging. Organisations will have to design, not just for the client experience, but for an intentional employee experience. Organisations will have to provide a work environment to which employees want to belong due to the nature of the work and the environment, as opposed to having to work there as their only option. The case study below highlights such a process, where the organisational design canvas was utilised to explore a new way of work, one that is more relevant to the workplace of the future.

5.10 Case Example: Applying These Insights to the Design Process in a Global Insurance Organisation

5.10.1 *Overview of the Business*

The setting of the case study is a multi-national insurance company with operations in South Africa, India, the United Kingdom, Lesotho, Namibia, Botswana, Kenya, and Ghana. The case study focuses on the *Business of Tomorrow* (BoT). The business provides client-centric financial solutions with a focus on the lower- to middle-income market. The organisation plays across the insurance spectrum, offering cover—funeral, life, risk, and disability, as well as products for amassing savings and investing for retirement. The business has a large geographical footprint with more than 140 branches, supported by two head offices.

5.10.2 *The Case for the Change*

Operating in strenuous economic times, with changing client expectations and internal cost pressures, the business relooked its organisational design with the aim of aligning it to its strategic intent and to remain relevant in the market. The organisational design process highlighted that the business had grown over time, that functions had evolved, and that its innovation efforts were being hampered by outdated traditional mainstream systems and processes. Against this backdrop, a new organisational design was needed to create a mainstream business focused on operational excellence and continued income, with a view to the business of tomorrow—an innovative business focused on disruption, with the goal of diversifying income streams. The problem statement detailed the following questions that had to be resolved through the design:

- What type of business model would be best suited to driving disruption in this context?
- How should the business be designed around human experiences to attract a Millennial workforce with the ability to design products for a previously unexplored market?
- What employee experiences will drive employee productivity, and how should these be packaged as part of a broader employee value proposition to create a psychological attachment to the organisation and its brand?

5.11 Applying the Design Canvas as Part of the Design Process

The process was run over several months, to allow enough time for design decisions to be implemented and stabilised before proceeding with the next phase. The steps followed are discussed below.

5.11.1 Step 1: Defining Purpose and Reason for Existence

The process started with market research on the external environment, focused on understanding client needs through both desktop research and consumer interviews. Semi-structured interviews and open-space workshops were conducted with team members, to define the core value proposition, client ecosystem, and the right to win in the market. BoT's reason for existence was to provide digital insurance and debt solutions for the Millennial market through a coaching and advisory methodology. The team also agreed on a core mantra that represented the type of organisation they wanted BoT to become: boundaryless and open-minded, with employees who are not afraid of failure. This was articulated formally as follows for shareholders:

Identify and pursue profitable business opportunities on the fringe of innovation that prepare us for the business of tomorrow

To make this mantra real for them, they wrote the manifesto below as a commitment from each organisational team member to the common purpose and type of organisation they wanted to create and be a part of:

This is it...

This is the space where I can bring my best
 I am the master of my own fate
 I show up, dressed in confidence and armed with skills
 I know that I can't succeed without my tribe
 It's not about what I can do, it's about what we can achieve
 Together, we step out of our boxes and work towards a common goal
 We use our collective talents and creativity to make a difference
 We are open-minded, proud, and committed

To achieve our goals, we communicate, apply discipline, consistency, and *swag*
 We share our successes and failures
 And when we win, we own our bragging rights
 Our foundation is transparency, trust, and integrity
 Through collaboration, we can achieve greater things
 Though sometimes we may trip over ourselves, we always get up
 How we get up determines our success
 We are convicted, but can be flexible
 We are diverse, but unified
 We know when to follow the rules and when to disrupt
 We actively listen, but we can also speak our minds
 Our purpose is to create value by putting our clients first
 Welcome to the future.

5.11.2 Step 2: Defining the Design Principles and Rules of the Game

Based on the mandate and purpose of BoT, the next step was to focus on the organisational design principles to be adopted by the business, as well as the key organisational capabilities required. Design principles act as a compass indicating true north throughout the design process and facilitate strategic choices and key decisions the business needs to make, e.g. ranking the importance of speed to market vs quality, or cost vs speed. Design principles should clearly articulate strategic choices and how these will be lived through the organisational processes and ways of work. BoT's design principles were the following:

- The design should allow for flexibility and adaptability, to ensure responsiveness to a changing environment and product set.
- We will gain a competitive advantage by growing key talent and skills internally.
- Insight into clients is a differentiator in our business, and should inform everything we do.
- Digital capability is crucial in product development and distribution.

5.11.3 Step 3: Articulating the Core Capabilities and What BoT Needs to Be Good At

In articulating the core capabilities of BoT, clients' experience and their desired journey were utilised as the base to inform decisions. For BoT, there were three critical memorable moments in creating a meaningful client experience: a cognitive interaction when selling, and two emotive interactions—changes to a policy and lodging a claim. Clients' experiences of these touch points differ vastly. In the sales process, the client engages in a cognitive process to understand the product features, benefits, and price, and makes a decision whether to purchase the product. On-going

service interactions typically occur when the client interacts with BoT to update policy details, add or remove dependants, or purchasing additional benefits due to a life or health change. The final emotive interaction is the claims process. This typically occurs when something went wrong in the client’s life, necessitating access to the policy benefits. With this in mind, the key capabilities of BoT needed to reflect an understanding of the market and clients (insight), solution design (concept creation, product), sales (business development), phygital (refers to physical and digital omnichannel), and service (phygital omnichannel). These capabilities were sorted into three categories:

- Innovate: We want to be different and push the boundaries.
- Differentiate: We compete to be better than others and differentiate ourselves.
- Maintain: We need to optimise at a basic level to be able to operate our business.

The core capabilities required were then plotted onto a capability map and assigned a current and desired level of maturity. This crystallised what was currently available and what would have to be grown or acquired over time. The capability map is shown in Fig. 5.3.

5.11.4 Step 4: Defining an Operating Model Blueprint

A number of organisational design blueprints were created for BoT, with a core focus on alignment to the core purpose of the company and finding a model that would enable its philosophy. Figure 5.4 depicts some of the models that were explored in this process, with each entailing the acceptance of a number of limitations and the pursuit of benefits that the model could offer.

BoT decided to adopt a honeycomb operating model, as it would allow for faster decision-making. It is a prototyping-based design model that allows rapid testing of whether a product is successful, thus enabling faster and shorter iterative speed-to-market cycles. The limitation in employing this model was that BoT was a business

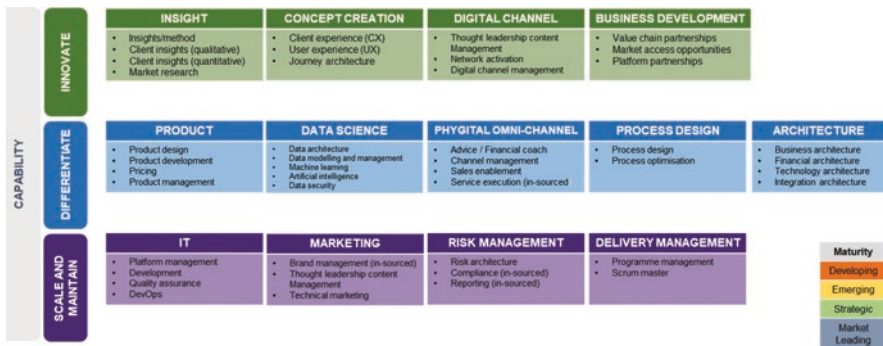


Fig. 5.3 BoT’s capability map. (Source: Van der Merwe, 2020)

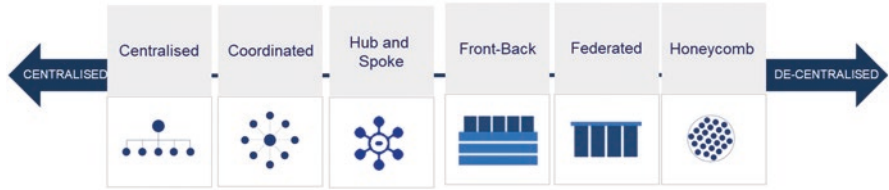


Fig. 5.4 Continuum of blueprints of operating models explored. (Source: Authors’ own work)

designed for a Millennial market as a stand-alone business, separate from the parent company. This impacted the availability of resources and other benefits, such as brand equity and leveraging existing technology solutions developed elsewhere in the group.

5.11.5 Step 5: Creating a Supply of Skills to Meet Capacity Demands

This step helped BoT organise talent demands in terms of scarcity and priority, aligned to the requirements identified in the capability map. Practically, this meant using external talent platforms (such as LinkedIn) to gain insight into scarce skills and the best way to gain use of these, and to rank skills according to criticality, based upon the BoT mandate and strategic plan.

The segmentation approach illustrated in Fig. 5.5 was utilised to visualise these skills requirements, followed by overlaying it on current internal availability.

5.11.6 Step 6: Creating Internal Employee Personas and an Employee Value Proposition

This step entailed creating a profile of the current BoT workforce by analysing its current composition using demographic data analysis techniques. Two broad personas, representing BoT employees, were created as a basis for creating a BoT-specific employee value proposition. The purpose of creating personas was to apply context to the lens through which we designed, but to allow for aggregation, so that we did not create solutions for individuals, but for the needs of characters, and therefore broader groups of employees. The characteristics of the personas are listed in Fig. 5.6.

The personas provided insight into what the employee value proposition needed to include to meet the different needs and expectations of the two personas. The two personas therefore provided the basis for the design of the employee value proposition and the parameters of the psychological contract. Focus groups were conducted

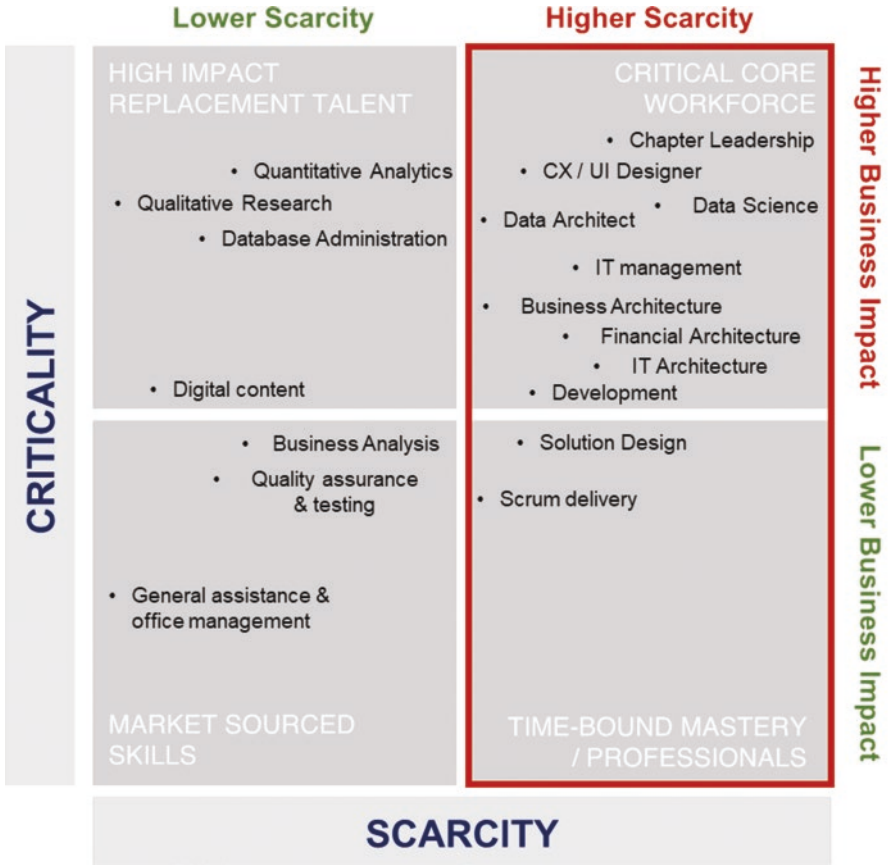


Fig. 5.5 Talent segmentation and demand matrix. (Source: Van der Merwe, 2020—reprinted with permission)

CHESLIN	GELDA
<p>Man aged 30 – 39 years ACI Been here less than 2 years Highly skilled</p> <p>Assumptions: Career trajectory still high Often starting family Financially strained and vulnerable Seeks meaningful work and wants to contribute Wants to make a name for himself Salary and benefits are important Wants to be recognised for impact and potential Work-life balance is important Wants to progress and receive responsibility New technologies and interesting work are important May need financial guidance/support</p>	<p>Woman aged 40-49 years White Been here more than 10 years Highly skilled</p> <p>Assumptions: Flatter career trajectory Often has a family to consider Financially more established Leaving a legacy is important Passing on knowledge to others Wants to be respected for contribution Wants to be recognised for contribution and loyalty Work-family balance is important Stability is important</p>

Fig. 5.6 BoT personas. (Source: Authors' own work)

to determine the wants and needs of these two personas, and the data were validated through interviews with a sample of the current workforce. Five key areas to be included in the employee value proposition were identified: (1) workspaces (physical and remote), (2) opportunities for growth, (3) reputation of the organisation, (4) benefits, and (5) reward and recognition. While these five categories were applicable to both personas, how they were lived was vastly different. For Cheslin, recognition may refer to opportunities to attend international conferences, whilst, for Gelda, it might refer to a long-service award presented by the CEO. Based upon these insights, employee value proposition priorities were ranked according to impact and difficulty of execution. The result of this exercise is shown in Fig. 5.7.

5.11.7 Step 7: Monitoring and Listening in Order to Adapt

Monitoring the effectiveness of a design and employee experience is critical. Understanding how employees experience working according to the model and how the EVP is contributing to the well-being and engagement of employees becomes key insights into the effectiveness of the organisational design. BoT implemented pulse surveys and retrospective discussions following interventions, to measure specific elements aligned to the model and identify the changing needs of employees. Poll surveys provided rapid feedback, which allowed the business to significantly increase its responsiveness to organisational concerns and employee needs.

Even though BoT was still in its infancy, it was apparent that the design process followed allowed for a clearer articulation of business purpose, the crafting of an aligned business model, and establishment of a human-centred culture that set the



Fig. 5.7 Prioritising EVP levers. (Source: Authors’ own work)

business up for success. The outside-in approach of designing the business around memorable client touch points also yielded value, allowing the organisation to become more in touch with the real needs of their clients, which led to better and more relevant product design. In terms of the trends identified earlier in this chapter and the subsequent impact on the psychological contract, the BoT design process responded as follows in Table 5.4.

Table 5.4 The BoT design process response to changing trends and the impact on the psychological contract

	2015–2020	2020–2025	2025–2030
External environment	<ul style="list-style-type: none"> • Shared economy • Ageing population • Social media as public voice became the norm 	<ul style="list-style-type: none"> • Vegetarianism/veganism • Pandemic hits the world economy • Data becomes cheap • Borders become rigid 	<ul style="list-style-type: none"> • 5G becomes the norm • Personalisation of consumer • Climate change reaches the tipping point • 3D printing changes industry
Impact on psychological contract parameters	<ul style="list-style-type: none"> • Public and social image became important, and employees wanted to understand what the organisation stood for and the moral purpose of the organisation • An ageing population necessitated changed policies on how organisations view retirement, career management, and career progression, to allow for a multi-generational workforce with different needs 	<ul style="list-style-type: none"> • Remote work will become a basic right, not a privilege • Employee well-being and care will become paramount, and employers will be evaluated in terms of their ability to care for all employees and ensure their physical, financial, and mental well-being • Employers will need to cater for changing needs of employee groupings, and be forced to take a stance in terms of environmental issues • Diversity will become a key vocal point, and organisations will need to have a voice within the public domain • Sense of belonging will become important as nationalism becomes topical, and cross-border identities of organisations will become important 	<ul style="list-style-type: none"> • Digital ways of work will become paramount, and location will no longer be a key job criterion, with time zones starting to play a more prominent role • Organisations will have to become socially conscious and show how they are being responsible. Sustainable investment and business will become the new normal

(continued)

Table 5.4 (continued)

	2015–2020	2020–2025	2025–2030
Response in the BoT design process	<ul style="list-style-type: none"> • A strong purpose statement and mantra were co-created with organisational members and centred around an actual client need • Personas were created to accommodate the different generational needs of the workforce 	<ul style="list-style-type: none"> • Remote work will be adopted as the norm, not the exception • Strong access to employee well-being processes and practices will be incorporated into the broader employee value proposition • The aim of the design is to create a strong sense of belonging with regard to the organisational identity 	<ul style="list-style-type: none"> • A diverse and digital workforce will spread across geographical boundaries (not yet global)

Source: Authors’ own work

5.12 Implications for the Future

This chapter highlighted the trends that will impact the world of work to varying degrees in the near future. For organisations to remain relevant, a different approach to organisation design is required, one that starts with an outside-in approach that organises the business around memorable moments that need to be created to achieve value for the client, in alignment with the organisation’s purpose. In essence, a more human-centred organisational design approach is required, designed around client needs and requirements, while also taking cognisance of the internal organisation through a targeted employee value proposition. This value proposition should be aligned to the critical skills required to execute the organisational design, specifying the type of talent that needs to be attracted or grown.

The organisational design canvas was the method used to incorporate these elements into the organisational design process. The BoT case study highlights that the use of the organisational design canvas requires a more integrated human-centred organisational design process going forward. The creation and definition of employee personas were critical success factors in the design process; however, from the literature, it would seem that traditional organisation design methods neglect to incorporate these steps as part of organisational design. Traditional design approaches tend to focus more on the process and structural aspects—how work will be organised and delivered—and not necessarily on what type of human-centred environment needs to be created to achieve these outcomes.

This case study was limited to one organisation and should be replicated to validate the organisational design canvas as a method of designing for the psychological contract. The case study also needs to be replicated with different types of teams and skills to ensure its relevance and generalisability. The case study however does contribute to the current literature regarding the psychological contract by positioning the organisational design process as a catalyst to intentionally craft the psychological contract through personalised employee experiences.

5.13 Conclusion

The world of work is changing and demands a response from organisations if they are to survive and thrive in this environment. Organisations have to intentionally craft a psychological contract aligned to employee characteristics, in line with talent and capability requirements in order to participate in the talent war. This requires a shift in methodology and designing organisations that are more relevant to modern clients and provide a platform for productive and engaging employee experiences.

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Chapter 6

When Protean Career Values Intertwine with Employee–Employer Obligations: Reviewing Digital Era Work Mindsets for Modern Psychological Contract Practices



Melinde Coetzee

6.1 Introduction

Employees' careers are embedded in and shaped by the broader organisational context that comprises reciprocal exchanges between the employer and the employee (Baruch, 2015). The psychological contract exists within the social exchange between the employer and employee. Traditionally, the organisational psychological contract represents the implicit and subjective beliefs regarding the reciprocal obligations within the exchange relationship between the employer and employee (Bankins & Formosa, 2019). Global business competitiveness and technological advancements in the contemporary workplace are significantly reshaping employers' business performance requirements and the career development needs of employees. As a consequence, the subjective psychological contract expectations of mutuality and reciprocity are rapidly transforming (Bankins & Formosa, 2019; Baruch, 2015; Lent, 2018). Contemporary organisations expose employees to more frequent job changes and shorter employment lifespans with dire consequences for the relational aspects of mutual trust, support, and loyalty that characterised the traditional psychological contract (Holland & Scullion, 2019). Individuals are becoming more self-reliant in managing their careers with personal values shifting towards less loyalty and commitment towards the organisation. Employees increasingly rely on establishing psychological security through greater self-determination in negotiating opportunities for career development, upskilling, and sustained employability (Hirschi, 2018; Lent, 2018).

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It appears that the transactional and transitional content types of psychological contract may feature more explicit in modern times with the focus leaning toward less job security and pure economic exchange to fulfil the organisation's short-term talent requirements (Holland & Scullion, 2019; Jeske & Axtell, 2018; Lent, 2018). The traditional transactional contract involves specific, short-term and monetizable benefits and economic exchange obligations. Transitional contracts are evident in short-term employment situations with a focus on monetary exchange for work rendered (Jeske & Axtell, 2018). However, it also appears that the relational and balanced content types of psychological contract may become more predominant with the emergence of the new so-called *Employee Relationship Economy* (RiseSmart, 2018; Witcher, 2018). Relational type of psychological contracts generally involves open-ended or longer-term employment situations. Both employees and employers invest in the relationship. The contents of the balanced type of contract are more open-ended with the exchange relationship covering a mix of economic and social (relationship) components (Coyle-Shapiro, Costa, Doden, & Chang, 2019; Jeske & Axtell, 2018). The research literature suggests that the balanced and relationship types of psychological contract may also emerge as being of importance because of the mutual needs for dynamic, flexible, and open-ended employment arrangements conditioned on the economic and business performance success of the company, and employee opportunities for work experience, career development support, upskilling, and advancement (Holland & Scullion, 2019; RiseSmart, 2018; Witcher, 2018).

A less explored aspect of the psychological contract involves the value-oriented content in the psychological contract. The value-oriented obligations represent the ideological currency in the exchange relationship. Ideological currency transcends personal gain and alludes to credible commitments from both parties to pursue a valued cause or principle that are implicitly exchanged at the nexus of the employer–employee relationship. For example, the organisation is seen to act in line with the proclaimed mission (strategic purpose) of the company and employees are seen to fulfil their proclaimed employment value proposition (EVP) towards enabling these goals (Page, 2020; Scheel & Mohr, 2013). Ideology consists inter alia of core values that define the enduring character of the organisation through shared beliefs about desirable, motivational goals that transcend specific actions and situations (Scheel & Mohr, 2013). However, research on the role of value-oriented ideological employee obligations in the psychological contract is still in its infancy and further research is needed to assess its prevalence along with shifting career values and the transactional, transitional, relational, and balanced types of psychological contract in the 2020s workplace (Coyle-Shapiro et al., 2019; Hall, Yip, & Doiron, 2018).

6.2 Chapter Objective

The objective of the chapter is to explore the extent to which career values contribute to better understand the employee–employer obligations content of the modern psychological contract. The chapter further aims to critically review the

implications of the digital era work mindsets for value-oriented psychological contract practices. In modern times of digital evolution and the COVID-19 crisis, people's careers and work orientation are dramatically impacted. The chapter contributes new insights on aspects that need to be considered in negotiating the modern era psychological contract.

6.3 Employee Career Values

Modern careers in a globalised, technological evolutionary time are characterised by increased opportunities for career mobility, shifts in the shape and form of jobs and occupations, more frequent career transitions, virtual and contingent work, as well as alternative work arrangements. Work in the 2020s will stretch the current boundaries of when and where work is done. Work may consist of a continuum of humans and robots; work could be performed anywhere, ranging from physical locations around the world to digital links (McKinsey Global Institute, 2015, 2016a, 2016b; RiseSmart, 2018). In addition, research shows that the global COVID-19 pandemic not only shifted people's perceptions of the labour market but also their future work-related priorities. People appear to attach more importance to working conditions and work–life balance since the onset of the COVID-19 crisis (Baert, Lippens, Moens, Sterkens, & Weytjens, 2020).

These trends require greater levels of self-direction, flexibility, agility, and adaptability on the part of job seekers and employees (Hall et al., 2018; Lent, 2018). Careers in the 2020s are seen to represent the sequence of individuals' diverse set of career and work experiences reflected through a variance in continuity over time, across several social spaces, and characterised by individual agency and sense of meaningfulness (Coetzee & Schreuder, 2021; Hirschi, 2018; Van der Heijden & De Vos, 2015). Meaningful and decent work will be a key motivational force of people's careers in the digital era. Protean career theory (Hall et al., 2018) explains that people's careers will be driven by their aspirations to express themselves and their personal values in their lives and in their jobs. The person, not the organisation, is in charge of their careers; people are driven by the core values of freedom and growth, and the main success criterion is subjective or psychological success (e.g. meaningful and challenging work; life-long learning; sustained employability; career development and growth) rather than objective career success (position and salary). Self-direction and intrinsic career values will be core mechanisms in guiding people through career decisions and transitions, as opposed to a reliance on externally defined sources of meaning (Hall et al., 2018; Lent, 2018).

Work has also acquired a new meaning for individuals. Global research (Deloitte, 2020; Deloitte Insights, 2019; Intuit Report, 2020; McKinsey Global Institute, 2015, 2016a, 2016b) indicates that the meaning of work now lies in self-regulated career management, career agility, personal growth and development, and an entrepreneurial mindset towards employment creation and employability. Developing and applying business and digital savvy in creating, marketing, and selling niche products and services with real-time information at lower entry costs on digital

platforms are core aspects of work in the 2020s. The new meaning of work for individuals is a consequence of their shifting perceptions towards what matters in managing and sustaining the career in a digital and post-COVID-19 era of work (Baert et al., 2020).

Individuals regard life-long learning, agency, upskilling, agility, and flexibility in adapting to change and technology as essential to sustaining a career. Work-life balance and integration in high-tech living work community systems have become important values. Autonomy, control, and flexibility in independent, self-directed forms of work have become the norm. The meaningfulness of work lies in value-driven product development and service delivery focused on the human experience—"Am I using my strengths and capabilities?"; "Am I making a difference?"; "Do I add value?" Being able to move beyond what one wants to "be" to what one wants and is able to "do" for society, so one can find meaningful ways to develop and grow personal strengths and capabilities that add value regardless of access to particular jobs, has become a core career value (Bühler & Nikitin, 2020; Coetzee & Schreuder, 2021; Deloitte, 2020; Deloitte Insights, 2019).

People will increasingly search for the right mix of a career development supportive workplace culture and on-demand meaningful project-based work experiences that help them gain experience, skills, and knowledge (Coetzee & Schreuder, 2021). The companies they choose will be the ones with an established reputation and brand as a people-oriented, caring, supportive, and engaging workplace that enables personal growth, learning, and development. Workers have begun to embrace change, flexibility, and mobility; rather than looking for a job for life, they look for a job that is the right fit now to facilitate personal career values and employability goals as the new norm for psychological job security (Coetzee & Schreuder, 2021; RiseSmart, 2018; Witcher, 2018). Opportunities to have the flexibility to pivot between careers or between work and professional development are important criteria of subjective career success. In agreement with the principles of protean career theory (Hall et al., 2018), passion, growth, upskilling, and learning are key drivers for changing careers; each career transition and new project-type job are seen as the beginning of a new cycle of learning and further development. Jobs are viewed as opportunities to pursue passions, experience professional growth, gain new experiences, and expand networks (RiseSmart, 2018; Witcher, 2018).

Managing the psychological contract in the 2020s digital world of work has become challenging because of the agency people take in their career management and the availability of online talent platforms that provide quicker access to a wider range of job possibilities and options. In a world that increasingly allows people the freedom to choose their career goals, work assignments, and relationships, they may frequently ask themselves whether the environment (i.e. opportunities, demands, social context, employment value proposition) offers them what they desire for career success and life satisfaction (Van Vianen, 2018). The evolution of technology makes access to information about available jobs and new learning and growth opportunities easily obtainable. Employees are therefore more willing to leave the

organisation if they think they will learn more or gain better experience and growth elsewhere (RiseSmart, 2018; Witcher, 2018).

For the employee, the psychological contract is built upon the EVP. The EVP reflects the unique set of benefits that employees receive in return for the skills, capabilities, and experience they bring to the company (Page, 2020). The EVP generally signals a strong people brand in outlining the unique people policies, processes, and programmes that demonstrate the organisation’s commitment to, for example, employee growth, career development, meaningful work, performance recognition, rewards, and benefits. The employer EVP contains the central reasons that people will be willing to commit themselves to the organisation (Page, 2020). Examples of EVP levers in attracting talent include excellent compensation and benefits; inspiring environment and colleagues; flexible work arrangements and work–life balance; open, transparent and effective management; challenging work; and respect for diversity. Clear communication of EVP levers enables companies to create a culture and environment in which these will be experienced (Coetzee & Schreuder, 2021).

The career values framework of Macnab, Bakker, and Fitzsimmons (2005) outlines three core sets of career values that employees are searching for in an EVP:

- **Working with others (service orientation, teamwork, influence):** Work activities where the individual has a direct positive effect upon others are important satisfiers. The individual values relationships and personal service. Influencing people and events, teamwork, and good co-worker relations are important sources of satisfaction (Coetzee & Schreuder, 2021).
- **Self-expression (creativity, independence, excitement, career development):** Work activities that require creativity and innovation and that give one the freedom to set one’s own goals and schedule are sources of satisfaction. Some individuals may value environments where they experience a balance of new activities and consistent routines. Others may value variety and risk-taking. Opportunities for personal and career development and career advancement may be important sources of satisfaction (Coetzee & Schreuder, 2021).
- **Extrinsic rewards (financial rewards, prestige, security):** Financial rewards, job security, and prestige are sources of satisfaction. Some may value competitive remuneration, financial incentives, financial security, and a stable job. Some may value predictability in the workplace and job while others may value rapid change. Recognition, admiration, and status or taking pride in performance may also be sources of satisfaction (Coetzee & Schreuder, 2021).

A preliminary qualitative study by Coetzee and Deas (2020) among predominantly early career (76%) employees ($N = 25$) in a large South African insurance company (whites = 40%; Africans = 28%; coloured race = 20%; Asian = 12%; male = 28%; female = 72%) highlighted core career values that are embedded in employees’ perceptions of employers’ obligations towards them. Table 6.1 summarises the core values in terms of perceived employer obligations and the career values framework of Macnab et al. (2005).

Table 6.1 Core career values embedded in employees’ perceptions of employer obligations

Career values (Macnab et al., 2005)	Perceived employer obligations
<i>Working with others</i>	
Service orientation	<ul style="list-style-type: none"> • Tools to do my job; correct tools and equipment for job
Teamwork	<ul style="list-style-type: none"> • Good relationships with managers and staff • Transparency in relationships
Influence	<ul style="list-style-type: none"> • Opportunities to voice my opinions and share knowledge
<i>Self-expression</i>	
Creativity	<ul style="list-style-type: none"> • Challenging projects and work • Opportunities to contribute meaningfully • Stimulating work environment • Value creation for individuals and communities • Constant innovation
Independence	<ul style="list-style-type: none"> • Flexibility in where and how I do my job • Opportunities to pursue my own goals • Opportunities to co-create solutions
Excitement	<ul style="list-style-type: none"> • Stimulating work environment • Opportunities to make positive difference-value creation • Interesting, challenging, and meaningful work
Career development	<ul style="list-style-type: none"> • Career growth • Career enhancement • Successful career trajectory • Career opportunities • Learning, training, and development opportunities (upskilling and knowledge enhancement) • Continuous learning • Growth opportunities for continuous professional learning and development and achievement of career goals
<i>Extrinsic rewards</i>	
Financial rewards	<ul style="list-style-type: none"> • Market-related salary; competitive remuneration • Fair salary and bonus • Company and staff benefits • Rewards programme • Contractual commitments (salary, leave, employee benefits) • Equal pay for equal work • Bursaries for further studies
Prestige	<ul style="list-style-type: none"> • Good reputation • Good company brand and reputation • Company values and brand • Recognition
Security	<ul style="list-style-type: none"> • Job security
<i>Other</i>	<i>Organisational supportive conditions</i>

(continued)

Table 6.1 (continued)

Career values (Macnab et al., 2005)	Perceived employer obligations
	<ul style="list-style-type: none"> • People-oriented organisational culture • Caring and transparent organisation • Flexible working hours • Flexible work-home policies (flexibility in where and how I do my job) • Work-home balance policies • Safe environment to voice opinions and share knowledge • Health and safety • Mentoring and coaching • Mutual respect • Feeling valued • Clear goals and performance expectations • Ongoing feedback on performance and areas of development • Ongoing feedback on company strategy and vision • Appropriate and updated, relevant resources, tools, equipment, and training to do my job effectively

Source: Author's own work

Coetzee and Deas (2020) found that 92% of the participants stated the self-expression career value of career development as an employer obligation. Specific emphasis was placed upon career growth and enhancement: career development opportunities, learning, training and skills development opportunities, and professional growth and development. The other career values of self-expression (creativity, independence, and excitement) were indicated by 62% of the sample. The emphasis on the self-expression career values corroborated the protean career theory's (Hall et al., 2018) premise of an increased shift towards the values of self-directed freedom and growth in the 2020s. The study findings are in agreement with the view that opportunities for self-expression and career development provide psychological job security, meaning to people's lives, and a higher purpose they strive towards (Hall et al., 2018).

The study findings of Coetzee and Deas (2020) further indicated a balanced spread between the extrinsic rewards career value of financial rewards (60%); the self-expression career value of creativity (60%); and, although not linked with Macnab et al.'s (2005) career values framework, organisational supportive conditions (60%). Research by Supeli and Creed (2016) indicated a decrease in job satisfaction and organisational commitment when the organisational culture and values do not support the needs of employees to develop and grow in line with their self-directed values orientation. Violations of the protean career psychological contract values orientation was also linked to higher intentions to quit (Granrose & Baccili, 2006). A study by Waters, Briscoe, Hall, and Wang (2014) indicated that people who experience an increase in the protean career values also seem more likely to be re-employed ("boomeranged").

The organisational supportive conditions in Table 6.1 reflect content relating to the balanced and relational psychological contracts. The basic premise

underpinning these two types of psychological contracts alludes to the notion that both individuals and organisations (i.e. employers) generate value through reciprocal employment relationships. Mutual reciprocity affords supportive and flexible conditions for career development and growth for the worker and generates positive individual and organisational outcomes such as, for example, commitment and satisfaction (Baruch, 2015; Coetzee & Bester, 2020; Sungu, Weng, & Kitule, 2019).

6.4 The 2020s Workplace Mindset and Psychological Contract

Uncertain business markets in a volatile economy seem to give precedence to the transactional and transitional content types of psychological contract with the focus upon less job security and a focus on pure economic exchange to fulfil the organisation's short-term, on-demand talent requirements (Holland & Scullion, 2019; Jeske & Axtell, 2018; Lent, 2018). However, contrary to these expectations, the 2020s workplace is also witnessing the emergence of the *Employee Relationship Economy* (RiseSmart, 2018; Witcher, 2018). Work is becoming more on-demand, project-based with the completion of one job, leading into the beginning of another. By implication, workers could “boomerang” (i.e. return back) to a former employer to complete a project, or to re-enter as a permanent or contract employee based on choice, and not necessarily on circumstance. In a hyperconnected digital world where relationships are no longer finite, more employers are apparently moving from a transactional employment model to one that focuses on a more balanced, value-oriented, and relational psychological contract with long-term relationships based on an organisational culture of engagement, loyalty, mutual respect, trust, and transparency. Departing employees are seen as future brand ambassadors, customers, hiring references, or even boomerangs, that is, potential returning employees (Witcher, 2018).

The role of managers shifts from a top down approach of distributing and managing work to coaching and supporting employees to achieve goals and realise the organisation's purpose. Instead of offering lifetime employment with highly competitive benefits, employers offer meaningful work that contributes to the company mission; they guarantee career development support, training and development, job tools and resources, and avenues for continual learning, growth, upskilling, and new career beginnings. Career development resources include helping workers move through career transitions with advice and guidance on how to repurpose their skills, and polish their professional brands to make the best impression with future employers. This approach helps to establish psychological job security in the digital era (Deloitte, 2020; Deloitte Insights, 2019; McKinsey Global Institute, 2015, 2016a, 2016b; RiseSmart, 2018).

Table 6.2 summarises the core findings of the qualitative study conducted by Coetzee and Deas (2020) regarding employees' perceptions of employee obligations towards the company. The study corroborates the evident 2020s shift towards a more value-oriented and relational psychological contract. Value-oriented content

Table 6.2 Employees' perceptions of employee obligations

Company vision, mission and values	<ul style="list-style-type: none"> • Fulfil company vision, mission, and values • Produce results in accordance to company vision • Engagement in mission through contributing meaningfully • Living company values • To be an ambassador for the company • Constructively support the culture and business objectives • Believe in the organisation's purpose
Value-adding	<ul style="list-style-type: none"> • Adding value • Innovative ideas for the betterment of the organisation • Keep company's interest at top of mind at all times • Contribute to company as a whole • Creative thinking • To make a difference • Contribute to the success and profit of the company • Contribute meaningfully • Bring innovative ideas and solutions to the table • To act in best interest of the organisation whilst offering knowledge, skills, and services • Give my value's worth
Attitudes and behaviour	<ul style="list-style-type: none"> • Attitudinal commitment • Be reliable and responsible • Showing up; challenge self; thinking beyond the current situation • Dedication, staying motivated • Loyalty to business and brand • Hard-working; pushing oneself beyond limits • Honest and professional • Not to take advantage of company for own self-interest/ personal gain • Not to get involved in organisational politics • Openness and honesty • Competence, passion, integrity, ethical behaviour, and accountability • Taking ownership of work • Time management
Performance	<ul style="list-style-type: none"> • Perform duties and roles effectively • Meet agreed KPIs and objectives • Striving to outperform • Deliver on expectations • Perform to best of my ability • Best performance for company growth • Willing to work overtime when needed • To work smarter where I can
Service delivery	<ul style="list-style-type: none"> • To provide various services to the employer • To create good and positive experiences with clients • Deliver quality service with passion and care • Good communication
Teamwork	<ul style="list-style-type: none"> • To be part of a team that makes the organisation a success • To create good and positive experiences with team • Good communication

Source: Author's own work

is reflected in the perceived employee obligations of being engaged in, and contributing to the company vision and mission. Living the company values, believing in and supporting the company purpose (mission), and adding value to the company in meaningful and innovative ways were perceived as important employee obligations. Relational contract content is reflected in obligated attitudes and behaviour, performance, service delivery, and teamwork.

The value-oriented obligations of the psychological contract emerge in work relationships when employees' expectations involve the belief that their contribution to the organisation simultaneously serves a valuable cause and that the employment relationship is based on the value-oriented promises and obligations that enable the fulfilment of the company mission (Scheel & Mohr, 2013). Research by Bal and Vink (2011) suggests that, in comparison to transactional and relational obligations, individuals' own value-oriented obligations facilitate higher overall appraisal of the employment relationship, and higher levels of job satisfaction, affective commitment, and trust. Scheel and Mohr (2013) argue that value-oriented content shifts the attention to employee obligations and outcomes (e.g. job satisfaction and career well-being) because they contribute to a sense of meaningfulness of and in work. Their research suggests that attention to the value-oriented content of the psychological contract contributes to a more stable employment relationship. Employees are likely to transfer personal values more directly into attitudes and behaviour (e.g. job satisfaction and commitment) that are inherent to employee obligations which tend to transcend the immediate employment relationship itself. Employees generally tend to choose employers whose values are more aligned with their own (Scheel & Mohr, 2013; Van Vianen, 2018).

The value-oriented content of the employee obligations outlined in Table 6.2 reflects the increased importance of ideological currency in the 2020s social exchange relationship between employees and employers. Value-oriented employee obligations are effective inducements because helping to advance cherished ideals is intrinsically rewarding. Employees who perceive ideological obligations in the psychological contract generally hold the belief that, as part of the reciprocal exchange, the organisation provides the ideal context in which employees can meaningfully contribute directly or indirectly to the greater cause or purpose of the organisation (Coyle-Shapiro et al., 2019).

Underfulfilment of ideological or value-oriented psychological contracts is associated with an increase in work effort as opposed to the underfulfilment of relational psychological contracts that is linked to a decrease in work effort (Vantilborgh et al., 2013). These findings suggest that value-oriented ideological contracts do not necessarily operate on the principle of reciprocity as does the relational contract, but rather on the intrinsic reward of contributing meaningfully to a greater cause.

6.5 Implications for Psychological Contract Practices

Research shows that in the 2020s, traditional and new forms of psychological contracts and careers will exist simultaneously and require new approaches to the management of the psychological contract. Scholars generally advise that organisations need to consider a differential approach to employees' unique career development needs and their psychological contract expectations. Meeting perceived employer obligations regarding employee career and skill development support for employability and personal growth is of high importance for talent retention and psychological job security (Gerber, Grote, Geiser, & Raeder, 2012; Philippaers, De Cuyper, & Forrier, 2019).

The review of the research literature corroborates the premise that value-oriented psychological contracts speak to the 2020s idiosyncratic psychological needs of individuals such as the protean career values of self-directedness or autonomy, freedom to grow, and to contribute in innovative and meaningful ways to a greater purpose. Protean career values include opportunities for career development, training and development, career advancement and professional growth as aspects that provide meaning to the career and engagement with work (Coetzee & Deas, 2020; Coetzee & Schreuder, 2021; Hall et al., 2018). Research shows that ideological employee obligations are positively linked with all psychological contract fulfilment components, including relational and transactional (Bal & Vink, 2011; Scheel & Mohr, 2013).

One of the implications for the 2020s value-oriented psychological contract includes giving consideration to idiosyncratic deals (i-deals) that help shape the modern psychological contract. I-deals involve unique, individualised conditions of employment that are negotiated between employees and the employer, and that benefit both individuals and organisation (Davis & Van der Heijden, 2018; Vidarthi, Chaudhry, Anand, & Liden, 2014). Davis and Van der Heijden (2018) found that career development i-deals boost employability and provide workplace learning, for example job enrichment projects, which increases employees' chances of career advancement. Employability/career development i-deals further seem to enable the creation of meaningful learning paths that are driven by employees' own career values and motives. Flexibility i-deals involve, for example, changes to working hours, working patterns, and place of work, which enhance employees' work–life balance needs. An i-deals approach to shaping the psychological contract should involve opportunities for greater control and autonomy in charting career development and personal growth in performance management discussions. Such an approach may enhance sense of meaningfulness, fulfilment of protean career values, and engagement (Hall et al., 2018).

Another implication highlighted by Coetzee and Deas's (2020) study of perceptions of employee–employer obligations is the creation of an innovative and supportive organisational culture. Generally, i-deals may help shape organisational support conditions that enhance employees' engagement. Employability/career development i-deals contribute towards increased psychological meaningfulness by

enhancing the work experience through meaning and purpose. Flexibility i-deals contribute towards psychological availability by enabling employees to bring more personal energies to their work (Davis & Van der Heijden, 2018). Employee engagement practices should focus on cognitive engagement interventions that help employees understand how their job fits into and contribute to the organisational culture and strategic purpose. Performance management practices that instil pride in and meaningfulness of the job may foster emotional engagement that helps broaden employees' creativity and innovativeness (Davis & Van der Heijden, 2018). In addition, socialisation tactics and supervisor support behaviours are important practices to help clarify mutual i-deals expectations and obligations (Kim & Moon, 2018). Adaptive organisational approaches to exchange agreements generally generate perceived fit and balance between personal goals, motives, values and organisational purpose, values, and goals. Perceived fit engenders greater levels of satisfaction, commitment, and engagement (Ackerman & Kanfer, 2020; Vantilborgh et al., 2013).

Research shows that innovative and supportive organisational cultures allow employees to satisfy their psychological needs for experiencing their work as meaningful, to grow as individuals, and for building constructive relations (Lysova, Allan, Dik, Duffy, & Steger, 2019). Meaningful work is seen to foster personal growth, career and organisational commitment, intrinsic work motivation, greater productivity and contributes to the greater good (Allan, Rolniak, & Bouchard, 2020). Innovative organisational cultures are generally characterised by entrepreneurialism, personal initiative, and growth. Supportive organisational cultures are characterised by employee empowerment, flexibility, and a caring people-oriented environment (Lysova et al., 2019).

6.6 Implications for Research

The research literature's evidence on the increasing importance of career values in understanding the shift to the value-oriented and relational nature of the 2020s psychological contract is scant. The role of i-deals in shaping the value-oriented and relational content of the psychological contract is also under-researched. The 2020s shift in career and employment mindsets calls for further research to examine the prevalence, saliency, antecedents, and outcomes of value-oriented ideological currency in different organisations, occupations, and cultural contexts (Coyle-Shapiro et al., 2019). Future research should also examine the extent to which the career values of different generational cohorts play a role in their perceptions of employee and employer obligations and in negotiating mutually satisfying i-deals. Such research may help to better understand how individuals' psychological needs influence their perceptions of the psychological contract. The global COVID-19 crisis also beckons more research on the impact of the pandemic on people's career values and the extent to which these influence their post-COVID psychological contract needs (Baert et al., 2020).

In agreement with the extant psychological contract research literature, the literature review outlined in this chapter focused on employee perceptions of employee–employer obligations and did not address employers’ views of obligations. The approach was based on the assertion that employees’ perceptions are essential and that the psychological contract is generally an individual-level subjective phenomenon (Kim & Moon, 2018). However, the perceptions of both employers and employees are needed to better understand the formation of the psychological contract in modern times. Future research could consider exploring the perceptions of obligations from the employer’s point of view to better understand the principle of psychological contract reciprocity in the digital world of work.

6.7 Conclusion

The chapter contributes new knowledge on how employees’ career values contribute to better understand the nature of the value-oriented psychological contract of the digital era. The take-home message from this chapter is tied to the manner in which new era protean career values intertwine with perceptions of employee–employer obligations in the 2020s digital era work mindset context. The new protean employment and value-oriented relationship imply growing independence and a self-interest in enhancing one’s employability through career and skills development opportunities that provide meaning and psychological security to the career. Negotiating employability/career development and flexibility i-deals and creating opportunities to meaningfully contribute to the larger purpose of the organisation have become important elements of the 2020s psychological contract. Modern psychological contract practices should consider the shifting nature of career values and value-oriented employee–employer obligations in building mutually satisfying relationships in the digital era workplace.

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Chapter 7

New Psychological Contracts, Old Breaches?



Sandra Costa

7.1 Introduction

The nature of work is in constant change (Barley, Bechky, & Milliken, 2017), which posits challenges for the study of the employment relationship (Ashford, Caza, & Reid, 2018). Most of those changes are a consequence of the technological advancement that facilitates flexibility in the more traditional work settings and also enables new (digital) work arrangements. Traditional arrangements are focused on dyadic relationships bounded in a traditional employment relationship, whereas the new digitally enabled work arrangements are based on work contracts and involve multiple parties. Psychological contracts have been widely used to study the functioning of the traditional, old, paternalistic employment relationship as well as its new more flexible version. However, questions may arise about its suitability and usefulness for the new digitally enabled work arrangements. This chapter sheds light on several pertinent issues about the role of psychological contracts in understanding the new digitally enabled work arrangements, such as the differences in the expectations and obligations between the past forms and the emergent forms of psychological contracts as well as the meaning and experience of psychological contract breach in these new work arrangements.

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7.2 Chapter Objective

This chapter has theoretical and practical objectives. From a theoretical point of view, this chapter reviews the changing nature of work as well as the evolution of psychological contract. Specifically, it highlights the changes from the old to the new psychological contract and emergent forms of psychological contracts in new digitally enabled work arrangements, especially the gig work. Moreover, it also discusses how these changes may (or may not) impact employees' perceptions of breach. By doing so, it contributes to the knowledge of the psychological contract by exploring its new characteristics and providing insights on how it operates in the new work arrangements. Furthermore, it helps to guide and stimulate research on the psychological contract field by considering recent changes in the nature and function of psychological contracts. From a practitioner perspective, this chapter aims to inform managers and their organizations about the emergent forms of psychological contracts and how different employment relationship types may also bring additional challenges to manage the workforce.

7.3 Psychological Contracts

Psychological contracts are at the foundation of the employment relationship and have been defined as “individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party” (Rousseau, 1989, p. 123). According to Rousseau (1989), psychological contracts are individual, subjective, and idiosyncratic. Psychological contracts are also considered mental models that guide individuals’ behaviors in the employment relationship (Robinson & Rousseau, 1994) by defining and adding predictability to the employment relationship (Morrison & Robinson, 1997). As such, psychological contracts serve two key purposes: (1) define the employee–organization relationship, and (2) determine mutual expectations that guide and shape behavior (Hiltrop, 1995, 1996). Specifically, psychological contracts define the individual obligations and contributions as well as the employer’s obligations and rewards available from the organization (Hiltrop, 1995, 1996; Morrison & Robinson, 1997). These perceived mutual “obligations compose the fabric of the psychological contract” (Robinson, Kraatz, & Rousseau, 1994, p. 138). According to Robinson et al. (1994), some examples of employee obligations include loyalty, extra-role behaviors, extra hours, and acceptance of transfer, whereas employer obligations may comprise high and merit pay, job security, support, and development.

7.4 Changing Nature of the Work I: The Old and the New Psychological Contract

The understanding of the employee–organization relationship is crucial for both organizations and employees (Coyle-Shapiro, Shore, Taylor, & Tetrick, 2004) to survive and thrive. The underlying exchange in that relationship has implications for both parties as it guides what they give and receive in return (Coyle-Shapiro, Costa, Doden, & Chang, 2019). Changes in the employment relationship impact the content of the psychological contract (Anderson & Schalk, 1998; Coyle-Shapiro et al., 2019). According to the changes in the labor market as well as in the employment relationship, it is possible to define and describe an old psychological contract which is rooted in the old traditional employment contract and a new psychological contract which entails a more flexible version of the reciprocal agreement (Anderson & Schalk, 1998; Hartley, Jackson, Klandermans, & Van Vuuren, 1995; Rousseau, 1995).

The old psychological contract relies on a paternalistic view of the employer (Kissler, 1994) in which organizations were expected to take care of their employees by providing job security (“the job for life”) and managing their careers (Anderson & Schalk, 1998; Cavanaugh & Noe, 1999; Rousseau, 1995). From employees was expected loyalty, commitment to the job and the organization, and good performance (Cavanaugh & Noe, 1999; Hiltrop, 1995). These contracts were based on fairness, justice, and tradition, and provided a structured, predictable, and stable relationship between employers and employees (Anderson & Schalk, 1998; Hiltrop, 1995). In sum, the old psychological contract aspects were tailored for the traditional employment relationship in which the relational and intangible aspects were central to its functioning.

The notion of a “new psychological contract” or the “changing psychological contract” started in the 1990s with several articles examining and discussing this new form of psychological contract (i.e., Cavanaugh & Noe, 1999; Hiltrop, 1996; Martin, Staines, & Pate, 1998; Sims, 1994). It was agreed that the content of the psychological contract has changed to portray the employment relations trends (Anderson & Schalk, 1998; Cavanaugh & Noe, 1999; Hiltrop, 1995; Rousseau, 1995), which included an increase in short-term, flexible and insecure contracts (Millward & Brewerton, 1999). The reasons for the changes in the employment relations reflected the striking pace of changes in the labor market, which included market globalization, corporate downsizings, reorganizations, restructuring, relocation, foreign competition, crisis, new strategies, mergers, and acquisitions (e.g., Anderson & Schalk, 1998; Martin et al., 1998; Sims, 1994). As a consequence, organizations and managers needed a newer and more flexible form of organization–employee relationship (Cullinane & Dundon, 2006; Millward & Herriot, 2000).

The so-called new psychological contract focuses on transactional exchanges, employability (Anderson & Schalk, 1998; Hiltrop, 1995), and self-development (Hallier, 2009) rather than security and loyalty. It is also flexible and open to renegotiation rather than stable and predictable (Anderson & Schalk, 1998; Hiltrop,

1995). Another salient difference concerns employers and employees' expectations and obligations. On the one hand, employers are no longer obliged to provide security and to manage individuals' careers. However, they must provide equitable and competitive rewards for the employees' contributions (Anderson & Schalk, 1998; Hiltrop, 1995). On the other hand, employees are expected to be flexible, innovative, to go beyond the written employment contract (Hartley et al., 1995) as well as to excel in their contributions and manage their careers (Anderson & Schalk, 1998; Hiltrop, 1995). As such, the new psychological contract became more transactional and tangible and less dependent on relational exchanges (Cavanaugh & Noe, 1999).

The new psychological contract seems a more "managerialist version of the employment relationship," which allows for unequal exchanges between employers and employees (Hallier, 2009, p. 852). While employees are expected to do more and better, employers eschew career management and security. In detail, in this new version, employees have to work hard and exchange their skills and flexibility for having just a job (Millward & Herriot, 2000). On the other hand, employees do no longer expect long-term employment relationships and they are committed to their work and job rather than to the organization (Cavanaugh & Noe, 1999; Kissler, 1994). Moreover, as employees are responsible to manage their careers, they also expect the organization to provide opportunities and tools to assess and develop their skills (Cavanaugh & Noe, 1999) fostering their employability.

Academics and practitioners agreed that the psychological contract was changing (Anderson & Schalk, 1998; Cavanaugh & Noe, 1999; Hiltrop, 1995; Rousseau, 1995) and that "the new psychological contract should include particular beliefs regarding career development, commitment, and job security that reflect the movement of organizations from a paternalistic to a partnership relationship" (Cavanaugh & Noe, 1999, p. 326). However, details about its content as well as a measurement have rarely been discussed (Anderson & Schalk, 1998).

7.5 Changing Nature of the Work II: New Digitally Enabled Work Arrangements

The nature of work and employment relationships has changed in the past and it is likely to continue to change in the future (Barley et al., 2017; Chernyak-Hai & Rabenu, 2018). Nevertheless, management and organizational studies in general and psychological contract studies, in particular, have been largely neglecting those changes (Barley et al., 2017). The pace of change is frenetic due to continuous innovations and advancement in technology, such as wider use of artificial intelligence and machine learning (Brynjolfsson & Mitchell, 2017), the Internet of People, Things and Services (Simmers & Anandarajan, 2018), robotics, data analytics and cloud computing (Sung, 2018), teleconferencing, and wearable electronic and computing devices (Cascio & Montealegre, 2016). With technological advancements, workplaces became more digital and new forms of work emerged. However, the theories in which researchers rely upon to understand the employment relationship have been developed in a different era and they do not apprehend how individuals

work and experience work in this new world (Ashford et al., 2018; Ashford, George, & Blatt, 2007). The number of standard workers is decreasing, and the number of employees working in alternative work arrangement is increasing (Ashford et al., 2018; Katz & Krueger, 2019; Spreitzer, Cameron, & Garrett, 2017). It is less common to see people working from 9 am to 5 pm in co-located spaces with a direct supervisor and the same team (Ashford et al., 2018; Nicklin, Cerasoli, & Dydyn, 2016; Rockmann & Pratt, 2015; Spreitzer et al., 2017). In sum, these advances in technology have fundamentally changed the structure and nature of work as well as created opportunities and challenges for both organizations and individuals.

Advancements in technology allowed for more (and new) flexible work arrangements. Such new arrangements go beyond the telework, remote work, or virtual work and include (but are not limited to) digitally enabled work arrangements. As such, work and workplace have now extended meanings that go far beyond the previous understanding of the traditional employment relationship (Perrons, 2003) because these new forms transcend the legal, economic, temporal, and spatial constraints of traditional employment contexts (Gajendran & Harrison, 2007). The new form of digitally enabled work is called platform-mediated contracting or gig work and it captures a form of work in which the employee works for him/herself, and there is a short contract with a consumer for a task or assignment that may be virtual or at a location (Spreitzer et al., 2017). Moreover, it involves a digital online platform as the “intermediary” between the worker and customer (Duggan, Sherman, Carbery, & McDonnell, 2020). This is the key feature of gig work and distinguishes it from other forms of contingent work (Duggan et al., 2020). Gig work usually includes short-term work or tasks enabled by digital tools, such as Uber, Airbnb, MTurk, Fiverr, Deliveroo, TaskRabbit, Turo, and Amazon Flex (Burtch, Carnahan, & Greenwood, 2018; Duggan et al., 2020). More specifically, these types of work may be divided into capital platform work (platforms used by individuals—not workers—to sell goods or lease assets), crowdwork (work-mediating digital platforms through which workers remotely (outsourced, dispersed geographically) complete tasks), and app-work (service-providing intermediary digital platform organization that has workers performing the tasks locally for customers) (De Stefano, 2016; Duggan et al., 2020). The focus of the next section will be on the psychological contract of gig workers in these new work arrangements in which there is a digital platform as an intermediary between them and customers.¹

7.6 Emergent Forms of the Psychological Contracts: The Novel Psychological Contract?

Psychological contracts have been widely studied in the standard employment relationship context. However, recent research has suggested that psychological contracts are evolving (Alcover, Rico, Turnley, & Bolino, 2017; Baruch & Rousseau,

¹As such, individuals who use platforms to sell goods or lease assets will not be the target of the analysis.

2019; Griep et al., 2019; Guest, 2017; Knapp, Diehl, & Dougan, 2020) following the changes in the labor market. These changes are specifically promoting modifications in the type of the employment relationship (“with whom” and “what”), the schedule (“when”), and the location (“where”) (Ashford et al., 2018; Griep et al., 2019), which may be considered atypical when compared to the traditional employment relationship.

Psychological contracts are indeed changing, but the conceptualization offered by Rousseau (1995) fits both traditional and new work arrangements as it does not limit the existence of these contracts to the relationship between an employee or worker and an organization (i.e., dyad). Rousseau (1995) argues that the exchange agreement is made between a person and another party, such as an employer, “client, customer, supplier, or any other independent party” (p. 34). The concept is therefore useful not only to understand the exchanges occurring in the employment relationship in which there is a clear employee–organization link but also to understand the digitally enabled new work arrangements. Recently, in support of this notion, Knapp et al. (2020) described psychological contracts as an “inherently versatile [concept] and lends itself to the analysis of exchange relationships that transcend the specific circumstances of employment and organizational boundaries” (p. 200).

Looking closer to work arrangements that are enabled by digital platforms, the gig work arrangements are not based on a traditional employee–organization relationship (Duggan et al., 2020; Sherman & Morley, 2020) and the “traditional understandings around reciprocity and organizational support no longer apply or, at a minimum, are considerably different” (Duggan et al., 2020, p. 123). A relevant feature of these work arrangements is that digital platform organizations do not consider their workers as employees (Aloisi, 2015; Duggan et al., 2020). Furthermore, in theory, workers and employers have no expectations of mutual trust and commitment and are more independent and autonomous (Ashford et al., 2018; Duggan et al., 2020).

Workers are indeed paid for short-term jobs or tasks, which may lead to the assumption that the employment relationship is purely transactional (Duggan et al., 2020). However, nascent evidence suggests that the relationship between the worker and the digital platform organization is much more complex (Aloisi, 2015; Ashford et al., 2018; De Stefano, 2016; Graham, Hjorth, & Lehdonvirta, 2017; Petriglieri, Ashford, & Wrzesniewski, 2019; Ravenelle, 2019). For instance, Aloisi (2015) argues that trust between parties is critical for the functioning of the relationship between the worker and the platform. Additionally, gig workers seek development opportunities within the platform organization (Graham et al., 2017) as well as social interaction (Ashford et al., 2018; Petriglieri et al., 2019). Moreover, gig workers also want to participate in the decision-making process in circumstances that directly affect them (Ravenelle, 2019). This evidence demonstrates that, despite the levels of flexibility and insecurity of this work arrangement, the relationship is not just an economic exchange, but also involves a more relational component, at least for the worker.

The digital platform organization communicates with the worker using the app, which uses algorithm management (Duggan et al., 2020). A pertinent question at this point is: with whom do workers have psychological contracts? Organizations do not hold psychological contracts (Rousseau, 1989) and neither do platforms. However, the interactions with the platform may be considered interactions with the organization and, as such, they may contribute to the formation and development of expectations. For instance, the digital platform organization encourages specific in-role and extra-role worker behaviors (Duggan et al., 2020; Kuhn & Maleki, 2017). For instance, Uber sends messages about improving customers' ratings, and Lyft asks drivers to greet their customers with a fist-bump (Kuhn & Maleki, 2017). Moreover, via the app, the platform organization can have a high degree of control of the worker–customer relationship experience, workers' income as well as flexibility, and autonomy (Kuhn & Maleki, 2017; Madan, Saluja, Jiang, & Choi, 2015). This control may nurture expectations from the workers. For instance, gig workers expect transparency and fairness in how the algorithm is managed (Aloisi, 2015) and they expect rewards for the excellence of their service (Aloisi, 2015; De Stefano, 2016; Ravenelle, 2019). Moreover, clear communication about the changes in the app is also requested by gig workers (Ravenelle, 2019). From the digital platform organization perspective, the expectations appear to be simple: availability, responsiveness, policy adherence, and excellent service (Aloisi, 2015; De Stefano, 2016; Ravenelle, 2019). However, as described above, the digital platform uses the app to control and reinforce workers' behaviors (Kuhn & Maleki, 2017) that are not part (at least in principle) of the work arrangement.

When discussing digitally enabled work arrangements, a bilateral perspective of the psychological contracts does not capture the complexity of this new employment relationship type, which involves multiple and distributed parties (Alcover et al., 2017; Griep et al., 2019; Knapp et al., 2020; Sherman & Morley, 2020). To illustrate this point, Sherman and Morley (2020) gave the example of Deliveroo (digital platform organization) in which the employment relationship includes not only the Deliveroo and the courier (worker), but also the restaurant and the customer. They then propose that the worker holds specific psychological contracts with each party which is aligned to the arguments put forth by Marks (2001) and Schalk and Rousseau (2001). Sherman and Morley (2020) also specify that there are obligations in each exchange relationship. On the one hand, the worker expects rewards, flexibility, and perks from the platform organization; efficiency, recognition, and accountability from the restaurant; and correct information, readiness to receive the delivery, fair evaluation, tipping, and patience from the customers. On the other hand, the platform organization expects the worker to be available, customer-focused, and respectful of the restaurant; the restaurant expects the worker to be punctual, accountable, patient, and careful; and the customer expects efficiency, no spills, and respectful of property from the worker (Sherman & Morley, 2020).

Table 7.1 Old, new, and emergent forms of psychological contract

	Old psychological contract	New psychological contract	Emergent forms of psychological contract
Employment relationship	Traditional long-term employment relationship	Flexible employment relationships. Some continuity is expected	In a form of work contract
Job insecurity	Secure Job for life	Insecure Short-term work	Increased insecurity Future work relationship is uncertain
Autonomy and responsibility	Compliance with authority Shared responsibility	More autonomy Possibility of (re) negotiation	Independent: “Work without a boss” Radical responsabilization of the worker
Career development and management	Organization responsibility Vertical pathway	Shared responsibility Focus on employability Boundaryless and protean careers	Uncertain, unclear, and multiple careers Individual’s responsibility Reputation
Physical workspace	Physical workplace	Possibility of telework, virtual, and remote work	Nonexistence of a workplace
Performance management and pay	Direct supervisor assesses performance Satisfactory performance leads to steady increases in pay	Performance may be assessed using a 360° appraisal methods (or different combinations) Pay based on performance	Pay based on the quantity of work. Performance ratings (by customers) may be part of “worker brand” and impact the volume of work
Social relationships	Formal	Interdependent work	Isolation, loneliness
Psychological contract basis	Relational	Transactional-balanced Possibility of multiple PC	Transactional Multiple and distributed

Source: author’s own work

Drawing upon ongoing discussions about digitally enabled work arrangement and its impact on the psychological contract, Table 7.1 summarizes the main differences between the old traditional psychological contract, the new psychological contract, and the emergent forms of psychological contracts.

7.7 Psychological Contract Breach

Employees monitor and assess the fulfillment of their psychological contracts. To do so, they calculate a ration between their contributions to the organization and the rewards from the organization (Morrison & Robinson, 1997). The result of this ratio between both parties’ contributions determines whether an employee psychological

contract has been fulfilled or breached. As such, the psychological contract refers to the employee's perception (cognition) concerning the degree to which the organization has failed to fulfill its promises or obligations (Robinson & Rousseau, 1994) and is "a subjective experience based not only (or necessarily) on the employer's actions or inactions but on an individual's perception of those actions or inactions within a particular social context" (p. 576). Most of the research on the psychological contract is focused on its breach and the subsequent outcomes and it is well known that psychological contract breach has been associated with deleterious outcomes for both employees and organizations (Coyle-Shapiro et al., 2019). In a recent review, Coyle-Shapiro et al. (2019) showed that psychological contract breach affects negatively not only the employment relationship but also the employee's health and relationships both inside and outside of the organization.

The norm of reciprocity (Gouldner, 1960) and social exchange theory (Blau, 1964) are the theories commonly used to explain the negative consequences of psychological contract breach (Coyle-Shapiro et al., 2019; Coyle-Shapiro & Shore, 2007; Shore & Tetrick, 1994). Psychological contract breach captures a perceived imbalance in the employment relationship and, according to these theoretical frameworks, an employee who perceives it would conclude that the organization is not giving what he/she deserves, and would reciprocate accordingly. Robinson et al.'s (1994) study has shown that the more the organization fails to comply with its obligations, the more the employee decreases the obligation to positively reciprocate. This is a clear illustration of the social exchange theory and norm of reciprocity in action. This reciprocation can be seen in a reduction of both in-role and extra-role performance levels (Costa & Neves, 2017a; Restubog, Bordia, & Tang, 2006), commitment (Ng, Feldman, & Lam, 2010; Rosen, Chang, Johnson, & Levy, 2009), or in an intensification of counterproductive behaviors (Costa & Neves, 2017b; Rosen & Levy, 2013; Turnley & Feldman, 1999; Zagenczyk et al., 2015). Meta-analytic findings (Zhao, Wayne, Glibkowski, & Bravo, 2007) and recent reviews (Coyle-Shapiro et al., 2019) show that psychological contract breach harms attitudes, emotions, and behaviors.

7.8 Old Breaches in the Novel and Emergent Forms of Psychological Contracts?

The content of the novel and emergent forms of psychological contract is different from its past forms but as Rousseau explained—in 1989—workers react to "unmet expectations of specific rewards or benefits, but also to more general beliefs about respect for persons, codes of conduct, and other patterns of behavior associated with relationships" (Rousseau, 1989, p. 129). Psychological contract breach is a highly subjective experience that is not necessarily linked to the actions or inactions of the other party (Robinson & Rousseau, 1994), which makes breaches in the psychological contract to be the norm rather than the exception (Conway & Briner, 2002;

Robinson et al., 1994). Hence, one can say that regardless of the content of their psychological contract, workers may experience breaches.

From a theoretical point of view, social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) can be applied to understand the new work arrangement, mainly because this type of employment also relies on an exchange between parties. However, questions about how reciprocity looks like in these settings may arise due to its distributed and multiple nature. Emergent forms of psychological contract involve different parties and each party plays a role in a given position with different resources (Baruch & Rousseau, 2019). Consequently, the maintenance and effectiveness of this type of work arrangement are dependent on each party fulfilling its obligations to each other (Sherman & Morley, 2020). A critical aspect of these multiple, distribute, and intertwined psychological contracts is that a breach of the psychological contract by one party can trigger subsequent breaches with the other parties (Wiechers, Coyle-Shapiro, Lub, & Ten Have, 2019).

Empirical studies exploring psychological contract breach in the digitally enabled work settings are still scarce. A study with 223 Didi drivers (ride-hailing platform in China) found that fulfillment of both transactional (income and profit) and relational (fairness, training, and support) aspects of psychological contract is associated with higher levels of performance (Liu, He, Jiang, Ji, & Zhai, 2020). However, some caution is advised when interpreting these results as the data collected are self-reported and cross-sectional. In a qualitative study, with workers from TaskRabbit and Kitchensurfing, Ravenelle (2019) found that workers perceived a violation of their psychological contract when: (1) the platform decided to change its pay structure without consulting them, and (2) realized that the platform did not feel any responsibility for the workers. These preliminary studies show that breaching the gig workers psychological contract may have negative consequences, such as undermining the trust necessary to the business (Ravenelle, 2019), especially when there is an established lack of trust in digital platform organizations and their algorithms (Yeomans, Shah, Mullainathan, & Kleinberg, 2019).

7.9 Future Research Implications, Limitations, and Suggestions

Technology has enabled new and complex forms of work arrangements which have implications for our understanding of the employment relationship in general and the psychological contracts in particular. Psychological contracts nature and structure as well as the impact of the psychological breach have been studied for more than 30 years, but the emergence of new forms of psychological contract brings new opportunities as well as challenges for researchers. The purpose of this chapter was to highlight the differences between the old and traditional, and the new as well as emergent forms of psychological contracts. Based on recent reviews, discussions,

and empirical research on the changing nature of work, digitally enabled work arrangements, and psychological contracts, it is possible to highlight three areas of future research: the content of the emergent psychological contract, the functioning of multiple and distributed psychological contracts, reciprocation process after psychological contract breach.

Regarding the content of emergent forms of psychological contracts, further research is warranted as the number of studies involving gig workers is scarce. Moreover, the few studies about gig workers' expectations and obligations bring more complexity into the relationship as they show that the assumption on the purely transactional property of these arrangements does not hold (Duggan et al., 2020). Accordingly, qualitative studies may provide additional insights about what gig workers expect from the employment relationship of such nature. An interesting aspect to be considered is how past experiences may shape pre-entry expectations and consequent psychological contract maintenance and effectiveness. Quantitative studies may also be useful to measure the extent to which gig workers have a transactional, relational, or balanced psychological contract.

Concerning the multiple and distributed nature of the emergent psychological contract, some guidance may be found in the conceptual work of Knapp et al. (2020) and Sherman and Morley (2020). The former generates propositions predicting the likelihood of a worker holding different psychological contracts with individuals, groups, or organizations. Moreover, they propose that dependence, accountability, and trust are key to the process. The latter suggests a new methodology to study the content of multi-party working relationships: the repertory grid technique.

Psychological contract breach prevails in the employment relationship (Robinson et al., 1994), and preliminary findings have shown that this is also true for gig workers (Ravenelle, 2019). More studies are needed to address what are the causes of psychological contract breach of these groups of workers. Future research should also try to understand how reciprocity operates in digitally enabled work arrangement. Research has proven that psychological contract breach leads to negative workers' reactions in attitudes and behaviors towards the organization (e.g., Zhao et al., 2007), but also towards other parties (Coyle-Shapiro et al., 2019). However, in a context in which the control exerted by the platform is too high (Kuhn & Maleki, 2017), the worker may not have "space" to reciprocate the perceived unfair treatment. In the digitally enabled arrangement, alterations in performance as a response to psychological contract breach may be immediately penalized in the customers' ratings as well as in the volume of work (De Stefano, 2016), which has a direct impact on the workers' income. Factors such as employability and independence may explain reactions to psychological contract breach in these work arrangements. In other words, if the worker performs the "gig" as a second job, he or she may be less willing to tolerate breaches.

Other avenues of research may consider exploring topics such as well-being and morale of gig workers (Wood, Graham, Lehdonvirta, & Hjorth, 2019), motivation in these precarious work arrangements (Jabagi, Croteau, Audebrand, & Marsan, 2019),

and the exploitative character of digitally platform organizations (Van Doorn, 2017; Wood et al., 2019).

This chapter is not without limitations. The most salient regards the inclusion criteria for the discussion: gig work involving an app as intermediary. As such, it excludes individuals who use platforms to sell goods or lease assets (e.g., Airbnb). A second limitation relates to the limited number of studies included in the psychological contract breach section. Empirical research are still insufficient to draw strong and final conclusions about how gig workers experience and react to breach.

7.10 Implications for Practice

Psychological contracts are at the core of the employment relationship, and they have been used to explain its functioning (Rousseau, 1995). One can hence argue that the changing nature of psychological contracts is rooted in the changing nature of work. Advancements in technology are one of the main reasons for these changes by allowing the creation of new work arrangements—the gig work—in which digital tools are critical to its functioning. Naturally, it poses new challenges for individuals, for organizations, and for how organizations manage individuals.

First, digital platform organizations need to clarify the worker status as well as what is expected from each party in the work arrangement. It seems contradictory claiming that gig workers are not employees and, at the same time, exert high levels of control and encourage them to perform extra-role behaviors (Duggan et al., 2020; Kuhn & Maleki, 2017). Moreover, it is also true that the jobs are not as flexible as advertised and penalties may be applied to those who do not perform according to the app requests (i.e., Uber drives are penalized if they decide not to work during peak times and when they reject jobs). Accordingly, organizations need to clearly define expectations and rewards.

Second, deeper knowledge about the workers may help to address their concerns and foster performance. Moreover, the emergent forms of psychological contract are likely to differ between digital platform organizations, which means that the extent to which an aspect is important for a group of workers may be different from other groups. As such, it is important for each organization to monitor their workers' psychological contracts, especially when there is preliminary evidence showing that the workers want more than remuneration and flexibility (Meijerink & Keegan, 2019). An option for organizations is to survey their employees regarding their expectations and structure their rewards systems according to what their workers expect.

Third, the platform organization is more than just the link between the work and the customer (Duggan et al., 2020) and it does manage a large invisible workforce (Prassl, 2018). Algorithms do perform human resource management like practices (Duggan et al., 2020) such as manage the working relationship, assign work, performance management (Meijerink & Keegan, 2019), and reward management. However, the human support component is removed, which may have a negative

impact on how the organization is perceived and undermine trust and performance. Organizations need to take these facts into account and reconsider their role as an employer. When possible, organizations should have a “face,” a manager, who would be responsible for a group of employees, making a bridge between the worker and the organization and promoting organizational values and culture.

7.11 Conclusion

This chapter reflected on the existing literature about the changing nature of work and psychological contract to explain how they are evolving together. Understanding technological changes in the labor market, new work arrangements that rely on digital platforms, and how this influences the content of the psychological contract is critical for both research and practice. This chapter provides relevant insights: (1) the novel and emergent forms of psychological contract are indeed more complex than what it seemed at a first sight, (2) gig workers also have expectations to be fulfilled and experience breaches as traditional employees. Accordingly, more research is warranted to fully understand gig workers’ work experiences. Organizations should take these insights into account when planning how to manage their workforce.

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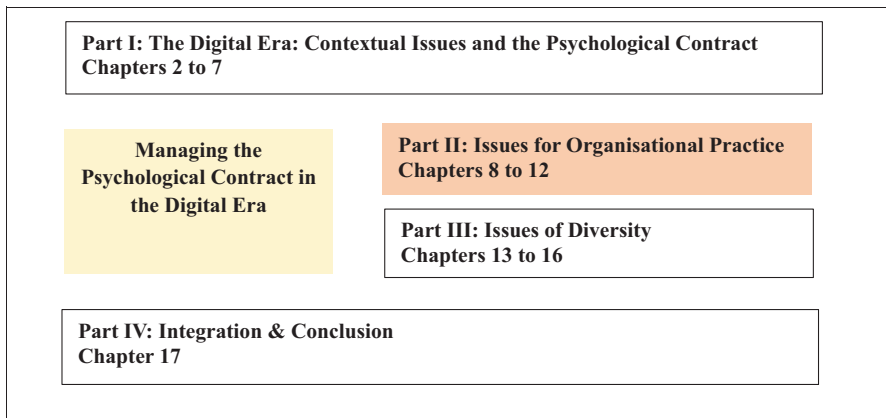
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Part II

Managing the Psychological Contract in the Digital Era: Issues for Organisational Practice

Conceptual Overview of the Book Volume



Overview

Reader (Chap. 8: *Psychological Contracts in the Era of HRM 4.0*) makes a profound case for the human resource management (HRM) function in managing the digital era relational psychological contract. The author examines how digital practices of human resource management (HRM 4.0) affect psychological contracts. The chapter highlights the establishment of social interaction around HRM 4.0 issues to ensure trust and transparency. The author reviews a number of HRM 4.0 practices (for example, recruiting and selection, performance management, career management, talent management, and training). Noteworthy is the chapter's narrative on the attributes and demands of HRM 4.0, and the role of supervisors and HR professionals as organisational contract partners.

The chapter by **Holtom, Sekiguchi, Kiazad and Qin** (Chap. 9: *Job Embeddedness and the Psychological Contract of the Future*) goes into the link between job embeddedness and the psychological contract. The authors rightfully position job embeddedness as an important construct to consider in managing perceptions of psychological contract breach and the costly consequence of voluntary employee turnover. The chapter outlines antecedents and consequences of the psychological contract and job embeddedness. Noteworthy is the authors' review of research on the constructs and their suggestions for future research questions. The authors make a convincing case for investigating job embeddedness as a buffering mechanism for managing employees' reactions to psychological contract breach. The chapter provides insightful suggestions for organisational practices that consider the link between job embeddedness and the digital era psychological contract.

Bester and Stander (Chap. 10: *Strengthening the Psychological Contract Through Talent-Enabled Assessment Journeys: An Employee-Experience Guide*) proceed with enhancing our insight into digitally enabled talent assessment protocols that strengthen the modern psychological contract between employers and employees. The authors reflect on various practices that influence employees' psychological contract experiences, including realistic job previews, cognitive ability assessments, internet activity, assessment and development centres, personality questionnaires, virtual reality assessments, gamified assessments, situational judgement tests, and performance appraisal assessments. The chapter outlines practical guidelines for conducting talent assessment in a manner that not only supports and expands the psychological contract but also ensures fair talent management and research projects.

Dhliwayo (Chap. 11: *Pre-emptive Management of the Psychological Contract Through Personnel Selection in the Digital Era*) adds a further elaboration on personnel selection in the management of the digital era psychological contract. The author highlights personnel selection as an essential pre-entry socialisation practice that contributes to the formation of the psychological contract. The chapter narrative extends psychological contract theory by highlighting ways in which the contract can be pre-emptively managed at the selection stage to improve employee and organisational performance.

In Chap. 12 (*Total Rewards and the Potential Shift in Psychological Contract Perceptions in the Digital Era*), **Bussin** shares his expertise on the concept of total rewards. The author takes a novel approach by elucidating the science behind and manifestation of the psychological contract across five stages: employee attraction, recruitment and selection, onboarding, retention and organisational exit or stay. The author offers a fresh perspective on the concept of total rewards in the digital era and presents comprehensive guidelines for organisational practices that strengthen the psychological contract experiences of workers.

Chapter 8

Psychological Contracts in the Era of HRM 4.0



Sabine Raeder

8.1 Introduction

Relational psychological contracts in HRM 4.0 are a contradiction in terms. HRM 4.0, the digitalised form of Human Resource Management (HRM), focuses on numbers, data and information (Bissola & Imperatori, 2019), whereas relational psychological contracts require interaction and subjectivity for their development (Rousseau, 1989). HRM 4.0 consists of smart and pervasive applications that autonomously interact with one another to produce HRM activities (Strohmeier, 2018). In its analogue form, HRM has been identified as an important context for psychological contracts (Raeder, Knorr, & Hilb, 2012; Uen, Chien, & Yen, 2009). Many HRM practices affect the contents of the psychological contract and its fulfilment (Bal, Kooij, & De Jong, 2013; Sonnenberg, van Zijderveld, & Brinks, 2014). Any new development in HRM is thus expected to influence psychological contracts in the organisation. The accelerating digitalisation in HRM has such potential implications.

Relational psychological contracts develop in long-term employment relationships, are based on loyalty and can be adapted when the context of work changes (Rousseau, 1990). HRM 4.0 has not yet been linked to psychological contracts because aspects of technology and efficiency currently receive more attention (Bondarouk, Parry, & Furtmueller, 2017; Cascio & Montealegre, 2016). In particular, relational psychological contracts may suffer from such a technological view of the employment relationship.

HRM 4.0 is still in its infancy, with the majority of applications to be produced in the near future. It is thus too early to fully explore or examine the effect of HRM 4.0 on psychological contracts. In this chapter, typical attributes of digital forms of HRM, that is, standardisation and reduced social interaction, serve to identify

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potential consequences for psychological contracts. The demands of ensuring transparency and building trust are derived from the two attributes. The attributes and demands help illuminate the potential consequences for psychological contracts and can also be considered for future applications.

This chapter contributes to extant research through discussing potential consequences of current developments in smart and pervasive practices of HRM. This paper notes the connection between HRM 4.0 and psychological contracts when HRM 4.0 is not yet fully implemented to draw researchers' attention to future benefits or problems. Some of these benefits or problems should be anticipated when smart and pervasive systems are developed to improve consequences of electronic systems on employment relationships. Attributes of HRM 4.0 and demands to be fulfilled by HRM 4.0 provide criteria that can also be used to evaluate future applications and their effects on psychological contracts. Considering potential consequences before HRM 4.0 is implemented allows organisations to plan for future developments and prevent adverse effects on psychological contracts.

8.2 Chapter Objective

This chapter discusses potential effects of HRM 4.0 on psychological contracts. First, the two attributes of HRM 4.0, standardisation and reduced social interaction, are identified. The demands of trust and transparency that HRM 4.0 is required to fulfil are derived. For each of the attributes and demands, consequences for psychological contracts are reviewed. Second, digital forms of HRM practices are assessed against the background of attributes and demands, and consequences for psychological contracts are explored.

8.3 HRM 4.0 and Psychological Contracts

The term HRM 4.0 is derived from Industry 4.0, where machines form the Internet of Things and autonomously collect and process data (Strohmeier, 2018). Applications of HRM 4.0 are similarly connected to the Internet of Things; they analyse the data that they generate, update information continuously and produce, whenever possible, suggestions for future behaviour. An example of such an application in HRM 4.0 is the autonomous analysis of data on the work performance of an employee that triggers suggestions for training when performance goals have not been met (Richter, Heinrich, Stocker, & Steinhueser, 2017).

HRM practices have been studied as one of the major contextual antecedents of psychological contracts because they contribute to the form and negotiation of psychological contracts. Specifically, HRM practices were shown to positively affect the fulfilment of the psychological contract, and fulfilled psychological contracts help organisations perform (Katou, 2013; Latorre, Guest, Ramos, & Gracia, 2016;

Raeder et al., 2012). HRM practices have been found to support a relational psychological contract and inhibit a transactional psychological contract (Bal et al., 2013; Chien & Lin, 2013; Uen et al., 2009). This effect occurs when the HRM practices aim to foster the commitment of employees and support the development of employee skills and careers. Such commitment-based and developmental HRM systems demonstrate to employees that the organisation is investing in the employment relationship. The organisation's interest in long-term employment relationships is compensated by a broader scope and greater flexibility of the psychological contract that allows for commitment to the organisation and for extra-role behaviour (McLean Parks, Kidder, & Gallagher, 1998).

The distinction between relational and transactional psychological contracts refers to the most frequently used definition of psychological contract contents (Rousseau, 1989). Relational contracts focus on socio-emotional aspects and on employee development in a long-term employment relationship, whereas transactional contracts are in their extreme form reduced to the exchange of work time for salary. In contrast, the fulfilment or breach of the psychological contract indicates whether obligations and promises in the employment relationship have been met (Robinson, 1996). Relational contracts are valued in the organisation because they are beneficial for important employee outcomes, such as turnover intention, extra-role behaviour, performance and commitment (De Cuyper & De Witte, 2006; Millward & Hopkins, 1998).

When HRM 4.0 is newly introduced in an organisation, employees may perceive a breach of the psychological contract because previous promises of the organisation are not being met (Bissola & Imperatori, 2014). Changes to the terms of HRM practices are experienced similar to a form of organisational change that leads to a perceived breach (Tomprou, Nikolaou, & Vakola, 2012). When HRM 4.0 is operational, however, it is more relevant to study how it affects the contents of the psychological contract and to compare digital and analogue practices of HRM and their relationship to psychological contracts. In line with McLean Parks et al. (1998) and as explained below, it is expected that systems of HRM 4.0 lack attributes that motivate employees to perceive their psychological contracts as being relational.

8.4 HR Staff as an Organisational Contract Partner

The supervisor has been considered the closest representative of the organisation in the psychological contract (Tekleab & Taylor, 2003). The majority of direct interactions that refer to the employment relationship and its terms usually occur between the employee and the supervisor. Many conditions, however, are defined through HRM practices that are implemented by the HR department and communicated by HR staff, such as options for individuals' careers, performance management routines, selection procedures and training opportunities. Particularly in larger organisations, the HR department represents the employer psychological contract in

several aspects, but the relationship between the employee and HR staff is less individualised than the relationship with the supervisor (Tekleab & Taylor, 2003).

Who acts as an organisational psychological contract partner also depends on who carries out HRM functions in HRM 4.0 (Intindola, Weisinger, Benson, & Pittz, 2017). Some researchers advocate that automatised processes transfer more responsibility to the line manager (Imperatori, Bissola, Butera, & Bodega, 2019). If such a devolution of HRM responsibilities from the HR department to line managers occurs, the organisational psychological contract is best represented by the supervisor. In either case, HRM aspects of the employer psychological contract are considered and represented by HR staff directly or by the supervisor. In the context of HRM 4.0, the devolution of HRM responsibilities might even be advantageous for psychological contracts. The social dimension and opportunities to discuss contents of the psychological contract are largely removed in electronic forms of HRM. All forms of interaction (digital and face-to-face) are still practised with the supervisor, thus allowing for exploration of the psychological contract contents.

8.5 Attributes of HRM 4.0 and Demands

Digitalisation affects how HRM practices are defined and delivered because it promotes the standardisation of processes and reduces the necessity for social interaction in the HRM function. Standardised processes, if implemented correctly, increase the consistency of decisions across occasions and time (e.g. in recruitment, Wiblen, 2016). Consistency is a requirement for fairness in the distribution of outcomes and in procedures. Standardisation and reduced social interaction remove individuality when each practice is implemented. Standardised communication and information do not permit many different and individual options.

Replacing analogue HRM with HRM 4.0 creates a demand for organisations to actively ensure transparency and foster trust (Bissola & Imperatori, 2014; Cascio & Montealegre, 2016). The use of big data requires transparency and protection of privacy, whereas the shift to interaction mediated through technology calls for other sources for trust. As argued below, HRM 4.0 initiates a process of shaping psychological contracts that are standardised for different groups of employees, leaving less space for relational contents and socio-emotional elements than analogue forms of HRM.

8.5.1 *Standardisation, Consistency and Fairness*

The standardisation of processes in digital forms of HRM ensures that groups of employees receive the same information and services (Ruël, Bondarouk, & Looise, 2004). Decisions are based on the same algorithms for all groups of current or future employees, such as when staff is selected. Standardised processes are free of bias

and subjectivity that could be caused by HR staff or managers in an organisation. They allow for consistent decisions and ensure that rules are applied in the same manner across occasions and time (Bondarouk, Harms, & Lepak, 2017; Wiblen, 2016).

Electronic systems guarantee fairness through consistency as long as fair procedures have been implemented in algorithms that prevent any disadvantages for current or future employees (e.g. disadvantages for older applicants or those with foreign names in recruiting). Aspects of fairness in systems of HRM 4.0 refer to distributive and procedural justice. Distributive justice means that outcomes of decisions are distributed in a consistent way either in relation to employees' input or in relation to peers (Colquitt, 2001). Procedural justice refers to whether processes that lead to decisions are consistent, unbiased and accurate. Research has shown a positive relationship between procedural justice and the use of electronic HRM practices that cover communication, development and performance management (Bissola & Imperatori, 2014).

Standardisation reduces HRM practices to aspects that are measurable, countable and identical for groups of employees. Less tangible issues are excluded (e.g. commitment, engagement, innovative behaviour) because they cannot be captured electronically (Bondarouk & Brewster, 2016). Relational psychological contracts refer to intangible aspects in employment relationships, and the focus on tangibles thus impedes the development of relational psychological contracts.

Standardisation of processes and information provides the opportunity to communicate identical information on the organisation's psychological contract to different groups of employees. It ensures that the same information and promises are presented and thus that any psychological contract is based on such explicit information. Standardised information can reduce the variety of interpretations that employees can develop and the risk of psychological contract breach that occurs because perceived promises have not been fulfilled.

Distributive and procedural fairness are positively correlated with relational psychological contracts (Chen, 2010; Cohen, 2013; O'Donohue, Donohue, & Grimmer, 2007). Fairness can thus be considered a prerequisite for relational contracts that digital systems of HRM fulfil without effort. Biases might, however, be present in algorithms of artificial intelligence (Lambrecht & Tucker, 2019; Woods, Ahmed, Nikolaou, Costa, & Anderson, 2020). Biases regarding gender, age or nationality, for example, mirror biases in society, including in analogue HRM practices.

8.5.2 Reduced Social Interaction and Individuality

Digitalisation entails replacing social interaction with HR staff with electronic systems. The term social interaction refers to any type of communication that is not formalised and standardised through electronic systems. Accordingly, social interaction is not restricted to face-to-face communication but can also include exchanges through email or social media in an individualised form.

Digital applications of HRM can respect and define many different subgroups of employees to preserve a high degree of diversity. Individual aspects, however, will not be fully acknowledged in standardised processes where options are defined in advance. It is thus more difficult to approach small target groups of a few employees who are dispersed in the organisation (e.g. key employees who should be retained). HRM 4.0 also reduces the individuality of employers because different employers use the same systems. Hence, employers are more interchangeable as potential contract partners.

Digitalisation replaces social interaction related to topics that are important for refining one's psychological contract. It also reduces communication and negotiation around psychological contracts. This removes opportunities for employees to explore and probe their psychological contract in interaction. HR staff and employees exchange less information and fewer cues that an employee could incorporate into a relational psychological contract. Reduced social interaction affects socio-emotional aspects of the psychological contract, particularly in relational psychological contracts (Deas, 2019).

8.5.3 Trust and Transparency

Smart and pervasive systems collect data autonomously and continuously and build a cloud of big data (Hecklau, Galeitzke, Flachs, & Kohl, 2016). To maintain employees' trust, it is important to define and transparently inform what data are collected for what purpose and how these data are used and stored. Accumulating big data without clear rules that protect the privacy of those who provide data inhibits perceptions of trust and fairness. This is particularly relevant if sensitive data are generated through wearables, that is, sensors in clothes or attached to the body (Cascio & Montealegre, 2016; Hecklau et al., 2016) or when data are collected from social media, such as for the purpose of recruiting new employees (Woods et al., 2020).

Social interactions are critical for building trust, and in their absence, trust cannot be delegated to digital systems (Torres & Mejia, 2017). Electronic HRM practices that aim to manage the relationship with employees through communication, development and performance management were found to encourage a perception of trust, especially because they are considered fair (Bissola & Imperatori, 2014). Trust is particularly crucial when systems collect data autonomously and in a pervasive manner. The delegation of responsibility for HRM to supervisors in a process of devolution is advantageous to building trust because HRM is then represented through a human being.

Electronic systems in HRM also provide advantages because they allow the employer to inform employees transparently and abundantly about their obligations, promises and inducements (van Niekerk, Chrysler-Fox, & van Wyk, 2019). Such information is rather standardised and adapted to suit to the needs of groups of employees. Individual concerns are, however, not considered.

Trust is inherent in relational psychological contracts (McLean Parks et al., 1998), and it is thus important that trust is created to ease the development of relational contracts. Empirical research has shown a relationship between trust and psychological contract breach, with higher trust reducing the likelihood that breach of the psychological contract is perceived (Robinson, 1996). Organisations thus need to understand the importance of trust and ensure that trust is built and maintained through real human beings. Any digital HRM services have to be complemented by real social interaction.

8.6 Practices in HRM 4.0 and Relational Psychological Contracts

The term HRM 4.0 was derived from Industry 4.0 less than a decade ago. Earlier, electronic applications of HRM that were neither smart nor pervasive were named, for example, e-HRM or HR Information Systems (Bondarouk, Parry, & Furtmueller, 2017; Marler & Fisher, 2013). Electronic applications (e.g. online recruitment) are currently more widespread, but not all of them collect and process information autonomously. Concerning their effect on the psychological contract, it is reasonable to consider applications of both HRM 4.0 and e-HRM because they can affect psychological contracts in a similar way.

In its current form, HRM 4.0 has not yet exhausted all potential options. As shown in a survey of experts in HRM, many smart options are not yet widely used (Strohmeier, 2018). Examples of rarely implemented smart practices are recruiting requirements determined by smart things or employee objectives determined by smart things.

Each HRM practice and its digital counterpart convey messages about the employment relationship that can be interpreted in terms of the psychological contract. In the following, major HRM practices and the potential effect of their smart form on psychological contracts are discussed. Attributes and demands introduced above serve to guide the evaluation of possible consequences.

8.6.1 *Recruiting and Selection*

Recruiting aims to find a pool of applicants with the demanded qualification for a certain position, whereas selection seeks to choose the best-suited applicant through valid and reliable methods. E-recruiting in the form of interactive career websites and announcing vacancies on social media is quite common, as is administering selection tests online (Arjomandy, 2016; Stone, Lukaszewski, Stone-Romero, & Johnson, 2013). Career websites and social media are used with the goal of enhancing employer branding and organisational reputation. Interactive career websites collect applications in a standardised form, easily allowing for automated assessment of each application (Holm, 2012). Newer developments

utilise artificial intelligence to search and approach the pool of applicants through social media, conduct the first screening of applications or evaluate video interviews recorded by applicants (Woods et al., 2020).

Recruiting and selection through artificial intelligence are consistent and unbiased as long as the algorithms used are unbiased (Woods et al., 2020). Systems of e-recruiting ensure that information about the employer is presented in a standardised way and require applicants to submit their applications in a standardised way, thus ensuring equal and fair treatment of applicants. Digital applications, however, might not select qualified applicants whose competency profile does not completely match the profile defined for the position. HR staff or supervisors, in contrast, could easily detect value in a variety of slightly diverging profiles.

Several concerns regarding the full automation of recruiting and selection have been raised. An argument against the full automation of selection is the fact that it does not capture social interaction and that social skills thus cannot be assessed in settings of interaction (Strohmeier, 2018). It is also challenging to develop trust in the organisation when the largest portion of the interaction between applicant and organisation is managed through electronic systems (Torres & Mejia, 2017). Privacy concerns have been voiced because the potential employer collects private data, such as when accessing social media accounts or requesting pre-recorded video interviews (Stone et al., 2013; Woods et al., 2020). It is thus important for the organisation to protect applicants' privacy and ensure their trust in the organisation.

Research has shown that organisations with dedicated career websites present more information on psychological contracts on the career websites than organisations without career websites (van Niekerk et al., 2019). Organisations without a dedicated career website provide information on psychological contracts on their websites, but this information is less detailed. While it is beneficial for organisations to explicitly inform applicants about their psychological contract, a high degree of automation during recruiting and selection reduces opportunities for interaction. If recruiting and selection are fully automated, there are fewer opportunities for a first negotiation of terms of the psychological contract. Such negotiations are particularly useful for intangible aspects that are less likely to be listed on career websites.

8.6.2 Performance Management

Performance management entails setting individual goals for employee performance, planning and monitoring the accomplishment of these goals and providing regular feedback on an employee's performance. Instead of monitoring actual performance, systems in HRM 4.0 allow employee performance to be measured through smart things (e.g. sensors in equipment) or wearables when the employee is performing work tasks (Strohmeier, 2018). Such performance data can be used to assess an employee's performance throughout the year, determine compensation or identify talent in the organisation. Continuously monitoring how employees perform their work tasks allows smart systems to immediately suggest training when

training needs are detected (Richter et al., 2017). They can also prompt breaks when stress levels are elevated or warn employees in dangerous situations (e.g. a heat detector in firefighters' gear).

This pervasive measurement of employees' performance is one of the most controversial issues in HRM 4.0 (Strohmeier, 2018). Particularly wearables, that is, devices that employees carry on their body or in their clothes, can be perceived as complete surveillance. Collecting big data to measure performance might cause problems with transparency and trust when employees do not know what information is collected, when it is collected, for how long it is stored and for what purpose it is used (Strohmeier, 2018). It is thus important that organisations establish trust through other measures of communication and social interaction and that the use of big data is transparent and rule based.

The ubiquitous measurement of performance through standardised and objective indicators shifts the focus to tangible forms of performance and ignores intangible forms, such as organisational citizenship behaviour, commitment or turnover intention (Bondarouk & Brewster, 2016). The lack of more subjective evaluation of an employee's performance hinders fair assessment of performance because many relevant employee contributions are ignored. The emphasis on objective performance accentuates the economic exchange and thus a transactional psychological contract. Intangible forms of performance, inherent in relational psychological contracts (Millward & Hopkins, 1998), are disregarded.

8.6.3 Career Management

Career management integrates approaches that support employees in planning and developing their further career. In HRM 4.0, artificial intelligence suggests career development plans based on employee competencies and prior training (Kohl & Swartz, 2019). More common than fully automated systems are career management platforms that register employees' competency profiles, inform them about demanded competencies for particular positions and link learning and training opportunities to both (Cascio & Montealegre, 2016). Such platforms provide employees with necessary information for their career self-management. Both types of systems support a structured and transparent approach to career management. They make potential career paths visible and allow organisations to strengthen the internal labour market (Ruël et al., 2004).

Systems of career self-management encourage employees to plan their career on their own based on information that the employer provides. Career self-management transfers the responsibility for career development from the organisation to the individual. Such systems thus motivate employees to develop their employability and, subsequently, to weaken their relationship with the employer. To maintain a relational contract, more effort is required on behalf of the organisation. The organisation needs to express its commitment and help employees plan their careers with a view to the organisation.

8.6.4 Talent Management

Talent management aims to develop the career of employees with high potential and ensure succession planning in the organisation. In a fully automated option, high potentials are selected into the talent pool through the smart measurement of employee performance (Strohmeier, 2018). Electronic systems that are not fully automated still provide the advantage that talent is selected in a formalised process and with standardised criteria (Wiblen, 2016).

As discussed above, intangible forms of performance are disregarded when relying on automatically collected indicators. Criteria for defining talent might thus be perceived as unfair when employees are excluded who contribute strongly to the performance of the organisation but produce low objective performance measures.

Research has shown that employees identified as talent have more relational contracts than employees who are not in the talent pool (Seopa, Woecke, & Leeds, 2015). If organisations use an exclusive definition of talent with a small percentage of employees invited into the talent pool, it is more likely that the psychological contract will be perceived as fulfilled (Sonnenberg et al., 2014). This difference in psychological contracts of talent and non-talent most likely persists when talent management goes digital.

8.6.5 Training

HRM 4.0 allows assessing training demands through smart things (e.g. sensors, wearables), suggesting corresponding forms of skill development and providing facilities for training. For example, the machinery in a workplace continuously registers information to predict potential problems in the production line (Richter et al., 2017). If problems occur, the system suggests options to help the worker solve these problems. This provides an opportunity for the worker to learn based on the data that have been continuously collected. It further enables the worker to avoid and solve problems more efficiently in the future. Fully automated learning facilities, so-called learnstruments, guide employees through all steps of the learning process in a realistic environment (Menn et al., 2018).

In addition to smart forms of training, many digital options exist. Learning can be linked to systems of knowledge management. An electronic knowledge base that describes all work tasks and processes allows employees to search for solutions when problems occur in a production process (Richter et al., 2017). Training can be organised in virtual learning environments that participants access through an avatar. Such virtual learning environments also permit the training of social skills and the exchange of experiences. Social media can be used for training purposes. Digitalisation poses new demands on employees' skills and competencies that can be met with such digital forms of learning.

Training linked to smart things is focused on a deficit model of the worker that suggests training in missing or underdeveloped competencies. Comparably little attention is paid to competencies that allow employees to grow, broaden their social or leadership skills or learn from others. Despite providing an attractive learning environment, all forms of electronic learning lack many cues that occur in real-life interaction. Although several of the digital training options include social skills, social interaction can only be experienced to a limited degree.

Training was found to be related to the fulfilment of the relational psychological contract (Fontinha, Chambel, & De Cuyper, 2014). It is likely that this relationship also holds for digital forms of training despite their shortcomings regarding social interaction.

8.6.6 *Autonomy*

Autonomy refers to flexibility and control that employees are granted in their work tasks. In HRM 4.0, employees can be enabled to fulfil their work tasks with a high degree of autonomy through the support of an information and communication network that can be accessed through mobile devices (Richter et al., 2017). At a highly flexible production site, such a network allows employees to inform colleagues about their current work piece and the parts they require to complete it. Employees can retrieve information about the ongoing production from the network and send their demands to colleagues. Employees coordinate autonomously relying on information of the production site and assume responsibility for finalising their work piece. The flexibility of workers and of the production system is protected through the use of the network. In a smart system, information provided by the employees can be complemented by information that is autonomously collected through sensors (Hannola, Richter, Richter, & Stocker, 2018).

Such systems provide comparably complete and easily accessible information regarding the production process (Richter et al., 2017). They allow employees to cooperate more smoothly, as if cooperation is not digitally enabled. They rely on social interaction in a digital form and allow for support and loyalty to develop in this interaction. In essence, such systems provide a context in which a relational psychological contract can grow.

8.6.7 *Communication and Participation*

Organisational communication serves to inform employees about recent and future developments and allow employees to voice their views. In addition to widely used web-based communication channels (e.g. intranet), organisations rely on social media as a means for internal communication and cooperation (Arjomandy, 2016; Nisar, Prabhakar, & Strakova, 2019). Such social media channels can be designed as internal communication tools or admit external members (e.g. former employees, customers).

With the use of social media, communication and participation can access the world of HRM 4.0 more smoothly than many other HRM practices. Information can easily be exchanged through social media, but it cannot fully replace real-life social interaction. If an organisation does not exclusively rely on electronic forms of communication, social media can well create the bond between the organisation and the employee that is needed for relational psychological contracts.

8.7 Discussion

Digitalisation in HRM 4.0 introduces many options for automating processes in organisations, but its development has mainly focused on technological feasibility and economic efficiency. Because practices of HRM 4.0 are not yet widely implemented, the analysis of its consequences for psychological contracts can only rely on theoretical arguments. For this purpose, two attributes of HRM 4.0 (standardisation and reduced social interaction) and two demands to be fulfilled by HRM 4.0 (transparency and trust) were identified.

The analysis has shown that the shift to a mainly automated HRM could produce negative effects on the employment relationship. The two attributes of HRM 4.0 (standardisation and reduced social interaction) that were selected for this theoretical analysis help assess consequences for psychological contracts. For some practices of HRM 4.0, standardisation ensures consistent and fair decisions (e.g. in recruiting, selection). For others, standardisation limits the range and quality of information that decisions rely on and emphasises economic aspects of the exchange (e.g. performance, career and talent management). Only for autonomy and communication does standardised information provide a suitable basis. For some practices, the lack of social interaction hinders the development of relational aspects in the psychological contract (e.g. recruiting, selection, performance and career management). Other practices (e.g. communication and participation, autonomy) entail social interaction, such as through social media, that allows employees to develop loyalty and commitment in line with a relational psychological contract.

The two demands posed on HRM 4.0 (transparency and trust) aim to prevent potential problems. Some practices require ensuring transparency when big data and artificial intelligence are used (e.g. recruiting, selection, performance management) and that trust is encouraged when social interaction is replaced with digital systems (e.g., recruiting, selection, performance management). Supervisors are called on to foster trust in the presence of practices of HRM 4.0.

The overall impression created through this analysis is that large parts of HRM 4.0, except for practices to ensure autonomy and communication, challenge the development of a relational psychological contract. The analysis indicates a potential shift to more transactional psychological contracts because they better harmonise with digitalisation in HRM. During the economic downturn at the end of last century, a new psychological contract was suggested, where job security was exchanged for employability (Cavanaugh & Noe, 1999; Turnley & Feldman, 1998).

It is likely that fewer long-term employment relationships with relational psychological contracts occur now than at the end of the last century. Relational psychological contracts have not been fully replaced by new or transactional psychological contracts, and job security has not yet ceased to exist. The expected change in psychological contracts became a gradual shift instead of a complete turnaround. In a similar vein, HRM 4.0 is expected to prompt another gradual shift in psychological contracts in the direction of more transactional psychological contracts and a greater emphasis on employability. Socio-emotional aspects of psychological contracts will most likely suffer in smart HRM.

Different speeds of development can be expected for organisations with different types of jobs. HRM 4.0 will more likely be implemented in technical jobs (e.g. in production) or in jobs that can be fully digitalised (e.g. financial services) but not in jobs with a low degree of digitalisation (e.g. health care). In jobs with a high degree of digitalisation, smart HRM can be aligned with the work infrastructure, whereas this is not an option in jobs with a low degree of digitalisation. A gradual shift to transactional psychological contracts will then proceed more quickly in jobs with a high degree of digitalisation.

8.7.1 Limitations and Future Research

Some organisations have introduced applications of HRM 4.0, but most have not even tested any such application. It is thus too early to empirically examine consequences of HRM 4.0 on psychological contracts. No empirical research substantiating the assumptions has yet been published. It is also uncertain how quickly the introduction of HRM 4.0 is proceeding. This will depend not only on technological feasibility and economic concerns but also on the acceptance of digital applications of HRM among managers and employees. More time is needed to empirically investigate the effects of HRM 4.0 on psychological contracts.

Not all the hypothesised effects of HRM 4.0 are negative for relational psychological contracts. Some practices enhance consistency and fairness, some simplify communication and collaboration and others invite employees into virtual learning environments. Any future analysis must include positive and negative aspects of HRM 4.0.

When empirically investigating the effect of HRM 4.0 on psychological contracts, it is important to also include employees' perception and evaluation of HRM 4.0. Some of the positive aspects, such as engaging virtual worlds in training or communication through social media, might cause adverse effects. Some of the negative aspects, such as collecting performance measures through wearables, might be seen as beneficial. Any such analysis of effects of HRM 4.0 should thus first specify advantages and disadvantages of the particular practices. Costs and benefits for the organisation should also be considered.

Future analysis of psychological contracts should also pay attention to the wider context of the labour market. A more transactional psychological contract or more focus on employability leads employees to change jobs more often if the labour

market allows. Shorter tenure with one employer can be motivated through attractive jobs on the labour market or periods of recession. Such factors should be taken into account when studying transactional and relational psychological contracts.

8.7.2 Implications for Organisational Practice

Implementing HRM 4.0 poses high technological demands on organisations and might not produce the expected economic value. Many organisations have so far focused on the two aspects of technological feasibility and economic efficiency. How HRM 4.0 affects communication, cooperation and employment relationships in organisations has not yet been of major interest. HRM 4.0 might, however, influence the organisation as a social system far beyond technological and HRM issues. Any move to HRM 4.0 should thus be carefully planned, particularly considering all potential consequences unrelated to technology and HRM.

Organisations should complement the shift to digital practices with measures to maintain social interaction and respect employees' individuality. Opportunities should be created for employees to discuss and explore the contents of their psychological contract. Organisations should communicate how they plan to maintain transparency amidst the use of big data and to support trust when introducing new systems. When HRM goes digital, the supervisor remains the only important organisational contract partner. Organisations have to be aware of this and should strengthen the role of the supervisor to represent all aspects of the organisational psychological contract.

When introducing practices of HRM 4.0, organisations should consciously take advantage of the strengths of electronic systems that support communication and coordination with and between employees. Communication systems should be used to provide abundant and consistent information about the psychological contract that is offered and expected in the organisation. Such information can, for example, be conveyed through career websites. Communication systems should further support employees in coordinating and planning their work autonomously.

It is crucial to prevent disadvantages to certain employees from the use of practices of HRM 4.0. Organisations should thus ensure that systems are fair and do not discriminate against particular groups of employees or applicants (e.g. older employees or those with foreign names). Fairness can be attained, for example, through inspecting the algorithms of artificial intelligence that are underlying decision making. If doubts occur because principles of fairness are compromised, decisions should be reconsidered with the goal of reaching an overall fair process of decision making. When assessing employees' performance, intangible forms of performance, such as organisational citizenship behaviour, should also be considered. Career self-management systems might motivate employees to plan to continue their career outside the organisation. Such adverse effects should be prevented through actively retaining key employees. To preserve social aspects of training contents and goals, smart or electronic forms of training should be complemented with real-life interaction.

Finally, these recommendations aim to ensure that organisations maintain relational psychological contracts because they support aspects of performance of employees and organisations.

8.8 Conclusion

Practices of HRM 4.0 will be continuously implemented in the coming years. While electronic forms of HRM facilitate communication with and cooperation between employees, they are also criticised for reducing social interaction and neglecting intangible aspects in the employment relationship. Through the increasing use of electronic HRM, the supervisor will remain the only partner to represent the organisational psychological contract. It will thus be important that each supervisor consciously develops relational psychological contracts with employees in addition to ensuring trust and transparency in the use of electronic systems.

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Chapter 9

Job Embeddedness and the Psychological Contract of the Future



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9.1 Introduction

In the first 12 years of the Glassdoor Employees' Choice awards (2009–2020), the management consulting firm Bain & Company has finished in first or second place nearly every year and never lower than fourth. One of the biggest reasons employees cite for this consistently high ranking is that top leaders encourage people to “build your own Bain.” What this means is that they are counseled to craft a career that allows them to grow and develop by exercising choice over assignments and locations to achieve their personal goals. They also enjoy extensive perks to help them to manage life outside of work, like 8 weeks of paid leave for all parents to use in the first year of life of a new baby. In exchange, Bainies work long hours in service of their clients, travel the world, and relocate as needed.

This example speaks to the unwritten contract employees form with the firm. Moreover, it highlights several factors that embed its employees in the organization. For example, the way employees exercise autonomy over their career paths through the “Build your Own Bain” program increases *fit*. The strong corporate culture

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emphasizes collaboration and honest feedback that *links* new consultants to mentors. And some of the hardest benefits to *sacrifice* when people consider leaving include a travel concierge, back-up childcare, and even breast milk shipping when traveling because the firm knows these benefits matter most to their often-on-the-road consultants. Not surprisingly, these job-embedding factors have helped Bain to achieve industry-low turnover rates.

9.2 Chapter Objective

A meta-analysis of job embeddedness (JE) (Jiang, Liu, McKay, Lee, & Mitchell, 2012) research demonstrates that it explains significant variance in retention over and above traditional constructs such as job satisfaction, organizational commitment, and job alternatives. At the same time, the extant literature on psychological contracts (PC) provides ample evidence of an association between PC breach and intention to quit (Clinton & Guest, 2014; Guzzo, Noonan, & Elron, 1994; Robinson & Morrison, 1995). Further, although some studies report an association between breach and turnover behavior, a meta-analysis by Zhao, Wayne, Glibkowski, and Bravo (2007) failed to find any significant link. Given these unresolved differences, a central objective of this chapter is to explore the theoretical and empirical connections between PCs and JE. An additional objective is to discuss future research opportunities as well as the practical implications of this work.

9.3 Job Embeddedness

Job embeddedness (JE) represents a broad set of considerations that may affect an employee's decision to stay on the job (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). These considerations include on-the-job factors such as connections with co-workers, the fit between one's skills and job requirements, and organizational perks. It also includes off-the-job factors such as personal, family, and community commitments. Research in a variety of settings, ranging from health care to banking to hospitality, has demonstrated the utility of the JE construct (Jiang et al., 2012).

In developing the theory of JE, we built on Kurt Lewin's idea of embedded figures (Mitchell et al., 2001). One way to conceptualize a person's life is to visualize a web created by strands connecting the different parts of one's life. A person who has more roles, responsibilities, and relationships would have a more complex web than someone who had fewer. The person with the more complex web is more embedded in a situation; a person with more strands connected to her job would be more job embedded. The person with the more complex web would experience more disruption in the web if she severed ties at a central intersection on the web. Research shows that people become embedded in a job in a variety of ways (Holtom, Mitchell, & Lee, 2006). The critical aspects of JE are the extent to which the job is

similar to, or fits with the other aspects in their life, the extent to which the person has links to other people or activities, and what they would sacrifice if they left—the perks, benefits and other aspects of the job they value such as a safe or pleasant work environment.

Fit is defined as an employee's perceived compatibility or comfort with an organization and with his or her environment. According to JE theory, an employee's values, career goals, and plans for the future must "fit" with the larger corporate culture and the demands of his or her immediate job (e.g., job knowledge, skills, and abilities). In addition, a person will consider how well he or she fits the community and the surrounding environment. JE assumes that the better the fit, the higher the likelihood that an employee will feel professionally and personally tied to the organization.

Links are formal or informal connections between an employee and others. JE suggests that a number of threads connect an employee and his or her family in a social, psychological, and financial web that includes work and non-work friends, groups, the community, and the physical environment where they are located. The higher the number of links between the person and the web, the more an employee is bound to the organization.

Sacrifice represents the perceived cost of material or psychological benefits that are forfeited by organizational departure. For example, leaving an organization may induce personal losses (e.g., losing contact with friends, personally relevant projects, or perks). The more an employee will have to give up when leaving, the more difficult it will be to change employment. Examples include non-portable benefits, like stock options or defined benefit pensions, as well as potential sacrifices incurred through leaving an organization like job stability, psychological meaning, and opportunities for advancement. Similarly, leaving a community that is attractive and safe can be difficult for employees. In sum, JE represents the accumulated psychological and other reasons why an employee would stay on a job.

9.4 Psychological Contract

As discussed previously in this book, the psychological contract (PC) refers to the unwritten set of expectations of the employment relationship as distinct from the formal, codified employment contract (Rousseau, 1989). Together the psychological contract and the employment contract define the employer–employee relationship. The PC includes informal arrangements, mutual beliefs, common ground, and perceptions between the two parties (Rousseau, 2001). The PC develops and evolves constantly based on communication, or lack thereof, between the employee and the employer (Rousseau, 1990).

Managing expectations is a key consideration for employers so that they do not unintentionally give employees the wrong perception of action that may not happen. Employees may also manage expectations so that difficult situations that affect productivity are not seen by management as deviant. Perceived breaches of the PC can

severely damage the relationship between employer and employee, leading to disengagement, reduced productivity, counterproductive work behavior, and in some cases voluntary turnover.

9.5 Literature Review Linking Psychological Contracts and JE

In this section, we review the literature on PCs and JE, focusing on their theoretical foundations and common antecedents and consequences of the two constructs. We also discuss future research based on the review.

9.5.1 *Theoretical Foundations*

Social exchange theory (SET) is among the dominant theories that have been used in the conceptual framework of PCs. SET proposes that social behavior is a process of exchange of material and non-material goods between people (Homans, 1958). It is also one of the most universal theories invoked in explaining workplace relationships and work-related behavior (Cropanzano, Anthony, Daniels, & Hall, 2017; Cropanzano & Mitchell, 2005; Shore & Coyle-Shapiro, 2003; Wayne, Shore, & Liden, 1997). The norm of reciprocity, stating that individuals will reciprocate to pay back received benefits (Gouldner, 1960), is the primary exchange rule that has been outlined in SET that researchers adopt to investigate employee–organization relationships (Cropanzano et al., 2017). Rousseau’s (1989) definition of the PC as “an individual’s beliefs regarding the terms of conditions of a reciprocal exchange agreement between the focal person and another party” (p. 123) is grounded on SET and the norm of reciprocity. This definition highlights the subjective, individual, and promissory nature of the PC (Coyle-Shapiro, Costa, Doden, & Chang, 2019).

SET has also been used in some studies of JE. For example, Harris, Wheeler, and Kacmar (2011) theorized that leader-member exchange (LMX) will promote organizational embeddedness through the social exchange mechanism. Likewise, Nguyen, Taylor, and Bergiel (2017) stated that perceived organizational support (POS) would promote JE and Akgunduz and Sanli (2017) proposed that employee advocacy and POS influence JE through the social exchange process. Sekiguchi, Burton, and Sablinski (2008) theorized that on-the-JE moderates the social exchange mechanism linking LMX with employee performance.

Conservation of resources (COR) theory (Hobfoll, 1989) is another theoretical framework that is increasingly used for the understanding of a full range of employees’ reactions to the PC breach (e.g., Kiazad, Seibert, & Kraimer, 2014). COR theory indicates that individuals desire to acquire, conserve, foster, and protect resources they value. Individuals want resources to fulfill basic survival purposes

and other material, personal, and social needs (Hobfoll, Halbesleben, Neveu, & Westman, 2018). People strive to avoid losing their resources and when those scenarios come true, they may feel aggressive and make even more efforts to retain resources. From this view, PC breach can trigger an employee's action to protect their remaining resources, which may lead employees to engage in unintentional actions such as harming behaviors toward coworkers (Deng, Coyle-Shapiro, & Yang, 2018).

For JE research, COR theory is becoming a major theoretical foundation. For example, Halbesleben and Wheeler (2008) stated that employees are more embedded when they obtain more resources and if an employee is embedded in his or her organization, leaving the job corresponds to making more sacrifices or giving up more resources. Ghosh, Sekiguchi, and Gurunathan (2017) used COR theory to predict that distributive and procedural justice influence organizational embeddedness, which in turn affects in-role performance. Allen, Peltokorpi, and Rubenstein (2016) demonstrated another angle of the linkage between COR theory and JE. They proposed that employees who are highly embedded in an adverse work environment (e.g., abusive supervision) would still be less likely to leave the job because their concerns about potential resource loss override interpersonal discomfort. Kiazad, Holtom, Hom, and Newman (2015) used COR theory to develop an expanded multifoci framework of JE that integrate different foci of embeddedness such as on-the-job, organizational, occupational, community, and family.

Other theories that have been used to enrich the work of the PC include affective events theory (AET) and lifespan theory. AET states that affective work events lead to affective reactions, which further construct attitudes and work behavior (Weiss & Cropanzano, 1996). Based on the idea that psychological breach is a significant workplace event that results in emotional reactions, Zhao et al. (2007) integrated AET with SET in their meta-analysis and showed that affect acted as a mediator between the effect of PC breach on attitude and actual individual work behavior. Bal, de Lange, Jansen, and van der Velde (2008) further added lifespan theory to AET and SET in their meta-analysis. Consistent with the theory that individuals change their psychological characteristics across the life span, their findings indicated that age moderates the negative relationship between PC breach and employees' attitudes. It was also demonstrated that for younger employees, the negative relation between (a) PC breach and (b) trust and organizational commitment was stronger. On the other hand, for older employees, the negative relation between contract breach and job satisfaction was stronger (Bal et al., 2008).

As for JE, Hom, Mitchell, Lee, and Griffeth (2012) expanded employee turnover theory by proposing proximal withdrawal states theory. This theory claims that there are four motivational states determined by (a) desire to stay or leave and (b) intensity of this preference. These four states are enthusiastic stayer, reluctant stayer, enthusiastic leaver, and reluctant leaver. Proximal withdrawal states theory supplemented JE theory by "separating affect from perceived freedom and clarifying the etiology of experienced autonomous control" (Hom et al., 2012, p. 850). Specifically, this research realized that reluctant stayers share similar degrees of affective commitment, job satisfaction, and JE with enthusiastic leavers, while

reluctant leavers are similar to enthusiastic stayers. Li, Lee, Mitchell, Hom, and Griffeth (2016) confirmed the previous results and further pointed out that job satisfaction and JE can better predict employees' turnover behavior if they are enthusiastic stayers or enthusiastic leavers.

9.5.2 Common Antecedents and Consequences of the Psychological Contract and JE

There has been an abundance of research examining the antecedents and consequences of the PC and JE. Driven by shared theoretical foundations, mainly SET and COR theory, it is not surprising to find a number of common antecedents and outcomes for the PC and JE. We have selected some representative studies for readers' reference as shown in Table 9.1.

As for the common antecedents of the PC and JE, organizational justice, POS, human resource management (HRM) practices, and LMX are theorized to provide information whether the PC is fulfilled, breached, or violated, to influence the social exchange mechanism and the norm of reciprocity, and/or to provide or deplete important resources for individuals. As for the common consequences, work-related attitudes (job satisfaction, organizational commitment, turnover intention), work behaviors (in-role/job performance, organizational citizenship behavior [OCB], innovation-related behaviors), and emotional reaction (organizational cynicism) are influenced both by PC and JE due to the norm of reciprocity or the motivation to obtain, retain, protect, and foster resources.

9.5.3 Studies Examining Both Psychological Contract and Job Embeddedness

Only a few prior studies examined both PCs and JE together. The mechanisms these studies investigated include the causal relationship between PCs and JE as well as the moderating role of JE in the psychological processes involving PCs. Ng and Feldman (2009) introduced the concept of PC replicability, which explained the degree to which employees believe that their current psychological contact can be replicated in other organizations. They suggested that age and years of work experience are negatively related to perceptions of contract replicability. Specifically, employees with more work experience would have a higher level of JE, which would lead to a decrease in external mobility.

Wheeler et al. (2010) proposed a model depicting the relationship between the effectiveness of HRM practices, LMX, JE, and intent to leave. They demonstrated that when HRM practices better communicate person-organizational fit to employees, there is a higher chance that employees can fulfill their PCs, thus improve

Table 9.1 Common antecedents and consequences of the psychological contract and job embeddedness

	Variable	Psychological contract		Job embeddedness	
Antecedents	Organizational justice	Chen (2010)	f	Ghosh et al. (2017)	o
		Cassar and Buttigieg (2014)	b	Nguyen et al. (2017)	o
	POS	Agarwal and Bhargava (2014)	b	Nguyen et al. (2017)	o
		Tekleab, Takeuchi, and Taylor (2005)	v		
	HRM practice	Chien and Lin (2013)	f/r	Wheeler, Harris, and Harvey (2010)	o, c
	LMX	Chen and Wu (2017)	b	Harris et al. (2011)	o
Henderson, Wayne, Shore, Bommer, and Tetrick (2008)		f			
Consequences	Job satisfaction	Rayton and Yalabik (2014)	b	Harris et al. (2011)	o
	Organizational commitment	Coyle-Shapiro and Kessler (2000)	f	Robinson, Kralj, Solnet, Goh, and Callan (2014)	o,c
	Turnover intention	Arshad (2016)	v	Holtom et al. (2006)	o,c
	In-role/job performance	Turnley, Bolino, Lester, and Bloodgood (2003)	f	Lee, Mitchell, Sablinski, Burton, and Holtom (2004)	o,c
	OCB	Turnley et al. (2003)	f	Cho and Ryu (2009)	o
	Innovation-related behaviors	Ng, Feldman, and Lam (2010)	b	Ng and Feldman (2010)	o
		Niesen, Van Hootegeem, Vander Elst, Battistelli, and De Witte (2018)	b		
	Organizational cynicism	Johnson and O’Leary-Kelly (2003)	b	Nafei (2015)	o
POS	Kiewitz, Restubog, Zagenczyk, and Hochwarter (2009)	b	Akgunduz and Sanli (2017)	o	

Source: Authors’ own work

Note. Please refer to the following for the abbreviations used in this table: *f* psychological contract fulfillment, *b* psychological contract breach, *v* psychological contract violation, *r* relational psychological contract, *o* organizational embeddedness, *c* community embeddedness

employee retention through JE. Holmes, Baghurt, and Chapman (2013) conducted a qualitative phenomenological study. They showed how human resources practices could affect the fit, links, and sacrifice of the employees through recruitment, employment, socialization, education, and training, thereby addressing employees’ concerns, and eventually fulfilling the PC to better retain employees.

Kiazad et al. (2014) challenged the widespread ideology that responses to PC breach are negative and suggested that employees can respond to PC breach

positively. Specifically, their findings showed that employees were likely to have more work-related innovative behavior after a breach if they had more links, a better fit, and fewer sacrifices. In other words, organizational links, fit, and sacrifice can act as moderators of the psychological breach–innovation relationship. Kiazad, Kraimer, and Seibert (2019) further advanced the relationship between the PC and JE by arguing that PC fulfillment provides employees with greater JE by increasing the perceived cost employees of leaving. Driven by the willingness to keep the material or psychological benefits related to PC fulfillment, employees voluntarily undertake OCBs toward the organization. This proposal offers innovative thinking, which explains that employees stay and perform out of a motivation for receiving benefits rather than out of obligation and reciprocity.

In the context of the healthcare industry, researchers examined the role of PCs and JE in attracting, retaining, and engaging nursing employees. Bernard and Oster (2018) designed a formal career development framework in Centura Health in Colorado. This project aimed to elevate nurses' work engagement and retention. In explaining the logic behind the design of this career framework, Bernard stated that increased JE has a positive influence on retention through satisfying the PC. Sonette, Pharny, and René (2018) questioned whether the PC breach (e.g., understaffing) affects embeddedness for professional nurses. Their results indicated that there is a negative influence of psychological breach on productivity, performance, job satisfaction, organizational commitment, and trust, which also lowers JE.

9.6 Future Research

Having reviewed the major components of JE and PCs as well as the impact of emerging technology, we now discuss five avenues for future study to advance integrative research in these areas. Table 9.2 provides some exemplary research questions that might be addressed under each general avenue.

9.7 Reciprocal Relationships Involving JE and PCs

Future longitudinal research may enrich the understanding of JE and PCs by examining their bi-directional association. It is possible JE shapes employees' PCs or evaluations of their fulfillment. For example, JE scholars associate sacrifices with extrinsically-motivated staying (e.g., staying to maintain job benefits or security; Hom et al., 2012), and links and fit with intrinsically-motivated staying (e.g., staying due to strong affective ties or value congruence; Gagné & Deci, 2005). Employees who stay for intrinsic reasons—such as having many links or strong fit (Hom et al., 2012)—should be more inclined toward relational PCs that symbolize long-term commitment and open-ended exchanges based on trust. Sacrifice-embedded employees (who mainly stay for job benefits) should be more inclined

Table 9.2 Future research questions

General research direction	Exemplar research question
Reciprocal relationships involving JE and PCs	<ul style="list-style-type: none"> • <i>What is the causal association between JE and PCs? To what extent does JE shape employees' PCs or evaluations of their fulfillment? To what extent do PCs or their fulfillment influence JE?</i> • <i>In what way do PCs or their fulfillment influence specific JE dimensions?</i> • <i>What underlying (mediating) mechanisms explain the relationship between JE and PCs?</i> • <i>How do the relationship between JE and PCs fluctuate and change together overtime?</i>
PC breaches as "shocks"	<ul style="list-style-type: none"> • <i>Can PC breaches be conceptualized as "shocks" from the unfolding turnover model?</i> • <i>To what extent do promises inherent in PCs become part of "turnover scripts"?</i> • <i>To what extent do PC breaches activate script-based leaving?</i> • <i>How do the JE dimensions "buffer" or moderate negative responses to PC breach?</i>
Advancing integration with theory	<ul style="list-style-type: none"> • <i>To what extent can Conservation of Resources (COR) principles provide new explanations for the JE-PC link? For example, to what extent do PCs or their fulfillment influence outcome criteria through resource (links, fit, sacrifices) losses and gains?</i> • <i>To what extent do embedding resources (links, fit, sacrifices) differ in their instrumentality for shaping responses to PC fulfillment?</i> • <i>How do PCs or their fulfillment influence different "staying mindsets" from Proximal Withdrawal States Theory (PWST)?</i>
Common antecedents of JE and PCs	<ul style="list-style-type: none"> • <i>How do the EOR types differentially relate to JE, PC types, and PC fulfillment?</i> • <i>To what extent do JE and PCs (or their fulfillment) relay the effects of EOR types on outcome criteria?</i> • <i>What is the differential association of "dark triad" traits with JE and PCs?</i> • <i>To what extent do JE and PCs (or their fulfillment) relay the effects of personality traits (including dark triad ones) on outcome criteria?</i>
Collective JE and PCs	<ul style="list-style-type: none"> • <i>How might collective perceptions of JE and PCs (or their fulfillment) be conceptualized and operationalized?</i> • <i>To what extent can HR management practices and leadership influence collective perceptions of JE and PCs (or their fulfillment)?</i> • <i>To what extent can the "strength" of JE and PC collective perceptions moderate antecedent effects on collective outcome criteria?</i>

Source: Authors' own work

toward transactional PCs, which involve the provision of mostly extrinsic rewards for employee contributions in a quid pro quo fashion (Rousseau, 1990). All the same, embedded employees will be motivated to exhibit better performance, and their "embedded" status should signal value and loyalty to organizational decision makers, making organizations less likely to break promises to them.

Of course, the causal direction can flow from PCs to JE as well. For example, PC breach may tarnish perceptions of value fit or cause employees to believe they have

little to lose by leaving. On the other hand, the *fulfillment* of promises should strengthen embeddedness by increasing links, fit, and sacrifices. For instance, delivered inducements can strengthen links by encouraging autonomous teamwork and cross-functional collaborations, or strengthen fit by satisfying employees' psychological needs and ability to meet job demands. As for sacrifices, PC fulfillment might produce dysfunctional embeddedness mindsets (i.e., slackers and reluctant stayers; Hom et al., 2012) particularly for those who do not share corporate values or lack attachments to colleagues (Hom et al., 2012). This might be particularly true in firms that offer high or broad inducements for low or narrow contributions from employees (Hom et al., 2012).

Going further, subsequent inquiries might extend these ideas by integrating dynamic perspectives on JE and PCs. For example, from a JE perspective, PC fulfillment should generate a desire in the employee to stay. However, embedded employees might become enthusiastic leavers upon experiencing PC breach. Alternatively, potential leavers might transition into enthusiastic stayers if the organization delivers promised inducements that make it difficult to leave. Exploration of such possibilities would further enrich understanding of the reciprocal and dynamic relationship involving JE and PCs.

9.8 PC Breaches as “Shocks”

One of the ways JE facilitates employee retention is by absorbing work-related “shocks”—or triggering events that pressure employees to consider leaving the organization, such as being overlooked for a promotion or getting an undesirable performance evaluation (Lee, Mitchell, Wise, & Fireman, 1996). Burton, Holtom, Sablinski, Mitchell, and Lee (2010) found that embedded employees responded to turnover-inducing shocks with slightly better work performance. As these authors noted, after experiencing negative shocks, “[embedded individuals] re-focus their efforts, perform well and contribute to the overall health of the organization” (p. 6).

Future research might explore this “buffering effect” of JE on reactions to PC breach. Like shocks, PC breaches can be single negative events that violate employees' progress toward meaningful goals (Conway & Briner, 2002), induce turnover intentions (e.g., Raja, Johns, & Ntalianis, 2004), or activate pre-existing action plans (“scripts”) for leaving the organization (e.g., “If I don't get this promotion I was promised, I will quit”; Lee et al., 1996). To illustrate, Kiazad et al. (2014) found PC breach to facilitate innovative work behavior (e.g., implementing improved ways to work) among those with more links, better fit, and fewer sacrifices. Building on these findings, future studies might integrate, more fully, the literature on PC breach and shocks. For example, Lee and Mitchell (1994) propose the notion of “scripts” in their unfolding turnover model. Future scholars might examine whether the promises inherent in employees' PCs also become part of a script (“if they don't live up to this promise, I will quit”) and activate this action plan when unfulfilled. This proposed line of inquiry could raise awareness about the role of PC breach in

turnover processes. The differential moderating effects of specific JE dimensions (e.g., links and fit vs sacrifices) on reactions to PC breach is also worthy of further exploration. Burton et al. (2010) noted that in cases where employees experience a shock but decide not to quit, the impact of the shock is likely to manifest in other outcomes, such as performance withdrawal. Yet, in the case of PC breach, this may depend on the specific JE dimension. For example, as breaches signal to employees that their relationship with the organization is unstable (Restubog, Hornsey, Bordia, & Esposito, 2008), perhaps those more dependent on the organization as a source of valued benefits (sacrifices) will be less inclined to respond in ways that may be seen as challenging or lead their relationship with the organization to become even more unstable.

9.9 Advancing Integration with Theory

In this section, we discuss two theoretical frameworks—namely, Conservation of Resources (COR; Hobfoll, 2001) and Proximal Withdrawal States (PWS; Hom et al., 2012) theories—focusing on how each permits a theoretical integration of the JE and PC literatures.

Conservation of Resources (COR) theory. According to COR, people are hedonistic in investing and conserving resources, defined as “those objects, personal characteristics, conditions, or energies that are valued” (Hobfoll, 1989, p. 516). Furthermore, some resources are valued in their own right (“health of family”; Hobfoll, 2001, p. 342), while others facilitate attainment or protection of other valued resources (e.g., “support from co-workers”; Hobfoll, 2001, p. 342). Underpinning COR’s core assumptions are two principles: (1) anticipated or actual resource loss is psychologically more meaningful than equivalent resource gains; and (2) people must invest resources to gain new resources or prevent resource loss. However, according to COR, not everyone is capable of orchestrating resource gain or avoiding loss. Rather, those with ample existing resources are less vulnerable to loss and more capable of gain. Finally, people become increasingly protective of their resources as they diminish. COR’s propositions may guide future research seeking to integrate the JE and PC nomological networks. To illustrate, the COR assumption that employees are driven to protect (Principle 1) and acquire (Principle 2) valued resources may elucidate how PC breaches or fulfillment influence employee behaviors *through* JE. Indeed, delivered organizational inducements likely boost the very resources that embed employees (links, fit, and sacrifices), in turn leading these employees to exhibit superior work performance as a means to safeguard their employment or continue accruing benefits. PC breaches, on the other hand, may weaken the web of attachments surrounding employees, leading them to withdraw or reduce discretionary efforts as they adopt a more conservative stance in response to resource loss. The COR assumption that resources differ in their “instrumentality” for facilitating resource gains also positions the JE dimensions as moderators that may *differentially* condition how employees respond to PC breach. As Kiazad

et al. (2014) found, employees with more links or better fit may respond constructively to PC breaches to offset the loss because links and fit can be instrumental for such purposes. Sacrifices, on the other hand, have relatively little instrumental value insofar as boosting performance, but may lead employees to respond to breach with a level of performance that is “just enough not to get fired” (Hom et al., 2012).

Proximal Withdrawal States Theory (PWST). Challenging the longstanding unidimensional view of employee turnover and retention, Hom et al. (2012) discerned different stayer types based on their preference for staying (versus leaving) and perceived control over this preference (i.e., want to stay vs have to stay). Thus, enthusiastic stayers feel less external pressure to stay, whereas reluctant stayers feel they cannot leave (despite wanting to; Hom et al., 2012). While the JE perspective assumes that an employee’s desire to stay with the organization transmits PC effects on employee outcomes, not all “stay-ers” should be expected to be high performers. Indeed, Hom et al. (2012) envisioned different types of stayers, differentiating those who stay because of perceived sacrifices (i.e., slackers) from those whose desire to stay is driven largely by intrinsic forces, such as fit or links (engaged stayers). Integrating Hom et al.’s (2012) PWST, it is possible that different PCs (or their breach or fulfillment) will generate different “stayer mindsets.” For example, transactional PCs or their fulfillment might produce more “slacker” or “reluctant stayer” mindsets (Hom et al., 2012), particularly in the absence of links or fit. By contrast, delivered inducements under relational PCs should facilitate more “engaged stayer” mindsets by boosting links and fit, and fostering intrinsic motivation to stay and perform. Disaggregating the JE construct to examine how PCs can influence different staying mindsets is another way to integrate the PC and JE literatures to generate new lines of inquiry.

9.10 Common Antecedents of JE and PCs

By and large, JE and PC scholars thus far have overwhelmingly examined the consequences of JE and PC relative to their antecedents. Still, some existing theory and empirical evidence point to some common antecedents that future research might explore. Below, we offer avenues for future research drawing on two categories of common antecedents: organizational practices and individual differences.

9.10.1 Organizational Practices

Past studies suggest that human resource management (HRM) practices can influence JE and PC processes because they shape employees’ relationships with the organization or signal that employees stand to lose important benefits by leaving (e.g., Hom et al., 2009). Advancing this line of research, we recommend that future research adopt Tsui, Pearce, Porter, and Tripoli (1997) typology of

employee–organization relationships (EORs) because it parsimoniously explains shared roots of JE and PCs.

Tsui et al. (1997) present a typology of EORs differing along two dimensions: (1) *exchange balance* (whether organizational resources match employee contributions) and (2) *type of resources exchanged* (whether the exchange relationship is largely economic or social). Balanced economic exchanges (quasi-spot contracts) are largely transactional (i.e., employees are given resources to perform specified job requirements), while balanced social exchanges (mutual investment EORs) are largely relational (e.g., organizations foster employees' career development and employees reciprocate with extra-role contributions). Tsui et al. (1997) also conceived two *unbalanced* exchanges: overinvestment EORs (i.e., employees perform specified job activities in exchange for broad-ranging organizational inducements) and under-investment EORs (i.e., employees are expected to make broad contributions in exchange for specified monetary rewards).

We envision how these four EOR types may differentially influence JE and PC processes. For example, mutual investment and overinvestment EORs offer employees resources (good compensation, training, recognition, stable employment) that should promote their perceptions of met promises and embed them via fit (cultivating firm-specific skills and knowledge), links (encouraging teamwork and extra-unit collaborations), and sacrifices (non-portable fringe benefits, vacation time). Employees in mutual investment companies may also receive idiosyncratic deals (non-standard, individualized agreements; Rousseau, 2001) that become part of their PC and embed them in the organization, since such specialized arrangements are often firm-specific and difficult to replicate elsewhere (Ng & Feldman, 2008). Overall, mutual investment and overinvestment EORs promise and deliver enduring resource flows to employees (facilitating PC fulfillment) and embed them by promoting their long-term employment (Hom et al., 2009).

By comparison, we expect that quasi-spot and underinvestment EORs would potentially promote perceptions of PC breach and undermine JE. In these EORs, where HRM inducements and investments are lower, organizations provide only those resources employees need to meet specified job duties (fostering more transactional PCs; Tsui et al., 1997) and invest little in employees' job longevity. Underinvestment and quasi-spot firms thus provide fewer incentives relative to employee contributions (heightening the probability of breach; Morrison & Robinson, 1997) and drive out "misfits" through "expectation-enhancing practices" (Shaw, Dineen, Fang, & Vellella, 2009). In addition, the relatively explicit, "quid pro quo" exchange norms underpinning quasi-spot relationships provides limited scope for discrepancies, making employees more vigilant of their PCs and deviations from promised inducements more easily detected. Furthermore, because employees are not expected (quasi-spot EOR) nor motivated (underinvestment EOR) to engage in activities outside core job requirements (Tsui et al., 1997), these EORs typically will not promote relational PCs nor impel employees to solidify links or perceive many sacrifices associated with leaving.

9.10.2 Individual Differences

The second category of antecedents captures a number of individual difference variables that studies have shown to predict JE and PC processes. A common theme linking these studies is that they explain *why* certain people are more likely to become embedded and *why* certain people are more likely to experience PC breach. For instance, employees with an internal locus of control are more likely to become embedded (Ng & Feldman, 2011) and less likely to experience breach (Raja et al., 2004), perhaps because they are more effective in acquiring tailored employment deals and social capital. Furthermore, because conscientious employees are more proactive in seeking information about their work environments (e.g., engaging in a more diligent job search), they tend to join organizations where they fit (Lev & Koslowsky, 2012) and experience fewer breaches at work (Raja et al., 2004). We encourage future research to broaden the scope of dispositional antecedents of JE and PC breach in an effort to integrate these literatures.

One underexplored typology is represented by the “dark triad,” encompassing Machiavellianism, narcissism, and psychopathy (Paulhus & Williams, 2002). Machiavellians generally disregard morality and are inclined toward manipulating and exploiting others for self-enhancement; these employees may find it harder to form enduring workplace links, more readily switch jobs for better benefits or advancement, or expect more inducements from the organization relative to their inputs. Narcissists have overly inflated and unrealistic self-views and a strong need for admiration; their greater yearning for others’ admiration and affirmation should culminate in stronger personal links and greater motivation to achieve career growth and success within the organization (strengthening their fit and sacrifices). Still, given their supreme perceptions of self-worth, they should be more vigilant in monitoring their PCs and be less tolerant of discrepancies. Finally, psychopathy is marked by high levels of impulsivity, lack of empathy, and greater intolerance of uncertainty (Paulhus & Williams, 2002). Their heightened impulsivity, reduced ability to delay gratification, and selective attention to negative stimuli (Luhmann, Ishida, & Hajcak, 2011) could make it harder for these employees to maintain social relationships, receive recognition and benefits, or make them more susceptible to believing in promises that were not made (thus leading to incongruent understandings about promises; Morrison & Robinson, 1997).

9.11 Collective JE and PCs

Moving beyond their individual-level focus, subsequent inquiries might explore antecedents and outcomes of collective JE and PCs. For example, when leaders facilitate the development of strong links between team members or person-organization fit, they might create a climate where most people are highly embedded or perceive similar PC types and outcomes. Indeed, leadership practices and

working conditions are likely to be shared by members working within a unit, and these common experiences may cultivate shared beliefs toward the job and working environment. According to social information processing theory (SIP; Salancik & Pfeffer, 1978) individuals adapt their attitudes in line with those of others and contextual norms within their social environment. In this way, shared experiences within the work environment may contribute to the formation of shared mental models of the employment relationship, including organizational inducements and/or their fulfillment. Going further, future research might investigate whether the “strength” of these collective perceptions moderates antecedent effects on collective staying and performance. In other words, climate strength may serve as a social-contextual cue that provides a clear and consistent signal to employees about how others construe their employment relationship and how embedded they are in the workplace (Felps et al., 2009). For example, the beneficial effects of mutual- or over-investment EORs on collective staying might be accentuated in strong JE or relational PC climates, or neutralized in weak ones. Alternatively, future studies can enrich JE and PC theories by investigating whether the effects of collective JE and PC (i.e., an average of employees’ JE perceptions and PC types) on outcome criteria are conditioned by the strength of these collective perceptions. Indeed, there is consistent evidence that climate strength accentuates the impact of unit-climate effects on unit-level outcomes, such as team performance or aggregated job satisfaction (Colquitt, Noe, & Jackson, 2002; Schneider, Salvaggio, & Subirats, 2002).

9.12 Psychological Contracts and Job Embeddedness in New Organizational Forms

In modern society, full-time commitment to one employer has been regarded as the norm. Conventional jobs have been defined as “jobs where work is performed on a fixed schedule, at the firm’s place of business under the firm’s control and with mutual expectation of continued employment” (Kalleberg, Reskin, & Hudson, 2000, p. 257), which indicates the inflexibility of time, place, and employer. However, the trend of globalization and hyper-competition requires organizations to become more flexible and fluid in order to rapidly respond to the environment. Especially, due to the change in microeconomic environment and growth in technology (Graham, Hjorth, & Lehdonvirta, 2017; Spreitzer, Cameron, & Garrett, 2017), the gig economy, also known as on-demand employment, has arrived. It signals a new employment type with the surge of gig-workers whose labor is accessible through digital platforms with a flexible time range (Lobel, 2017). In the following section, we look into how PCs and JE would evolve in the new world of work.

In the gig economy, non-standard employment is becoming increasingly prominent, including part-time, on-call, and temporary work as well as self-employment. This has important ramifications regarding the types of PCs that develop. Several studies have suggested that temporary workers are more likely to perceive the PC as

transactional (Chambel & Alcover, 2011; Chambel, Lorente, Carvalho, & Martinez, 2014; Guest, 2004; Millward & Hopkins, 1998) while standard employees tend to include more relational components (De Cuyper & De Witte, 2006). Besides, contingent employees were shown to perceive fewer employer obligations and expect fewer inducements, which formed a narrower spectrum of the PC (Chambel et al., 2014; Coyle-Shapiro & Kessler, 2002; Guest, 2004).

Another research stream suggests work-related behaviors of non-standard workers are more sensitive than those of regular workers to the PC. Van Dyne and Ang (1998) found the relationship between the perceived PC and OCB was positive for contingent workers, but not for regular workers. The authors conjectured that contingent workers withheld OCB until they perceived a positive employment relationship whereas regular workers tended to engage in OCB out of professionalism. Somewhat similarly, Coyle-Shapiro and Kessler (2002) discovered that in public service organizations, contingent workers engaged in OCB depending on the benefits received from the employers.

In addition to expanding various employment forms, the gig economy seems to enhance job mobility. As one example, Wang, Sun, Liu, Zheng, and Fu (2019) studied migrant construction workers in China. Their results suggest that because these workers lack formal written contracts, the effect of PC breach on job mobility varies depending on a worker's economic considerations. Thus, we must consider both economic factors and PC conditions to fully understand gig workers' motivation, attitudes, and turnover.

Lemmon, Wilson, Posig, and Glibkowski (2016) studied the employment relationship involving independent contractors and identified negotiation behavior as an antecedent to the establishment of PCs. They theorized that different independent contractors' negotiation behaviors (problem solving, forcing, or avoiding) cause different forms of PCs (balanced, transactional, or transitional), which further results in their perceived resources received, subsequent performance, and distributive justice perceptions. Ke, Davis, and Jefferies (2016) further explored the relationships between contracting parties in the Australian construction industry. The results of surveys implied that better relational conditions and benefits could predict higher degrees of unwritten agreements and contracting behaviors between contracting parties, which eventually leads to higher satisfaction.

The PC can also be extended to the context of a three-way working relationship involving a firm, its contractors, and clients. In a standard contractor arrangement, an employee interacts with both a contracting organization and a client organization. Thus, the firm and client organization share a joint employer relationship with the contracted employee (Coyle-Shapiro & Morrow, 2006; McKeown, 2003). Therefore, it is necessary to understand how a contracted employee forms a bond with two organizations. In this regard, Coyle-Shapiro and Morrow (2006) found that affective organizational commitment and affective client commitment are independent of one another. Affective commitment toward the contracting organization positively related to client affective commitment and contractor affective commitment mediates the effect of PC fulfillment on client affective commitment.

Given the employment characteristics of the gig economy as viewed above, expanding and broadening the constructs of the PC and JE would be useful to understand their roles in these more complex employment relationships. Reflecting on the characteristics of new organizational forms featuring triangular and nonstandard employment relationships, Claes (2005) defined the PC “as including perceptions of all parties and all aspects constituting the reciprocal promises (entitlements and obligations) implied in the employment relationship” (p. 132). Alcover, Rico, Turnley, and Bolino (2017) further develop a multiple-foci exchange relationship approach to the PC that considers the employment relationship with multiple agents. The JE research focusing on the gig economy or non-standard employment is still scarce, thus expanding the construct of JE would be beneficial, too. These reconceptualizations of the PCs and JE help us to capture the reality in the new organizational forms that individuals may have PCs with multiple agents and also be embedded in multiple foci, which may influence individual attitudes and behaviors.

9.13 How Technology Affects Psychological Contracts and Job Embeddedness

In this section, we discuss three different types of technologies (social media, algorithms, and electronic monitoring) and their influence on PCs and JE.

9.13.1 Social Media

From the organizational standpoint, social media has introduced both opportunities to strengthen bonds with employees and threats to retaining talented people. With the prevalence of social media, there is a larger pool of referents becoming available to individuals. For example, work-related social platforms such as LinkedIn and Glassdoor have provided individuals with options to identify many more social referents than before. From the PC perspective, Ho (2005) proposed that when employees evaluate the fulfillment of PC, social referents play a role in shaping such fulfillment evaluations. Indeed, the importance of social context in shaping individual perceptions about their work and organization has been long advocated (Greenberg, 1995; Salancik & Pfeffer, 1978). Generally, employees select their social referents based on three criteria: relevance, availability, and similarity. The use of more personal social media (e.g., Instagram, Facebook) may also expand access to eligible social referents. Thus, this broadened social influence may generate more information for the employee to associate or compare when evaluating the PC within an organization (Ho, 2005).

From the JE perspective, it is obvious that networking through social media is becoming a mechanism of job searching, which can promote voluntary turnover,

especially for those who have lower satisfaction and JE (Swider, Boswell, & Zimmerman, 2011). Although there is underdeveloped research on the success rate of job searching via social media (Forret, 2018), there is no doubt that networking sites including LinkedIn and Indeed have multiplied access to alternative jobs. And given that employees exist in social networks inside and outside their organization (Hom et al., 2009), it is likely that employees' JE perceptions may be influenced through elevated use of social media. Especially in the gig economy, the boundaries between one's professional and social life are getting diffused. The interoffice communication tools may be used for both work-related and non-work-related information exchange (Charlier, Guay, & Zimmerman, 2016). In the positive case, *links* may be enhanced through social media connections with co-workers (Mitchell et al., 2001). However, we see the potential for negative impacts as well. In either case, social networking is highly likely to be related to JE and retention (Charlier et al., 2016; Singh, 2019).

9.13.2 Algorithms

According to Cappelli and Keller (2013), gig work can be categorized into three groups: capital platform work, crowdwork, and appwork. Capital platform work refers to the work for the platforms that are designated to trade commercial goods or lease assets, such as Airbnb and Etsy. Crowdwork makes it possible to outsource micro tasking to a crowd, such as Amazon Mechanical Turk. Appwork provides mediating service by deploying in-demand workers. Examples include Uber, Lyft, and Deliveroo. A key feature of appwork is the utilization of algorithms during the labor process. Algorithms appeal to many people because of their apparent objectivity and mathematical correctness (Lee, Kusbit, Metsky, & Dabbish, 2015). However, some people still favor human agents as they believe that technology lacks a stable moral authenticity (Jago, 2019). Nevertheless, algorithms have emerged in our daily and professional life in the gig economy. Algorithmic management refers to “a system of control where self-learning algorithms are given the responsibility for making and executing decisions affecting labor, thereby limiting human involvement and oversight of the labor process” (Duggan, Sherman, Carbery, & McDonnell, 2017, p. 119).

Algorithmic management makes decisions in place of human beings, and due to its distinct design features that focus on objectivity and statistical strength instead of interpersonal and empathetic aspects (Duggan et al., 2017), appworkers may feel differently from other types of workers. Gilbert, De Winne, and Sels (2011) pointed out that algorithmic management differs from human agents such that the computation does not advocate workers' psychological needs and work-life balance. Therefore, it is highly likely that appworkers suffer from low perceived trust and confidence, resulting in deterioration of the employee–employer relationship. What's more, there is a disparity of algorithmic focus between transactional and relational features. The highly transactional relationship that is likely to exist in

appwork implies that the relational aspect is likely to be overlooked (Duggan et al., 2017).

To further explicate how algorithmic management affects employee–employer relationship from the PC perspective, Tomprou and Lee (2019) reasoned how consistency in decisions and consequences, lack of social interaction, and the degree of algorithmic intervention influence PCs. They suggested that the human-centered design of algorithmic management, including fairness, transparency, and participatory involvement could contribute to the positive formation of an individual’s PC. Even in digital-labor platforms where people work remotely, workers’ basic psychological needs can be addressed through various mechanisms built into a digital labor platform’s architecture. For example, social networking features, a positive feedback system, or a social badges system could be designed to enhance a digital platform worker’s perceived relatedness and competence. Further, autonomy could be integrated into a platform to provide the worker with the freedom to make various decisions (Wood, Graham, Lehdonvirta, & Hjorth, 2018).

9.13.3 Electronic Monitoring

Monitoring technologies are often used to track and manage productivity, revenues, and even customer relationships. Indeed, a growing number of organizations have been implementing electronic employee monitoring (Firoz, Taghi, & Souckova, 2006). However, not all firms assess employee–organization relationships frequently. Indeed, many firms still use the traditional annual survey method to assess employee engagement (Burnett & Lisk, 2019). Given the extensive use of technology in other aspects of the employment relationship, organizations may want to consider weekly pulse surveys that allow them to see the ebb and flow of employee engagement or affect. Such a pulse survey can be delivered to employees through a variety of channels (e.g., work computer, personal phone). By regularly eliciting data through this easy to use technology (e.g., TINYpulse), organizations are able to take prompt actions to solve a problem or respond to a change.

While it is evident that technological innovation has brought some advantages to work through electronic monitoring, it is also vital to be aware of the adverse effect that these technologies may have on the employee–organization relationship. For example, it was uncovered that employees held negative perceptions of organizational monitoring behavior, with a common sense of privacy and fairness being invaded (Coultrup & Fountain, 2012). Other related concerns include ethics, trust, and employee reactions that may influence the employee–organization relationship. These findings signal the need for future research on understanding the effect of those monitoring technologies on employees’ PCs, especially for digital laborers.

At the same time, there may also exist benefits to monitoring technology. For example, Predictability, Teaming, and Open Communication (PTO) aims to increase teams’ engagement and therefore create open discussion on team members’ personal and professional life. Successful teams can personalize their ways of working

and initiate those changes. Research demonstrated that PTO team members perceived higher efficiency, more value created, and more satisfaction toward work-life balance (Perlow, 2012). Another monitoring technology, Results-only work environment (ROWE), is an HRM system that gives employees full accountability and autonomy to choose the time and place of their work. It was reported that ROWE contributed to better schedule control (Kelly, Moen, Oakes, Fan, & Okechukwu, 2014), enhanced work-life balance (Kelly, Moen, & Tranby, 2011), and improved employees' health (Moen, Kelly, & Lam, 2013). Lehtonvirta (2018) added that it was more effective to focus on outcomes rather than imposing control on employees' working arrangements.

9.14 Implications for Organizational Practices: Interventions to Increase Fit, Links, and Sacrifice

As we have discussed, one of the ways to potentially reduce the probability of PC breaches from occurring or to reduce their severity when they do is to increase JE. As prior research has demonstrated, JE can have a buffering effect on shocks (Burton et al., 2010). A number of articles address the systematic ways in which organizations can increase organizational embeddedness in general (Holtom et al., 2006; Holtom, Kiazad, & Dandu, *in press*). In the following discussion, we identify several specific ways that organizations can leverage emerging technology to strategically increase JE.

9.14.1 *Fit*

One of the ways that firms have tried to increase fit before a person is hired is by providing realistic job previews (RJP). The premise is that the more people know before being hired, the better decision they can make if offered the job. This reduces the number of quick exits due to unrealistic expectations of a job. Many HR consulting firms (e.g., FurstPerson, Aon) are using gamification to provide RJPs. By making a game out of a job simulation, the candidate is getting a real look at the job they'll be performing at the organization.

Another way organizations are seeking to increase the probability that a new hire will fit is to use artificial intelligence (AI) to funnel them into the role that is best for them. Before candidates apply to a specific role, they can go through the Pymetrics platform to receive a personalized shortlist of roles they are best suited for. Further, when a candidate is not a fit for the role they applied for, Pymetrics can surface better fit roles at the organization or another.

Yet another way firms are seeking to leverage technology to increase the probability of fit pre-hire is through an enhanced reference-checking process. Crosschq is

an example of a company that uses the power of social networks to increase response rates from the industry average of 50% to over 95%. They empower the job candidates to recommend references and provide current contact info. While the actual recommendation is not seen by the candidate, he or she knows if the recommendation has been completed. Moreover, the use of standard rating scales optimized for mobile applications makes it easy and fast for references to complete their work. This information is then transformed through machine learning to provide predictive data to firms for making hiring decisions.

HireVue similarly seeks to increase both efficiency and effectiveness in the hiring process by using AI. The fully automated process enrolls applicants, schedules interview appointments, records the online interview, and then assesses a candidate's fit. This assessment is based on answers to standard questions validated through research as well as micro-expressions, and voice qualities (e.g., tone, rate, pitch). Each candidate receives a score. The top scoring candidates' videos are then reviewed by human recruiters. This process enables firms to "interview" many more candidates than they normally could in a face-to-face context. With HireVue, recruiters and hiring managers believe they make better hiring decisions, faster.

9.14.2 Links

In the gig economy, many workers feel a sense of disconnectedness. One type of forum that has emerged to close these gaps are online professional communities. For example, Uber drivers participate in a variety of moderated and unmoderated online exchanges. They share ideas about how to improve their Uber Driving Ratings as well as increase tips. The company has developed an internal forum as well in an attempt to build a sense of community or connection.

One of the ways Adobe seeks to increase internal links is ironic. They abandoned annual reviews. Adobe's People Resources leaders decided that annual performance reviews were too time consuming, negative, and slow to be the foundation for performance management moving forward. The "Check-in"—a two-way, ongoing dialogue between managers and employees—became the new standard at Adobe, resulting in dramatic efficiency gains, more effective performance management and higher employee engagement and retention through enhanced relations between managers and employees. Growth and development are a core part of the conversation, where managers and employees can discuss the employee's long-term goals, development needs, and progress. Suggestions for further training, stretch assignments, rotations, and other development opportunities arise as part of these dialogues.

9.14.3 *Sacrifice*

There are a number of technology tools that enable organizations to increase the sense of sacrifice employees would make if they were to consider leaving. One example is pulsing technology. TINYpulse and Perceptyx are two examples of platforms that provide organizations a real-time sense of employee perceptions and engagement. Sending employees just one simple question a week allows them to obtain high response rates to relevant questions as well as to chart the ebb and follow of attitudes across time. When organizations capture this information, there is a concomitant expectation that they will do something with it. This ongoing dialogue between organizations and their people can create an empowering environment that is difficult to leave.

An exemplar of another tech tool that can further bind employees to organizations is ThriveGlobal. It is an online provider of tools that help people to better manage sleep and burnout. By providing research-based programs and recommendations for managing issues at the work-life interface, they report client organization employees experience lower amounts of stress, burnout, and turnover.

Finally, firms today are subject to rampant comparison possibilities. Glassdoor is one forum that has gained great traction. It can work for or against companies. Those with strong reputations (and carefully curated profiles) can attract more and better applicants. Moreover, these positive reputations can create a sense of sacrifice that would be hard to overcome in a new job. The online pay comparisons also enable people to evaluate firms. Thus, wise leaders attend to these forums and expend resources to manage their profiles to ensure employees perceive a loss if they consider changing firms.

9.15 Conclusion

As with all research, the present chapter has a number of limitations. First, technology moves at such a rapid pace that despite our best efforts to understand how the PC has been impacted by innovations to date, we are at significant risk in predicting the future. As the great philosopher Yogi Berra once said, “It is tough to make predictions...especially about the future.” Second, there is a cross-cultural lens that has yet to be applied in any serious way to the PC and JE. In short, evidence suggests that different societies have different normative expectations and deal with conflict in diverse ways, yet we have no systematic framework for accounting for these differences in our research at present.

Yet, to our knowledge, this is the first scholarly work that has integrated the JE and PC literatures so thoroughly. Consequently, many new avenues for future research at the intersection of these theories have been opened. Importantly, there are a number of common antecedents to JE and PC that merit further investigation. Included among these are organizational justice, POS, HRM practices, and

LMX. These constructs provide information to employees as well as employers about PC fulfillment, breach, or violation. Similarly, we have identified common consequences, including work-related attitudes (e.g., job satisfaction, organizational commitment, turnover intention), work behaviors (e.g., in-role/job performance, organizational citizenship behavior [OCB], innovation-related behaviors). Future longitudinal research at this important intersection will enrich both JE and PC theory as we come to understand the directionality of their association (including the possibility of a reciprocal relationship).

As we have explored emergent technology, theory, and practice, we hope that we have provided researchers with meaningful new ideas for study. We hope that we have similarly provide practitioners with ideas for increasing JE and reducing the probability of PC breach or the impact of breach.

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Chapter 10

Strengthening the Psychological Contract Through Talent-Enabled Assessment Journeys: An Employee-Experience Guide



Marais S. Bester and Ederick Stander

10.1 Introduction

The expansive evolution of technology and digitisation has fundamentally shifted the Talent Management landscape. The rate of change brought about by technology has led to large-scale disruption of traditional business and management models, and the HR function has been placed before a novel challenge: become more agile, put in place mechanisms for responsiveness and leverage the opportunities brought about by a new digital era (Akhtar, Winsborough, Lovric, & Chamorro-Premuzic, 2019; Mihalcea, 2017).

Larkin (2017) comments that the digital disruption in HR represents the single largest structural transformation the industry has experienced in the last number of decades. To navigate the new world of work, HR professionals have had to lead change, become comfortable with ambiguity and cut through complexity to provide value-adding solutions to their organisations (Boroughs & Palmer, 2016; Laine, Stenvall, & Tuominen, 2017). Nearly a decade after the so-called “war for talent” concept first emerged, exponential technologies have become commonplace in organisations (Larkin, 2017). This includes artificial intelligence (AI), big data, digitised learning, open-source training resources, the gig-economy and hyper-connectivity (Gulliford & Dixon, 2019; Rathi, 2018).

It has introduced an additional burden to HR professionals, who have had to create compelling employee experiences and build employer brand whilst coming to grips with the increasingly digitised world of work. The HR fraternity has a new and undefined challenge: How does it support the business in making purposeful talent

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decisions through progressive assessment and development protocols, leveraging and utilising the opportunities brought through technology, whilst safeguarding and promoting the integrity of traditional Talent Management principles, such as the psychological contract?

Bersin and Chamorro-Premuzic (2019) argue that talent assessment has developed rapidly; with organisations mandating accuracy and unbiased decision making to ensure competitive advantage in a fiercely contested marketplace. This view is shared by Sivathanu and Pillai (2019); who delineate the increased emphasis on quality talent assessment processes to promote organisational interests and enhance performance. Through technology, the talent assessment function is faced with a number of new opportunities, including scaling of reach, a more uniform and consistent approach, integration of various business processes and reducing costs through lowered administrative and logistical expenses (Landers & Behrend, 2017; Mihalcea, 2017; Morelli, Potosky, Arthur, & Tippins, 2017). Technology introduces new possible methods for talent assessment, providing potential value at the individual, group and organisational level (Larkin, 2017).

HR is faced with a new and exciting prospect: leveraging technology for talent assessment in a way that supports mobility, accelerates decision making and providing the business with key insights (Mihalcea, 2017). From an analytics perspective, technology is putting forward new possibilities to strengthen the role of HR in strategic decision making by enabling robust and novice people analytics. This is summarised by Rasmussen and Ulrich (2015, p. 236): ‘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’.

The potential value of technology and digitisation within the domain of strategic HR management is undisputed. However, its best practice application in talent assessment remains largely unguided. Little work exists to guide practitioners in the methodical and ethical application of next generation talent assessment protocols (Orrù, Monaro, Conversano, Gemignani, & Sartori, 2020). This presents a real problem, as it provides ground for the diminishing of the psychological contract. Deas (2019) comments that a key emerging issue for research is the relationship between psychological contract fulfilment and the adoption of digital talent management strategies. This view is echoed by Dery, Sebastian, and Van Der Meulen (2017), who observes that digital innovations will progressively form a more influential role in employee experience in the future, with research required to better understand factors that drive enhanced employee connectedness and satisfaction.

10.2 Chapter Objective

In this chapter, the authors explore the critical interface between technology and digitisation, talent assessment, employee experience and the psychological contract. The purpose of this chapter is to put forward best-practice guidelines, guide

perspectives on work already done within this domain and shape early thinking around the need for best-practice protocols. The chapter explores contemporary talent assessment practices through the lens of the psychological contract with specific emphasis being placed on the employee's experience. The chapter builds on the available psychological contract literature by examining the role that HR practices and procedures play in building trust in the organisation's intentions and provides an overview of digitally enabled talent assessments and their impact on the psychological contract. The chapter culminates by providing a framework which scholars and practitioners can utilise to inform future ethical and fair talent management and research projects.

10.3 Trust in Human Resource Practices and the Psychological Contract

Key elements of the psychological contract that differentiates it from the traditional employment contract is that it is typically informal and not written (Singh, 2019). It could be based on a common understanding or promise and is not legally binding. Subsequently, a positive psychological contract is dependent on a high-trust relationship (Rehman, Ali, Sajjad Hussain, & Zamir Kamboh, 2019). It is the association of trust to positive behaviours supporting the accomplishment of organisational objectives which resonates with the central premise of the HR function, it being concerned with constructing trusting human relations within an organisational context in order to optimise performance (Supramaniam et al., 2020; Tzafirir, 2005). However, if the HR function fails in its mandate to communicate trust on behalf of the organisation, the psychological contract would be negatively impacted which would mean dire consequences for performance (Roehl, 2019). It should be noted that the relationship between trust and the psychological contract is complex and can be perceived through a variety of different lenses. Trust can be seen as both a correlate and antecedent, factor and a result of the psychological contract.

One party needs to trust the other to deliver on responsibilities and it is through the regular fulfilment of these responsibilities that trust is built over time (Coyle Shapiro & Conway, 2004). Rousseau and Greller (1994) state that HR management and processes play a key role to facilitate the enhancement of the psychological contract. Suazo, Martinez, and Sandoval (2009) support this theory by arguing that one of the key roles that the HR function plays is to communicate the psychological contract on behalf of the organisation and management in particular. In turn, Nishii, Lepak, and Schneider (2008) found that when employees perceive the practices, processes and tools that HR utilise to enhance their wellbeing, improve quality and support their careers, it would enhance the trust relationship. Conversely, when HR practices, processes and tools are perceived to be unfair or increase management control it is viewed negatively, resulting in reduced exchanged and lower trust (Rodrigues & Guest, 2013).

HR finds itself in a peculiar position, as it is often the function responsible for building trust on behalf of the organisation (e.g. career support and wellbeing support), but could also be seen as a function which represents a breakdown in trust (e.g. redundancy and disciplinary activities) (Welander, Astvik, & Isaksson, 2017). Prior trust in HR practices cannot only shape the extent and nature of the psychological contract and the related interchange; it can also influence perceptions of psychological contract breach. Levels of trust influence the perceptions of whether a breach had taken place and how the respective parties respond to the breach (Faruk, 2019; Robinson, 1996). Trust can even influence an understanding of why contract breach has occurred. A high-trust environment allows both employees and employers (as represented by HR) to be more tolerant of the occasional breach especially when plausible reasons can be provided on why the breach had taken place.

Researchers postulate that trust is a result of the psychological contract (Rehman et al., 2019). In a meta-analytic review Zhao, Wayne, Glibkowski, and Bravo (2007) found that contract breach was related to lower trust levels between the employee and the employer and, since contract breach and contract fulfilment is measured along a continuum, contract fulfilment is related to higher trust levels. Whilst low trust levels represent a significant consequence of a breached psychological contract, researchers found that trust could also act as a moderator of the relationship between psychological contract breach and undesirable behavioural outcomes (Faruk, 2019; Robinson, 1996).

Whilst using a large sample of 3109 professionals working across multiple industries and multiple geographies, Guest and Clinton (2011) explored the findings by Robinson (1996) by examining the impact of HR practices on the psychological contract. Their research showed that the prevalence of more professional HR practices had a strong positive relationship with both the fulfilment and nature of the psychological contract. They also established that, whilst controlling for individual, organisational, geographical and industry factors, both the nature and, more specifically, the fulfilment of the psychological contract was strongly related to the perceptions of trust and fairness of HR practices. In the same study, Guest and Clinton (2011) found that fair treatment by HR and trust in HR were related to higher levels of job satisfaction, turnover intention, work-related anxiety, and organisational commitment.

Guest and Clinton's (2011) moderation analysis showed that trust had a significant impact on the relationship between the nature and content of the psychological contract, as reflected in the promises made by HR, and employee's turnover intention, job satisfaction and organisational commitment. In lower trust environments, these employee outcomes were higher when the psychological contract had more content. Guest and Clinton's (2011) results also showed that when HR fulfilled their responsibilities towards the psychological contract, higher levels of organisational commitment were reported within low trust environments. These findings indicate that it is important to embed a good psychological contract, as communicated by HR, on behalf of the organisation, where levels of trust are lower.

Clinton and Guest (2014) established a relationship between psychological contract breach and staff turnover. They also found that trust and fairness independently

fully mediated the relationship between psychological contract breach and staff turnover with fairness having a stronger influence than trust. They established that trust had a significant impact on fairness which reemphasised the impact that trust has on the relationship between staff turnover and psychological contract breach. It is thus very important that HR utilises processes, procedures and tools that reinforce trust and fairness within the organisational context.

When psychological contract breach takes place, it is often perceived as a result of reduced trust levels, but the extent to which this takes place is dependent on the nature and circumstances for the breach and how this was communicated (Rehman et al., 2019). For example, if the contract breach took place as a result of an economic crisis and this reason was clearly communicated, then it may be understood that the contract breach did not negatively impact trust. However, if the practices that HR utilises are deemed unfair and not in alignment with promises that were made, then it would negatively influence trust.

Guest (2004) argued that when the psychological contract is used to examine and understand the nature of the complex and dynamic employment relationship, then it is not enough to merely describe the promises and commitments that have been made. It is more important to examine whether the promises have been kept, that practices are seen as fair and whether the respective parties trust each other to keep promises in the future. Perceptions of fairness is specifically important as situations may arise where promises made to certain parties may be seen as more favourable than promises made to other parties. This reinforces previous research on reference group theory which indicates that social comparisons play a significant role in the state of employment relationships (Hyman, 1942; Pekrun, Murayama, Marsh, Goetz, & Frenzel, 2019).

Trust, fairness and the fulfilment of the psychological contract, all of which are often communicated by the HR function, are closely related and co-exist. Research suggests that it is a multi-faceted and even fragile relationship that is based on continuous interaction, behaviour, promises and expectations (Bulińska-Stangrecka & Bagińska, 2019). The next section explores how HR can utilise modern, fair and ethical assessment techniques to enhance the psychological contract.

10.4 The Expansion of Modern Talent Assessment Practices and the Psychological Contract

Measuring and predicting human behaviour within the work context has always been challenging. Several quantitative and qualitative measures of human behaviour have been developed over the past decades. The rapid advancement of technology has meant that researchers and practitioners are able to measure human cognition, emotions and behaviour more objectively and more accurately (Morelli et al., 2017). However, there are numerous assessments, which are highly technologically advanced, that have not been properly validated which can potentially do significant

harm to the delicate psychological contract between employees and their employers. Trust in assessments play a significant role in how the HR function communicates its commitment to the psychological contract to employees.

One of the most significant challenges in quantitative psychology and measurement concerns the integration of technologies and computational techniques into standards where both facilitators and recipients of the assessment tools can trust the outcomes (Morelli et al., 2017). If the outcomes cannot be trusted, then significant harm could be done to the psychological contract. Due to this risk, literature has alerted researchers and practitioners to the need for deep evaluation of the measurement properties of assessments (Schmidt, Oh, & Shaffer, 2016).

Using accurate techniques to measure and predict job-related performance goes a long way in building trust in the assessments as well as their outcomes (Mislevy, 2016). Distrust in assessment data can result in psychological contract breach. It is thus paramount that practitioners can prove the scientific rigour of various assessment techniques by highlighting the reliability and validity of the instruments. Reliability is concerned with the assessment's accuracy and the amount of trust that can be put in the assessment's outcomes (Dick & Hagerty, 1971). Validity, in turn, is concerned with the correct application of the assessment tool or technique (Dick & Hagerty, 1971). However, when it comes to trusting assessment results, organisations and assessment users are often more interested in the assessments' practical value, which is also known as the assessment tool's utility (Schmidt et al., 2016). Assessment utility is determined through understanding the tool's predictive validity i.e. the tool's ability to predict, for example, future job performance, job-related learning and an employee's ability to adapt to complexity (Schmidt et al., 2016).

The predictive validity coefficient is directly proportional to the practical economic value (utility) of the assessment method (Schmidt et al., 2016). The usage of assessment methods, with increased predictive validity, lead to substantial improvement in employee performance (as measured by productivity output, financial output and speed of learning new job-related skills (Hunter, Schmidt, & Judiesch, 1990). When HR practitioners can prove that the assessment techniques significantly predict performance, it increases the trust that those affected by assessment results (e.g. management and employees) have in the output of assessments. However, if there is a poor relationship between the assessment output and job-related performance, it may result in a distrust in the assessment which could even lead to psychological contract breach. This is especially true when the assessment tool is used as a vehicle to communicate the psychological contract on behalf of the organisation.

It is important that when assessment developers and researchers create new forms of assessments they emphasise the predictive validity of the assessments in order to communicate the fulfilment of the psychological contract (Schmidt et al., 2016). Facilitators of assessments in organisations, such as Industrial Psychologists and HR practitioners, constantly need to monitor the utility of assessments. The first hurdle new assessment techniques must cross, in order to build trust in both the

assessment developer and the organisation's intentions, is the practical significance of the assessment outcomes. The section below explores the most popular contemporary assessment techniques, the amount of trust that can be placed in their outcomes, a theoretical review of their ability to predict work performance and ultimately influence the psychological contract.

10.4.1 Realistic Job Previews

Realistic Job Previews (RJPs) are typically placed on the organisation's career website to provide the applicant with more information about the job that they are applying for (Chehade & El Hajjar, 2016). RJPs are often positioned as scripts, videos, questionnaires (with person-job-match outputs), animations, virtual tours and/or avatars that allow the applicant to make a more informed decision about their fit to the organisation and/or job. The RJP allows the candidate to do a self-assessment which enables them to make an informed decision about their employment with the organisation. The RJP is one of the first steps that the organisation takes towards communicating their commitment to the psychological contract with the employee (Bilal & Bashir, 2016).

RJPs help form bonds and build mutual trust with candidates, which could contribute to a lower turnover ratio and more engaged employees (Chandani, Mehta, Mall, & Khokhar, 2016). The turnover of new hires can occur when they are unpleasantly surprised by an aspect of their job, especially if that aspect is important to them (e.g. unpleasant working environments, inflexible schedules and unreasonable management) (Pandey, Singh, & Pathak, 2019). New hires may even feel cheated if the job requirements or environment does not align with their expectations or what was communicated to them during the recruitment process.

RJPs can potentially save organisations hundreds of thousands of dollars by making sure only applicants that meet the minimum skill and behavioural requirements partake in the final stages of the job application process. RJPs, in the form of questionnaires for example, require applicants to do a bit more work than just clicking on an 'apply' button. This acts as an excellent sifting tool as the talent pool will mostly include candidates who are more motivated to engage with the organisation. Applicants report that they appreciate organisations who are transparent with them about their likely fit to the organisation, which ultimately builds trust in the organisation's intentions (Pandey et al., 2019).

A quality RJP plays a significant psychological role in communicating the organisation's intentions. If the promises do not meet the expectations of the employee, it can cause dissatisfaction and lead to dysfunctional organisational outcomes. It is thus very important for organisations to be realistic about the content of their RJPs in order to enhance the psychological contract.

10.4.2 Cognitive Ability Assessments

Cognitive ability assessments are still the most popular assessments used in personnel selection and development as they have the highest validity and lowest application cost (Schmidt et al., 2016). The theoretical evidence available for cognitive ability assessments that predict job performance is stronger than any other method of assessment (Schmidt et al., 2016). Cognitive ability assessments are also the best predictors of acquiring knowledge and skills on the job (Schmidt, 2002). It should also be noted that the theoretical foundation is stronger for cognitive ability measures than any other forms of employee assessments with thousands of studies exploring the theoretical elements and validity of the construct over the past 100 years (Schmidt et al., 2016). The theoretical understanding of what is measured by a cognitive ability assessment is therefore much clearer than other constructs. Online administration and scoring and norming technology such as Computer Adaptive Testing, Item Response Theory and Linear on the Fly Testing is allowing for a more positive candidate experience and the mitigation of human error.

Some studies have, however, found that cognitive ability assessments may adversely impact certain groups which could negatively impact the trust and perceived fairness of the assessments (Ployhart & Holtz, 2008). In one American study, for example, very large differences that demonstrate statistical favourability of White candidates over Black candidates ($d = .99$), medium to large differences favouring White candidates over Latino candidates ($d = .58$ to $.83$), and small differences favouring Asian candidates over White candidates ($d = -.20$) (Ployhart & Holtz, 2008). Meta-analytic research indicates that, while male and female candidates differ in some specific abilities, there is little or no adverse impact between cognitive ability assessment scores between genders (Ones, Dilchert, Viswesvaran, & Salgado, 2017). Limited research exists on the adverse impact related to other demographic categories.

Despite some evidence related to the adverse impact of cognitive ability assessments, the scientifically proven predictive validity and strong theoretical framework of these assessments makes it easy for practitioners to communicate trust in the results to end users. This supports the enhancement of the psychological contract. It is also easy for employees to trust the results from a face validity perspective. For example, if a numerical cognitive ability assessment is used for the selection or development of accountants, it is easy to see the practical value of the assessment results, which subsequently builds trust in the assessment. It is important for researchers and practitioners to monitor assessment outcomes in order to mitigate potential adverse impact.

10.4.3 Internet Activity

The process where social media and search engine providers analyse, predict and share information on user's internet activity in order to predict behaviour has been met with significant negative media attention in recent years. These software

providers use algorithms and machine learning techniques to understand and predict content interest and buying behaviour. In a study researchers from the Psychometric Centre from the University of Cambridge United Kingdom, collected a large amount of social media data (on over 50,000 participants) in order to predict personality of Facebook profile owners on the basis of their Facebook behaviour. This research resulted in a highly significant publication (Kosinski, Stillwell, & Graepel, 2013) where the researchers showed how Facebook-based behaviours and interests (i.e., 'likes') could be used to identify behavioural characteristics with significant accuracy (e.g. Christianity vs. Muslim $AUC = 0.82$; Democrats vs. Republican, $AUC = 0.88$). The data from this study has since been used, controversially, in some political campaigns that has negatively affected the trust and ethics associated with this type of assessment technique (Orrù et al., 2020). However, researchers state that when internet usage data is collected in ethical ways and for ethical purposes that it could yield highly accurate predictions of work-related behaviour such as Big Five Personality (Kosinski et al., 2013; Orrù et al., 2020). Researchers predict that quantitative behavioural profiles generated from social media and internet activity will become the norm in personnel selection in the future (Alexander, Mader, & Mader, 2019).

Employers already qualitatively screen applicants' social media activity to make inferences about integrity, fit and brand alignment (Albert, Da Silva, & Aggarwal, 2019). This has, however, been met with significant opposition as opponents argue that social media behaviour is not associated with work-related behaviour and that it can be seen as an invasion of privacy (Albert et al., 2019). However, as social media content is often in a public domain, recruiters may become more and more interested to access applicant profiles to reduce making a hiring mistake. Potential employees may perceive this as a breakdown in trust.

10.4.4 Assessment and Development Centres

Assessment and Development Centres tend to have very high face validity as a candidate is asked to complete a sample of the job by means of a simulation exercise. It is thus quite easy for management and employees to trust the content and output of the simulation exercises. However, the assessment results can greatly be impacted by the skill, experience and competence of the assessment administrators and assessors which has resulted in predictive validity coefficients ranging from relatively low ($r = .37$) (Schmidt et al., 2016) to relatively high ($r = .65$) (Schmidt & Hunter, 1998). This variance in predictive validity has resulted in some practitioners steering away from assessment centres completely. The usage of virtual Assessment and Development Centers (e.g. online in-basket exercises) have had a positive impact on standardising the administration process which has contributed to these types of assessments being perceived as more fair. However, the majority of virtual assessment centres still need to be scored by means of human intervention, which could potentially have a negative impact on the accuracy and fairness of assessment results if not done in a manner consistent with clear scientific frameworks, precise competence models and clearly defined end results.

10.4.5 Personality Questionnaires

Trait-based personality questionnaires are often used to predict work-related behaviour. Trait-based personality measures have average validity ($r = .40$) in predicting job-related performance (Schmidt et al., 2016). Managers and employees easily trust personality assessment results when the result correlate with actual observed work-related behaviour. However, individuals with low self-insight often struggle to accept personality assessment results (Colvin, Block, & Funder, 1995). As personality assessments measure preferred ways of behaving as opposed to actual learnt or displayed behaviour, candidates often struggle to accept the results which may result in them questioning the entire assessment experience.

Technology has allowed personality tools to be used to produce a person-job-match score (PJM) which indicates how well the candidate meets the job-related behavioural competencies. The benefits of PJMs are that they are able to provide a quick summary of the candidate's fit to the role which makes the decision-making process by the hiring panel much easier and quicker. PJMs have an average validity of .18 and scholars recommend that other constructs also be included into the overall PJM score to make it more accurate (e.g. skills, values, ability, and knowledge) (Schmidt et al., 2016). Practitioners should use PJM scores with caution as job-related behaviour tends to be more nuanced than just an overall score or someone's personality fit.

10.4.6 Virtual Reality Assessments

Assessments that simulate a 3D virtual world of work have become quite popular in the training and development space. However, research exploring the application of selection assessments in a virtual reality (VR) format is sparse, despite the VR format prominently featuring qualities that are broadly cited as benefits of assessments, such as realism and immersion (Hvass et al., 2017; Shin, 2017). The realistic properties of VR assessments make it easy for participants to relate the scenarios and outcomes back to their job requirements that subsequently make it easier to trust the assessment. Participants also report that the assessment experience is highly enjoyable which enables them to be more engaged in the process (Shin, 2017).

VR assessments are mainly used to upskill employees and have become very popular in industries such as healthcare, education and construction. They provide valuable information on employee's current skill levels and potential to attain new skills. These assessments are especially valuable in determining an employee's physical (i.e. psychomotor), cognitive (i.e. spatial awareness), situational judgement and adaptability skills (Jensen & Konradsen, 2018). More research is required on the predictive and construct validity of the usage of VR assessments for the measurement of more traditional recruitment and development constructs such as general cognitive aptitude and Big Five Personality traits. The financial investment

to acquire VR hardware and software is quite significant which may result in organisations questioning the potential return on investment.

10.4.7 Gamified Assessments

There is some evidence available that demonstrates the validity and utility of 2D game-based assessments in measuring constructs associated with cognitive ability and other job-related skills (Hummel, Brinke, Nadolski, & Baartman, 2017; Kiili, Devlin, Perttula, Tuomi, & Lindstedt, 2015; Shute, Ventura, & Kim, 2013). Preliminary research also supports the use of video game assessments to reduce adverse impact in the assessment of cognitive ability (Montefiori, 2016). An advantage that video game-based assessments have is the utility of these assessments in mitigating candidates' ability to fake or influence the results, i.e. deliberate attempts to influence assessment outcomes to yield socially desirable outcomes.

The technology utilised by gamified assessments such as Artificial Intelligence and Machine Learning allows for the accurate measurement of constructs and enhancement of the user experience (Sanchez & Langer, 2018). For example, some research has yielded promising findings pertaining to the reduction of construct-irrelevant variance unique to video game-based assessment formats, such as the development of a video game experience (VGE) scale to statistically account for differential levels of VGE in relation to performance on a video game-based assessment (Sanchez & Langer, 2018).

Whilst traditional assessment methods typically feature content that is clearly linked with the targeted measures as well as measures that are easy to manipulate (e.g. Likert scales), video game-based assessments may not be as transparent in their relationship to the targeted measure or as easy to manipulate. Conversely, assessment users may feel that the assessment lacks face and construct validity, as it may be difficult to link the assessment content to job requirements that may negatively affect trust in the assessment results. Whilst some users may enjoy the game-based experience, other, less technologically competent users may find the experience very daunting which may result in them strongly opposing this type of vocational assessment.

10.4.8 Situational Judgement Tests

Situational Judgement Tests (SJTs) present the applicant with complex situational workplace problems where they need to choose the correct response to the scenario based on multiple options (Sorrel et al., 2016). These scenarios are used to measure workplace skills and knowledge and or work-related behaviour. Online SJTs, that are administered and scored by the computer, have enhanced the user experience

and accuracy of the SJT results in recent years (Sorrel et al., 2016). Online SJTs can be presented by a text scenario, avatar or video. A meta-analysis showed that SJTs have a relatively low average predictive validity of .26 (Schmidt et al., 2016) which, together with their relatively high design and implementation costs, has resulted in many practitioners rather opting for more traditional forms of selection and development assessments. End-users easily trust the content and output of SJTs as they can be customised to reflect actual job requirements. These assessments also do well to give a realistic preview of what the job requires which enables candidates to make a more informed decision regarding their job applications. Many organisations effectively use SJTs as RJP to sell their employer value proposition and position their brand.

10.4.9 Performance Appraisal Assessments

During a traditional performance appraisal process, the supervisor evaluates work outcomes for subordinates against predetermined standards; identifies employees' work behaviours, strengths and weaknesses; and provides performance feedback for improvement and development (DeNisi & Murphy, 2017). Huy and Takahashi (2018), however, caution against this traditional approach of appraisal as the employee may feel left out of the process, may feel that the expectations are unfair and may not fully accept their performance or development targets. Huy and Takahashi (2018) advise that multi-rater tools such as 360s are used to gain the insight firstly from the employee and then from the employee's supervisor, subordinates and/or peers. A participative performance appraisal reduces the incongruence between employees and supervisors with respect to their contributions and returns, which reduces perceived failure to fulfil promises. Although researchers question the accuracy of performance appraisal data, as employees often ask their closest colleagues to complete their reviews which may skew the results, the argument can be made that it is still more objective than getting a single view from only the manager (DeNisi & Murphy, 2017). It is advised that performance appraisals should be combined with other more objective forms of assessments (such as cognitive ability assessments) to get a full view of an employee's potential. Using multiple sources of assessment during the performance appraisal process will help strengthen the psychological contract.

10.5 Technology and the Future of Talent Assessments: A Practical Framework

In this chapter, the authors acknowledge the exponential change and opportunity in talent assessment brought about by technology and digitisation, but equally err on the side of caution in highlighting particular challenges that may diminish important organisational dynamics such as the psychological contract (Orrù et al., 2020).

Mitigating for these challenges whilst embracing the opportunities brought about by technology require guidelines of application. We put forward a number of these for the consideration of scholars and practitioners as they scale their talent assessment efforts through technology.

10.5.1 Guideline 1: Creating a Compelling Candidate Experience

The role of candidate experience within the talent assessment context is key in strengthening of the psychological contract. Miles and McCamey (2018) argue that the experience of a candidate is directly related to facilitation of trust relationships with key stakeholders in the organisation, positive messaging to others about the organisation's value and purpose, and participating in key activities of the organisation in future. McCarthy et al. (2018) highlight several key metrics associated with candidate experience as part of talent assessment. They reference a number of studies, for example Career Arc, the recruitment and outplacement platform, who established that 72% of candidates who have had a bad assessment experience are likely to share that experience with others either directly or through social media network; LinkedIn, who estimates that a bad company reputation has an associated cost of 7.6 million USD per 10,000 employees of such an organisation; and Career Builder, who indicated that 42% of candidates who were dissatisfied with their assessment experience will never seek employment with the sponsoring organisation again.

It is therefore critical to ensure that technology and digitisation support the candidate experience, as opposed to diminishing it. This includes using media and technology that has the ability to reach a far greater and diverse audience, herewith promoting inclusivity and reach (Walford-Wright & Scott-Jackson, 2018), delivering intuitive and easy-to-use technology interfaces (Proaps, Landers, Reddock, Cavanaugh, & Kantrowitz, 2014), providing structured feedback and effective process management in real-time to the candidate (Ryan, Ali, Hauer, & French-Vitet, 2017), and creating compelling, rewarding and enjoyable experiences which continuously engages the candidate (Allden & Harris, 2013). Furthermore, the technology should assist in clearly communicating the purpose of the assessment to the candidate (Morelli et al., 2017), be designed in such a way that the candidate is able to raise questions (Morelli et al., 2017) and be clear on its compliance with data security measures (Chamorro-Premuzic, Akhtar, Winsborough, & Sherman, 2017).

10.5.2 Guideline 2: Ensuring Fit-for Purpose Application

A key pitfall that practitioners should avoid is using technology as a means in itself. Stander and van Zyl (2019) note that technology should support a strong underlying methodology and is an enabling tool that must be adopted within the framework of

a scientific and proven approach. Much work is still required in understanding best practice, fair and ethical administration of technology within talent assessment. For example, Dery, Tansley, and Hafermalz (2014) highlight that there is a lack of appreciation for the role of candidate competence in effectively engaging in digital assessment protocols. The important role of technology adoption, educational background and general comfort of candidates in using such aspects as gamification within talent assessment contexts remain largely under-researched (Buil, Catalán, & Martínez, 2020; Fetzer et al., 2017).

When adopting technology in talent assessment, key questions are to be raised, including:

- Does the technology adequately measure the underlying constructs we are interested in through the talent assessment protocol?
- Is the technology free of bias and can it be applied fairly and consistently throughout all participants in the assessment process?
- Is there scientific evidence of the technology delivering predictive validity in the specific talent decisions we intend to make based on the output data?

Adopting technology for the sake of adoption will weaken the integrity of the assessment process, herewith undermining trust and by extension the psychological contract. It is therefore important to utilise the appropriate tools, directly for the purpose of the outcomes sought to measure.

10.5.3 Guideline 3: Re-focus on Reliability and Validity

The advances in especially machine learning (ML), automation and artificial intelligence (AI) have repositioned the importance of scientific rigor in talent assessment methods. Whilst the history of such fields as Psychometrics include extensive research on predictive validity and reliability, these technologies have introduced new complexities. Gonzalez et al. (2019, p. 5) argue that there is a “paucity of empirical research that investigates the reliability, validity, and fairness of AI/ML tools in organisational context”. Hiring and promoting employees into specific job roles have, to a large extent, become even more complex with the introduction of AI and robotics (Bersin & Chamorro-Premuzic, 2019). The possibilities and future potential of AI and ML in making talent decisions are infinite, but at this stage in the history of the field much scrutiny, research and validation is required. This is made particularly challenging with the dual facts of practitioners being largely under-skilled in utilising these technologies, as well as the ever-changing nature of modern jobs (Bersin & Chamorro-Premuzic, 2019).

Several public case studies exist highlighting the relative immaturity of applications of AI in successful talent assessment. A recent example includes the multinational conglomerate company Amazon, who utilised natural language

processing and machine learning to fit prospective candidates to role profiles. Complex predictive algorithms were used to identify markers that could predict a candidate's competence to perform in particularly technical roles, such as software development. Over time it however emerged that gender bias existed in these systems, primarily due to the fact that the input data used to train the AI was strongly male dominated, herewith automating yet unfairly predicting lower success for female candidates.

Whilst the further pursuit of utilising these exponential technologies must be strongly encouraged, case studies such as the above highlight the importance of scrutiny, removing unfair biases at the inception stage, continuously monitoring and making sure input data is rigorous, well-researched, predictive and fairly representative without bias to any group.

10.5.4 Guideline 4: Data Protection and Compliance

A contemporary issue in the application of technology in assessment practice is privacy, data protection and legislative compliance. This is particularly relevant in talent assessments at scale, where candidates are often dispersed globally and operate in different local jurisdictions. Watson and Millerick (2018) write that the progressive expansion of data privacy laws globally has deeply impacted the way organisations manage and assess the data of their current and future employees. The General Data Protection Rules (GDPR) in Europe and Protection of Personal Information (POPI) in Africa are but some examples of legislative and policy actions taken to safeguard the integrity of personal information. When utilising technology in talent assessment, it is important to comply with both the spirit and the letter of these policies to promote trust and by extension the psychological contract with employees. Key indicators for the application of technology in talent assessment through technology include:

- Transparency in assessments, always safeguarding and promoting candidates' rights to equality, dignity and respect.
- Ensuring candidates understand which data is captured, what the data will be used for and how long such data will be stored.
- Ensuring and communicating to candidates the security and non-accessibility of data by unrelated third parties.
- Allowing candidates to request at any time the deletion of their data.
- Being non-intrusive and collecting data only for a stated objective of which the candidates are fully aware of.
- Ensuring candidate anonymity in cases where data is utilised for research and public dissemination.

10.5.5 Guideline 5: Integrating and Aggregating Talent Assessment Data

Al-Dmour, Masa'deh, and Obeidat (2017) argue that advanced HR Information Systems (HRIS) have redefined the strategic contribution HR can make from a data and analytics perspective. Organisations benefit from large quantities of data, allowing for more informed decision making (Chornous & Gura, 2020). Data is available across the employee life cycle, from on-boarding through performance management, reward and promotion (Al-Dmour et al., 2017; Masum, Beh, Azad, & Hoque, 2018). In this view, it is important to ensure the talent assessment is done within the ecosystem of the organisation's strategic objectives, supporting goals and allowing for integration with the various technology platforms on offer within the company. Simple examples include integrating talent assessment processes with applicant tracking systems for new hires, relating assessment data with indicators such as job performance history for the purpose of succession planning, and aligning developmental needs as identified in the talent assessment with the organisation's learning management systems and content. In line with the recommendations of Mislevy (2016), trust in the integrity and accuracy of assessment data is a crucial part of promoting the psychological contract with employees. This cannot be done if talent assessments occur in a vacuum, divorced from the data insights and value of other HR metrics. For true sustainability, talent assessment must form part of an ecology of HR data, predictive and future orientated in its application.

10.6 Implications for Theory

The chapter built on the existing body of knowledge related to the complex interplay between digitally enabled assessment experiences and employees' experience of the psychological contract. Emphasis was placed on the role that HR needs to play to ensure fair and trustworthy practices and policies which will support the organisation's efforts to establish a positive psychological contract with employees. A significant contribution was also made, in this chapter, to the current literature on digitally enabled assessment practices with specific focus being placed on the validity, reliability and utility of these practices. Talent assessment and talent management researchers are reminded to not underestimate the value of sound empirical research, user experiences and the impact on the psychological contract when developing and validating talent assessment tools and techniques.

The recommendations for responsible talent assessment processes in the future are many. Firstly, it is important to expand on the body of knowledge available in the literature on the best-practice use of talent assessment techniques, particularly where technological application is prevalent. The evolution of AI, ML, automation

and big data analytics propose a number of topics for research, especially as pertains validity and reliability. Scholars will have to expand on the available empirical evidence for these technologies in assessing employees, whether within the organisation or prospective. The opportunities through AI are vast, and it will likely transform the role of HR, from a transactional function into a business advisory role occupied with data science. Researchers will need to provide guidance and frameworks for practitioners to conduct validity and reliability studies within the application of these technologies. This is important in creating trust in talent assessment processes, particularly amongst candidates, who engage in an unwritten pact with the organisation to develop them and serve their best interests.

Much work is to be done in further scrutinising assessment techniques and its application. Research is required to understand the predictive validity of these measures within a complex, interconnected, and modern workforce. The methods need to be evolved in parallel with the expansion of the contemporary world of work, or risk becoming irrelevant, mistrusted by employees and ineffective in promoting the psychological contract. More modern training on these methods are required from reputable institutions, organisations and scholars. Agility in designing training will be needed, as assessments happen within a context of an evolving global society.

10.7 Implications for Organisational Practice

The chapter provided a practical framework which practitioners can use to strengthen the psychological contract by means of meaningful employee assessment experiences. The authors attempted to draw from their own practical experiences, feedback from other practitioners, research and best practice guidelines to develop this framework. Emphasis was placed on the important role that HR and more specifically talent assessment practices need to play in establishing a positive employer value proposition and employee experience. Employee satisfaction and engagement should be the fulcrum of all digitally enabled talent assessments experiences. The chapter highlighted the importance of assessment utility and using assessments for the right outcomes within organisations. Guidelines were provided to ensure that practitioners utilise digitally enabled assessments in a valid and impactful manner.

The chapter further reminder practitioners to only utilise assessments which have proved scientific validity and reliability data as there are numerous assessment developers and providers in the market who do not place importance on these scientific guidelines. Both practitioners and scholars should find opportunities to enhance their working relationships to ensure that more robust, ethical and scientifically validated assessment tools and techniques are utilised in practice. The chapter highlights the importance of developing digitally enabled assessment experiences which are robust in their ability to protect personal data. Personal data protection will play a much more significant role in the digitally centric world of work moving forward. Recommendations were provided in relation to using data from various digital

assessment sources to enable integrated talent management and employee lifecycle experiences. Within the world of ‘Big Data’, talent management would play a more significant role in future in terms of being a strategic business partner through the provision of unique talent data insights.

There are numerous recommendations that can be made to practitioners. At the policy level, much can be done to promote the psychological contract through modern talent assessment. Policies as relate to privacy, data protection and terms of service are primarily transactional, serving as a checklist of compliance with stated laws and procedures. The HR policies of the future will need to deliberately promote the well-being of assessment candidates, not only through non-infringement of basic privacy rights, but articulating the active promotion and expression of talent, fair opportunities, inclusivity and diversity. This must be followed up with real actions, executing strategies and tactics to continuously build trust in talent assessment processes. Continued transparency and communication to candidates will be key in this regard.

A further recommendation is the building of flourishing ecosystems, where talent assessment is not done in isolation but as part of an integrated effort to realise business value whilst promoting employees’ interests. This calls for multi-disciplinary research and collaboration, between the different specialist focus areas of HR, but also between HR and the business lines. The promotion of the psychological contract is not a burden for HR to carry alone. Rather, the entire organisation must subscribe to such development, building trust continuously throughout all parts of business processes.

Lastly, awareness of the various assessment techniques and its value must be created amongst employees. Special emphasis must be placed on the role of technology in applying these techniques. This will lead to better understanding, trust and ultimately strengthening of the psychological contract. Trust can only be fostered through transparency, and candidates cannot be expected to trust methods they are not well briefed on and acquainted with. The opportunities for research and developing practice in this field remain vast, and scholars will play a significant role in shaping thinking into the future.

10.8 Conclusion

In this chapter, we explored the application of modern talent assessment in the ambit of strengthening the psychological contract. This was done through three lenses. Firstly, we examined the implications of contemporary talent assessment methods and its effect on psychological contract. A synopsis of the psychological contract was provided, particularly as it has prevalence in an evolving and expansive world of work, characterised by change, technological advancements, and dynamism. The interplay in complex human relationships and dynamics within organisations were re-evaluated, asking questions of relevance for a modern workforce. The

custodianship of the HR function as a promotor of trust, fairness and ethics, towards fulfilment of the psychological contract, were examined. As a second focus area, the importance of validity and reliability, established concepts now being confronted with new and expansive applications, were explored. Modern assessment techniques, its application in the contemporary world or work and its relevance to the psychological contract were discussed in detail. Delineation of several assessment techniques, strengths and potential shortcomings, highlights a number of important themes for future research. Thirdly, a practical framework was put forward, suggesting guidelines for the application of technology in scaling talent assessments in global contexts, applying care in promoting the psychological contract through best practice uses and policy guidelines.

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Chapter 11

Pre-emptive Management of the Psychological Contract Through Personnel Selection in the Digital Era



Pfungwa Dhliwayo

11.1 Introduction

The concept of the psychological contract (PC) has been researched and studied for decades now. According to the seminal works of Rousseau (Rousseau, 1989, 1995; Rousseau & Tuoriwala, 1998), the concept of the PC centres on employees attitudes, their behaviour, and beliefs about the terms of exchange agreements with their employers. The PC is based on the norm of reciprocity in that employees exchange their effort in return for reciprocal benefits from their employing organisations (Blau, 1964; Gouldner, 1960).

Traditionally, two forms of the PC have been identified, the transactional PC and the relational PC (Rousseau, 1995). The difference between the two forms of the PC depends on whether the employment relationship is short-term or long-term, the contract terms are specific or loosely defined, the resources to be exchanged are tangible or intangible, and whether the rewards for performance are contingent or non-contingent (Liu, He, Jiang, Ji, & Zhai, 2020; Lu, Capezio, Restubog, Garcia, & Wang, 2016). Employees who hold their employers accountable for the transactional PC adopt the principle of reciprocity and expect their organisations to offer tangible and specific short-term rewards that are contingent on meeting certain performance levels and become their source of income. Conversely, employees who adopt the relational PC expect long-term employer obligations which include career development and job security based on loyalty and trust (Presti, Amelia, & Briscoe, 2019).

Employees expect organisations to fulfil their obligations, whether perceived or actual. Failure to fulfil such promises constitute PC breach. Since PC fulfilment has been linked to positive organisational outcomes like job satisfaction, organisational commitment, organisational trust, organisational identification, and intent to stay,

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which directly or indirectly lead to job performance, its breach is likely to result in negative organisational consequences. It is the subjective nature of the PC that makes it delicate because it primarily relies on the employees' perceptions of the reciprocity of obligations between them and their employers (Liu et al., 2020). It is, therefore, imperative for employers to understand their perceived obligations and how such obligations may negatively or positively affect organisational performance.

The advent of the fourth industrial revolution has propelled the world into the digital era, where organisations are transforming into smart and networked workspaces (Coetzee, 2019). The digital era has led to organisational and process efficiencies, has resulted in the transformation and disruption of some business models, threatened the survival of some organisations and created opportunities for others, but at the same time, leading to both career opportunities and economic and job insecurity for employees (Gan & Yusof, 2019). Resultantly, the fourth industrial revolution has altered the traditional organisational practice and perceptions of employee-employer obligations in terms of the nature of employment contracts, hours of work, social interaction, employee mobility, and career mobility (Presti, Pluviano, & Briscoe, 2018). The preceding has also altered the nature of the PC through the modification of the antecedents of the PC itself, requiring employing organisations to adapt their people management practices in ways that result in PC fulfilment, while reducing PC breach.

Industrial psychologists, human resources practitioners, and employing organisations should embrace the digital revolution and manage the PC in at least two ways. First, by avoiding promises that the organisations may not be able to fulfil, whether intentionally or unintentionally. Second, by covertly and overtly instituting processes and behaving in a manner that assists in shaping the potential employees' PC in ways that reduce the perceptions of PC breach and improve PC fulfilment. The management of the PC ought to happen at the personnel selection stage since selection provides the first opportunity for meeting potential employees and therefore plays an influential pre-entry socialisation role.

11.2 Chapter Objective

This chapter provides insights into the impact of the fourth industrial revolution on the PC. The chapter also suggests ways in which the personnel selection process can be used to pre-empt the management of, and positively influence the PC amid the opportunities and challenges introduced by the fourth industrial revolution. The literature and research have elaborated the nature of the PC independently from characteristics of the four industrial revolution. Still, the area of personnel selection and how selection can be used to manage the PC in the digital era is especially under-researched. The ultimate objective of the chapter is, therefore, to contribute to the PC theory by highlighting ways in which the PC can be pre-emptively managed at the selection stage to improve employee and organisational performance. The

chapter also seek to recommend areas of future research in relation to the corollary positions arrived at in terms of the selection and the management of the PC in the digital era.

In terms of the arrangement, the chapter discusses selection and the PC management in the digital era, followed by core conclusions and insights drawn from the discussion, to pave way for a discussion of the implications for organisational practice. The chapter then ends by recommending areas for future research.

11.3 Selection and the Psychological Contract Fulfilment

This section discusses ways in which the PC has been and will possibly be altered by the advent of the fourth industrial revolution. The section also offers suggestions on how the PC can be pre-emptively managed at the selection stage in the context of the digital era.

11.3.1 Economic Stability

As a result of the fourth industrial revolution, the life cycles of products, services and even businesses have become shorter because of improved efficiencies and as a result of changes to and disruption of business models (Gan & Yusof, 2019). It is interesting to note that in technology companies like those which use platforms to deliver service to clients, employees face economic instability (Liu et al., 2020). In particular, the shortened life cycles of products, services, and businesses have brought about the labour market characterised by the perceptions of short-termism with regards to employment itself and the employment conditions (De Jong, Schalk, & de Cuyper, 2009; Presti et al., 2019). Also, the employment and economic conditions within which the employees and organisations operate have also become precarious owing to the instability caused by both the general depression of the economy and the disruptions resulting from the advent of the fourth industrial revolution (de Jong et al., 2009; Presti et al., 2018; Shaw & Varghese, 2018). The features of the labour market mentioned above have profound implications on the PC fulfilment or breach depending on how the issues and the related promises are handled at the selection stage.

Against this background, organisations must avoid promising employees economic security from jobs because the disruption may either affect the ability of companies to meet employee obligations or the continuity of the businesses. Since employees may expect an existential work life, for the here and now (Liu et al., 2020), employers should concentrate on promising and fulfilling the actual remuneration and benefits to potential employees. Owing to short life cycles of products and services and even businesses, employing organisations should ensure that competencies like adaptability, ability to multi-task, and life-long learning are strongly

considered at the selection stage (Gan & Yusof, 2019; Shamim, Cang, Yu, & Li, 2016). Clarifying the expectations by either party at the recruitment and selection stage assists in mitigating the undesirable effects of PC breach since the transformation and disruptions in business models are likely to increase in sympathy with the development in technology. The selection stage, as the first and vital stage of the pre-entry socialisation, must be used to form the foundation of the positive perceptions of the PC fulfilment.

11.3.2 Career Stability

The fourth industrial revolution has brought about efficiencies in the production of goods and the provision of services, where products, information, services, and materials can be shared and distributed in more efficient ways (Saniuk, Grabowska, & Gajdzik, 2020). Also, the fourth industrial revolution variables, which include the internet of things, cloud computing, cognitive computing, and cyber-physical systems (Li, Xu, Xu, & Li, 2018), have resulted in the elimination and transformation of some careers, leading to career instability. The instability of careers comes from at least two primary sources. First, the rapid change in information technology and the automation of work processes will render some careers redundant in short spaces of time. For example, the World Economic Forum (2018) predicts that some careers will be redundant by 2022, while others will remain the same. Second, as the World Economic Forum (2018) predicts, new careers will emerge by 2022. Thus, making a blanket promise of career stability to potential employees may lead to perceptions of PC breach, whether transactional or relational, and is likely to be detrimental to both individual and organisational performances.

Employers may, however, manage the unfavourable effects of the PC in a three-tier approach to career promises at the selection stage. First, they should promise professional development to support career changes for people occupying careers that may be of strategic importance, but are likely to change or become redundant in the foreseeable future. To assist in the professional development, organisations must consider employing people who are adaptable and who have the ability to multi-task. Second, employers should focus on employing people who can adapt to new careers and capable of being developed for non-existent careers that might arise in the future. Organisations should therefore employ people who can metamorphose in terms of career orientation. Third, organisations should only promise career development to people who will occupy careers that are likely to remain stable in the foreseeable future. However, such promises must always be made with a disclaimer owing to the unpredictable nature of business models and careers in the digital era.

11.3.3 Boundaryless and Protean Career

As a result of the fourth industrial revolution, several careers in many countries, especially in the European Union, have become boundaryless (Presti et al., 2019). Boundaryless careers are careers that have no temporal or spatial limits and are both intra-organisational and inter-organisational (Sullivan & Arthur, 2006). In other words, as a result of the enabling technology, employees can perform multiple careers across different companies, countries, and continents. Besides, owing to the aspects of the fourth industrial revolution like internet connectivity, the traditional hours of work have shifted, and employees can opt to work around the clock. Moreover, work-home boundaries have been disrupted by the accelerated digital revolution and internet connectivity. The fourth industrial revolution has therefore accelerated the growth of boundaryless careers and the rise of contingent work including super-tempers and independent contractors. The result has been the emergence of alternative forms of the PC and career attitudes which selection practitioners need to take cognisance of.

Instead of focusing on long-term careers, career development with one company, employees now look at more transactional career development. In this type of career development, employees or potential employees assess the companies in terms of their ability to provide satisfying existential careers characterised by short-term, temporary, and transactional exchanges between the employer and the employee. Employees have resorted to the concept of protean careers (Arthur & Rousseau, 1996; Hall, 2002), where they entirely and proactively take ownership of their career development autonomously. The autonomously career development results from the motivation is to improve personal career development, competence, and success, to the extent that such employees become marketable to be eligible for boundaryless careers. The concept of a protean career is positively associated with a variety of positive outcomes for the employee, which include employability, career satisfaction, better career insight, and career success (De Vos & Soens, 2008; Presti et al., 2018).

The protean approach to career management may, however, not be palatable to organisations which may be driven by employee career development only aligned to their (organisations) specific long-term objectives (Kost, Fieseler, & Wong, 2019). Commenting on gig workers, Kost et al. (2019) point out that since employees are likely to work for multiple organisations, there is likely to be diffusion of career development responsibility between organisations and also between the organisations and the employees. This discourse provides an opportunity to design employee selection promises that reduce the probability of PC breach to ensure the engagement of the employees to their employing organisations, post-selection. For selection practitioners and employers alike, it is essential to acknowledge the protean and boundaryless nature of careers and come to terms with the fact that the employees who might have been engaged for full-time work may not exclusively be working for their particular organisations. Acknowledging the reality of boundaryless and the protean career will assist in clarifying expectations expressly in formal

employment contracts, or impliedly and covertly through other forms of pre-employment assessment and communication. Managing the career development expectations and the nature of the working relationship is better done at the selection stage to avoid performing damage-control activities post-selection. If the issues arise post-selection, it brings about mistrust and perceptions of PC breach, which negatively affect the performance of the employee and the organisation.

11.3.4 Loyalty

Traditionally, organisations have engaged in a variety of people development and retention initiatives to achieve continuity by retaining skilled and capable employees (Shaw & Varghese, 2018). The notion of people-based business continuity starts from the selection stage. When employers assess potential employees' fit with their organisations, they often consider job performance capability and the expected longevity of stay with the organisation. The assessment of the fit at the selection stage will then determine the people management initiatives aimed at retaining the employee and enculturating loyalty and long-term employment. The fourth industrial revolution may, however, have altered some of the traditional human resources practices and antecedents of the PC, such as loyalty.

As employees become enabled to work from anywhere, any time of the day, for more than one employer, or may choose long-term or contingent employment arrangements, the issue of loyalty and its associated aspects of organisational identification and mutual trust (Liu et al., 2020) become unimportant for the employee. The lack of trust may also be exacerbated by the potential disruption and efficiencies that the fourth industrial revolution may have on organisations, shortening their life cycles or improving efficiencies and thereby reducing the need for human intervention. Under such circumstances, promising loyalty and instilling organisation identification or mutual trust at the selection stage almost becomes a taboo for progressive organisations seeking to embrace the changes caused by the fourth industrial revolution. Asking questions like 'how long do you think you will stay with this organisation?', or 'where do you see yourself after five years in this organisation in terms of career progression?' may put-off the potential employee. The potential employees may be put-off because the traditional employment based on loyalty is being, or has already been replaced by a new exchange arrangement. The new exchange arrangement is characterised by a relationship where employees only engage when employers provide them satisfying career development to match the dynamic work environment and meet their immediate reward commitments (Presti et al., 2019). Such rewards ought to address the here-and-now of the immediate present rather than focusing on the there-and-then of the distant future.

It is also crucial for organisations to realise that unless they adapt their business models, products, and their employee career development, they may experience short life cycles, with a proclivity for disruption or extinction as a result of the fourth industrial revolution. Successful products and organisations today may be

non-existent in future. According to the World Economic Forum (2018), careers that are lucrative today may be redundant in future, and the future is limited to about 3–4 years. Hence, at the selection stage, instead of promising loyalty, employers must focus on putting their cards on the table, by informing potential employees about the dynamics of the digital age. The digital age brings about the changing nature of organisations and their products and services, and the need for employees to adapt their careers and skills to the rapidly changing nature of organisations. Discussing and agreeing on the principles mentioned above at the selection stage will assist employers in considering the current view on issues of loyalty and in pre-emptively managing the expectations to get the best value out of the employee. At the same time, the employee also gets the best value out of the employment relationship. The result will be full engagement to the vision and mission of the organisation and improved organisational performance.

11.3.5 Organisation Identification

Research has shown that organisation identification mediates the relational PC and task performance (Restubog, Hornsey, Bordia, & Esposito, 2008; Sverke, Låstad, Hellgren, Richter, & Näswall, 2019). Organisational identification occurs when employees perceive to be part of or affiliated with their employing organisation (Mayhew, Gardner, & Ashkanasy, 2010). Thus, organisational identification needs to be initiated at the selection stage to build mutual trust. In line with the preceding, employees' need for affiliation emanates from their need for belongingness, which is a personality attribute. In turn, organisational identification results in better employee engagement which leads to better task performance (Sverke et al., 2019). However, because of the digital age that we are living in, such a need for affiliation and organisation identification may appear to be taken away as a result of limited physical interactions as people work and connect through information and communication technology (ICT) platforms. As demonstrated above, organisational identification and acceptance may be a concern for most employees (Restubog et al., 2008). It is therefore important for employers to signal how the need for affiliation in terms of organisational identification and acceptance will be guaranteed through the use of ICTs, and this should be initiated at the selection stage.

There are many ways in which such signals may be sent to the potential employees. For example, in the digital era, there is sufficient information sharing to the extent that some employers may fear that their confidential information may end up in public. Thus entrusting potential employees with confidential company information like sharing of organisation strategies and financial performance information should be exercised, though with caution, during the selection process. Employers must also be willing to provide controlled access to other company information through company technology platforms so that potential employees may feel the experience of their potential employers. Implementing such initiatives at the

personnel selection stage is expected to build a formidable base for PC fulfilment through organisational identification.

11.3.6 Type and Form of Rewards

Research shows that the transactional PC is better related to task performance for employees with low tenure (Liu et al., 2020). According to Liu et al. (2020), people with low tenures may harbour perceptions of the short-termism in terms of careers, which in turn, may result in the perception of existential work life, that is, getting contingent rewards for the here and now. Thus, the type of rewards that employers promise or offer at the selection stage have a significant influence on the extent of the PC fulfilment and job performance.

Against this background, it is therefore vital for employers to adopt a two-pronged approach to deal with the issues mentioned above at the selection stage. In one way, they should promise contingent guaranteed rewards and contingent short-term incentives (STIs) to relate to the existential perceptions of the potential employees caused by their perception of economic instability. Such STIs may include instituting policies on the periodic payment bonuses that are contingent on employee productivity to relate to the transactional PC perceptions of newcomers. In another way and conversely, promising long term incentives like share options, share appreciation rights, other deferred payments and post-employment benefits like retirement annuities may not be appealing to some potential employees. The lack of appeal may result from doubts about the existence of their (employees') careers and their employing organisations as a result of the changes brought about by the digital era. As they stay with the organisation for relatively prolonged periods, employees may start to gain the trust for the long-term existence of the organisation and become amenable to long-term incentives.

11.3.7 Length of Service

As mentioned earlier, research shows that organisational identification mediates the influence of PC fulfilment on task performance (Restubog et al., 2008). The two types of the PC, that is, transactional and relational PC fulfilment, have different levels of influence on organisational identification depending on the length of service (Liu et al., 2020). Transaction PC fulfilment has a stronger influence on organisational identification and therefore, task performance for people with low job tenures than for those with high job tenures (Liu et al., 2020). Liu et al. (2020) demonstrated that transactional PC fulfilment is essential, especially in the first year of service. The relational PC fulfilment is more effective in motivating employees to achieve high-quality work for people with higher job tenures. The preceding is regardless of whether or not the job tenure is with one company.

From the research done by Liu et al. (2020), the changes in the nature of careers as a result of the fourth industrial revolution makes the transactional PC fulfilment more critical to people with low job tenures. The reason is that such people have limited job experience and therefore, may not understand how companies respond to the different stages of their life cycles and to the demands of the digital revolution. People with longer job tenures, however, might have more experience of seeing companies successfully metamorphosing in sympathy with the opportunities and challenges posed by the fourth industrial revolution. Thus, for highly tenured employees, long-term relationships based on the fulfilment of the socio-emotional, developmental and career needs may be critical factors influencing their norm of reciprocity. At the selection stage, it is therefore important for employers to treat people of different tenures differently in terms of promises, whether covert or overt. New entrances of people of low job tenures should be promised transactional type exchanges in the form of tangible and immediate benefits. Employees with long job tenures may be promised relational considerations like career development, other long-term benefits or loyalty, trust and the like. The differential treatment of employees from long and short tenures is crucial for effective PC fulfilment and job performance for the different strata of potential employees, post-selection.

Generally, employee tenure is related to employee chronological age, meaning that the PC antecedents affecting tenure may be similar to age group differences on tenure. There may be situations where there might be no relationship between tenure and age, meaning that the issue of age groups versus tenure and the effect of the fourth industrial revolution may need to be explored separately, and is discussed in the next section.

11.3.8 Age

Employers have to take cognisance that different age groups respond to the digital revolution in different ways, though this is a transitory assumption (Shanmugam, 2016). Sharif, Wahab, and Sarip (2017) report that there are many older people on the labour market especially in the European Union, where organisations prefer to employ older people for continuity and passing on knowledge to the younger employees. While older employees are more inclined to the relational PC fulfilment, react lesser to PC violation, may regulate their emotions better, younger employees may behave oppositely (Bal & Smit, 2012; John & Gross, 2004; Ng & Feldman, 2008).

The traditional age-group differences in the PC is further complicated by the advent of the fourth industrial revolution and in particular the degree of adopting technology as a business and life enabler for the different age groups. For example, older employees are more inclined to traditional ways of work where they may be more comfortable with working from the office, preferring stable and life careers. Older employees may also be less adaptable than the younger and technology-savvy employees who can easily and quickly adopt information technologies (Broady, Chan, & Caputi, 2010). The older employees have until relatively recently been

using computers and information and communication technologies less (Fernández-Ardèvol, 2011; Milliken, O'Donnell, Gibson, & Daniels, 2012). Cognisant of the preceding, employers must begin to shape the PC, especially of older employees so that they prepare to embrace the changing nature of work and careers as a result of the fourth industrial revolution. In particular, the focus at the selection stage should be on how the older employee may adapt to the new demands of the digital era. Selection should also focus on the ever-changing nature of careers, and the need for employees to multi-task and continuously improve their knowledge and skills, in most cases in new careers that they may have never imagined they will pursue.

11.3.9 Recruitment

The PC can be influenced at the selection stage by covertly shaping the recruitment processes in a way that psychologically pre-empt or prepares the potential employees on the expectations of the organisations. The selection processes should entail efficient decision making and prompt feedback to the candidates on the stage of the selection process and the hire and reject decisions. Covertly, recruitment has to be online, utilising blockchain technology that ensures efficiency and remote interaction between the potential employees and the organisations (Gan & Yusof, 2019). The remote access prepares the potential employees on the working life arrangements like remote working, working from home, and online social interaction, which are essential in building the relational aspect of the PC.

Both overt and covert selection processes should focus on the expected skills and attributes required for the effective individual performance in the context of the fourth industrial revolution in line with Shamim et al. (2016). Shamim et al. (2016) state that the employers should overtly, through interviewing and covertly through psychometric testing, assess for the skills required in the digital era. These skills include openness to experience, variety seeking, creativity, active imagination, intellectual curiosity, learning orientation, and flexible thinking. Assessing for the skills mentioned above prepares the employees on the expectations of the organisations, which in turn, shapes the exchange expectations between the employee and the employer in terms of the task fulfilment and the PC fulfilment.

Besides, the rigour of the selection process can be used to covertly shape the PC, both relational and transactional. Employers should simulate the working environment, mode of interaction, and reward systems, through the selection process to pre-empt the expected mode of working, post-selection. The simulations should focus on remote working, achieving results through virtual teams, and managing, motivating and developing virtual teams, online collaboration, and the associated rewards that come with effective performance in the digital era. Such simulations can assist to prepare the employees on the expectations of the organisation in terms of both the performance and the reciprocal tangible and intangible rewards contingent to meeting the organisational expectations. Also, such covert and rigorous selection procedures may assist job candidates to self-select by deciding on whether

or not to join specific organisations. Self-selection and organisation selection may assist in weeding out candidates who may be susceptible to the PC breach, especially in the context of the digital era.

According to Shaw and Varghese (2018), skills and capabilities will matter more than educational qualifications in the digital era. Thus, by overtly assessing for the relevant skills through the selection interview and by covertly reducing emphasis of, or being silent on the assessment of educational and academic qualifications, employers may begin to shape the PCs at the selection stage by directing the job candidates to areas that matter to the organisations. The emphasis on the areas that matter is expected to show the candidates what they have to bring to the table to receive reciprocal rewards. Building a foundation of such exchanges at the selection stage assists in reducing the disparity between employee and employer obligations and the probability of PC breach.

Having discussed the selection process and how it can be used to pre-empt the management of the PC in the digital era, it is imperative to provide core conclusions and insights derived from the discussion so far. The core conclusions will pave way for the discussion on the implications of the pre-emptive management on the PC for organisational practice.

11.4 Core Conclusions from the Literature and Research

A number of conclusions can be drawn from the literature and research reviewed and these are stated as follows:

- The fourth industrial revolution has brought a change in approach to the management and perceptions of the PC, requiring organisations to formally and pre-emptively specify the employee-employer expectations in employment contracts more than ever before.
- The life cycles of careers will become shorter as the fourth industrial revolution transforms the work through digital processes like the internet of things, cloud computing, cognitive computing, and cyber-physical systems (Li et al., 2018) and will result in more perceptions of psychological contact breach.
- As business models become constantly transformed or disrupted (Gan & Yusof, 2019), employees will engage in multiple employment to protect their economic interests. For employing organisations, promises of economic security from jobs will have to be replaced by promises of career adaptation support as part of PC fulfilment efforts.
- The increase in inter-organisation boundaryless careers and the protean career, where employees take full responsibility of their career development, may inversely result in organisations taking less responsibility in managing employee careers because of the perception that such employees are not full-time (Kost et al., 2019). Such non-committal approach to career development may cause perceptions of PC breach. The perceptions of PC breach may arise because the

same employees may expect the different organisations they work for to provide career development support, and this has profound implications for organisational practice.

- Owing to the constant transformation and disruption of business models caused by the advent of the fourth industrial revolution (Gan & Yusof, 2019), job security is likely to cease to be an antecedent of PC fulfilment. Organisations that base PC fulfilment on job security may find themselves breaching the PC promise made to employees.
- The fourth industrial revolution may signal the death of the relational PC as people become more committed and loyal to their jobs and careers than to their employing organisations. Relational PC promises like long-term employment, organisational stability, and long-term careers may be non-existent as a result of the rapid changes brought by the digital era. Organisational identification as important antecedent of the relational PC (Sverke et al., 2019) may also cease to be an aspect of the PC as a result of boundaryless careers. The stratification of employees according to their socio-demographic statuses (for example, tenure and age; Liu et al., 2020; Shanmugam, 2016) for the purposes of motivating them through targeted transactional or relational PC promises is also likely to cease. Both lowly and highly tenured, and younger and older employees may be more inclined to the transactional PC.
- The definition of the transactional and relational PC may shift in the context of the digital age. For example, issues like career development, which were traditionally components of the relational PC (Liu et al., 2020), may become transactional in nature since career development becomes a core requirement for employability and an essential key to tangible rewards.
- As a result of the short career life cycles emanating from the constant transformation of organisations as they adapt to the digital era, the employees are likely to have their PC fulfilled if the rewards systems are based on a more transactional and contingent short term-incentives as opposed to the more relational long-term incentives.

In this section, the impact of the fourth industrial revolution on organisations was discussed. The literature on how the fourth industrial revolution can alter the PC was also reviewed. Suggestions on how the antecedents of the PC can be proactively managed at the selection stage to improve PC fulfilment and reduce the probability of PC breach post-selection were also offered. The section ended by stating some conclusions from the literature and research and the conclusions have implications for organisational practice, which are discussed in the next section.

11.5 Implications for Organisational Practice

The impact of the fourth industrial revolution on the PC has implications for organisational practice and selection. The implications are discussed in this section.

11.5.1 Implications for Employment Contract Specificity

It has been demonstrated, in this chapter, that the fourth industrial revolution will lead to transformation and disruption of business models (Gan & Yusof, 2019). Such transformation is likely to affect career stability (World Economic Forum, 2018). Moreover, careers are now boundaryless and can change in nature and form or can become extinct as a result of the fourth industrial revolution (Presti et al., 2019). In these circumstances, employees may invariably expect certain obligations or exclusions from their employers. For example, employees may feel that it is reasonable to work for more than one employer to safeguard their personal economic interests. Some employees may still feel that the employer may be fully responsible for their careers, depending on their demographic characteristics like age and tenure, which in turn influence their type of the PC (relational versus transactional). Against this background, the implications are that organisations should be particular on the terms of employment, the nature of support, and the reward systems so that the expectations are known beforehand. Such specificity must be contained in formal employment contracts and ought to be done at the selection stage. Being specific about the employer and employee obligations, especially in writing, is expected to reduce differences in the interpretation of the implied conditions of employment and therefore, the PC. Thus, clarifying the expectations at the selection stage should reduce the probability or perceptions of PC breach, which in turn reduces the levels of disengagement and improves performance.

11.5.2 Implications for Multiple Employment

It has been noted that the economic instability caused by the advent of the fourth industrial revolution will transformed and disrupt business models, sometimes leading to loss of employment (Gan & Yusof, 2019; Liu et al., 2020). Resultantly, employees will engage in multiple employment in to protect their personal economic interest (Kost et al., 2019). The fourth industrial revolution has resulted in people enablement by way of connectivity, allowing employees to work for different organisations simultaneously, whether they may be full-time, part-time, or on a contingent basis, and whether or not the organisations that they work for are competitors. As economic agents, employees may work for multiple organisations to maximise their economic return. Such maximisation of economic return should occur within a short space of time and before both the business models and employees' careers get disrupted or transformed by the effects of the digital revolution.

The preceding may shift the nature and form of the PC from employees' perspective meaning that organisations which prohibit employees from working for multiple organisations may invite perceptions of the PC breach from their employees, the same way it may prevent competent employees from joining organisations. Organisations should therefore find ways of accommodating employees who prefer

multiple employment by instituting information protection and conflict of interest prevention mechanisms. The mechanisms may include putting in place tight confidentiality and non-disclosure agreements to protect trade secrets. Organisations can go a step further in lobbying for the legislation, including non-compete arrangements. Thus, while the employee benefits from maximising their economic return, the organisation benefits from the knowledge, experience, and efficiencies gained by the employee from working for different organisations. The result is the employee-employer mutual reciprocity and fair exchange.

11.5.3 Implications for Career Development

The fourth industrial revolution has amplified the boundaryless and protean careers in which employee take full responsibility for their career development in order to adapt to the ever-changing environment (De Vos & Soens, 2008; Presti et al., 2018). At the same time, organisations may not be willing to develop careers of people who are work both for them and other organisations (Kost et al., 2019). Kost et al. (2019) warn that the same employees who may work for multiple organisations simultaneously may not have enough resources to develop their careers and competencies and this may lead to the perception of PC breach. The breach of the PC may, in turn, negatively affect organisational continuity and performance in the long run.

For organisations to achieve PC fulfilment and enhance performance in the digital era, career management ought to shift to being the responsibility of the employers even in the context of boundaryless careers. Organisations may support employee career development through the provision of resources that are tied to productivity, ensuring that they maximise the return from the resources that they allocate to career development. Organisation may also facilitate network based and self-organised human resources management where employees form communities of organised practices to learn from each other in line with (Kost et al., 2019). Such support ought to be promised at the selection stage for the purposes of PC fulfilment, which will be expected to result in employee engagement and performance.

11.5.4 Implications for Job Security

The digital revolution has resulted in the change of business models leading to organisational instability, especially for organisations that may fail to adapt to the digital age (Gan & Yusof, 2019). Job security has been linked to the relational PC fulfilment (Liu et al., 2020). The influence of job security on the PC may become conjecture in the context of the fourth industrial revolution. Organisations that base employee motivation on the promise of job security may find themselves breaching employee trust and the PC, leading to diminished performance as careers change or become extinct because of the changes in business models. For organisations to be

successful in achieving PC fulfilment, promises of job security will have to be replaced by promises of support in career adaptation. The pre-emptive imperative of managing the PC at the selection stage should therefore focus on selecting employees capable of adapting to different environments and careers. Post-selection, organisations should focus on assisting employees in adapting their careers to different environments for the longevity of employment from the perspective of the employee and for business continuity for the organisation.

11.5.5 Implications on the Nature of the PC (Transactional Versus Relational)

The traditional approach to managing the PC has been to promise things like good working environment and career development, in return for exchanges like loyalty, commitment, organisational identification, and loyalty (the relational PC) (Rousseau, 1989, 1995; Rousseau & Tuoriwala, 1998). Tangible rewards have been associated with the transactional PC (Rousseau, 1989, 1995; Rousseau & Tuoriwala, 1998). The fourth industrial revolution seems to have however transformed the nature of the PC. Loyalty, commitment, and organisational identification may be difficult to instil as an exchange owing to the boundaryless careers and the short-term nature of products, services, and business models emanating from the advent of the fourth industrial revolution. The implications for organisations are that almost all antecedents of the PC should be treated as transactional as employees may only be willing to exchange on aspects that benefit them in the short-term.

The literature indicated that highly tenure employees (Liu et al., 2020) and employees of higher ages (Bal & Smit, 2012; Shanmugam, 2016) might be more inclined to the relational PC, unlike younger employees and those from of low job tenures. The fourth industrial revolution may, however, shift the PC. The rapid and constant changes in business models may cause a perception of short term view of the PC requirements whether the PC components are relational or transactional. In the digital era, age and tenure may therefore not matter in terms of PC fulfilment as people from higher ages and those highly tenured may value the antecedence of the PC fulfilment which traditionally were for the young and lowly tenured employees. Organisations need to reconsider the implications associated with the traditional promises made to different employee strata (for example, tenure and age) and their implications of PC fulfilment and breach, which may become transactional. The implications of the traditional promises aimed at PC fulfilment post-selection have to be dealt with at the selection stage.

This section discussed the implications of the pre-emptive management of the PC at the selection stage on organisational practice, following a review of research and literature. The next section suggest areas for future research.

11.6 Recommendations for Future Research

This section provides recommendations for future research on the pre-emptive management of the PC through selection in the digital era.

One of the implications for organisational practice proposed in this chapter is that organisations should specify all the expectations in the contract of employment to reduce perceptions of PC breach and improve PC fulfilment. The limitation with the preceding may be that, by its nature, the PC is psychological, meaning that even specified conditions of employment may be subjected to different interpretations from the employer and the employee. More research may be required to determine the extent of PC fulfilment or breach, even where the expectations are formally specified. Future research may also focus on whether there are significant differences in PC fulfilment for more specified and less specified contracts of employment, especially in the context of the digital age.

It has been noted that in the digital era, employees may resort to multiple employment to maximise their economic return (Kost et al., 2019). Thus, multiple employment may become the new normal in the digital era. In the context of multiple employment, research should focus on the prohibition of multiple jobs versus the PC breach and the effects of multiple jobs on PC fulfilment. Research should also investigate whether employee practices like outside employment by full-time employees may still be prohibited in the context of the fourth industrial revolution, without attracting perceptions of the PC breach.

Traditionally, job security has been a component of the relational PC (Presti et al., 2019). However, the digital age could constantly alter or disrupt organisation models and businesses, negatively affecting job security and causing perceptions of PC. Research should therefore focus on whether job security will still be a PC antecedent in the context of the fourth industrial revolution.

The fourth industrial revolution seems to have altered the nature of PC fulfilment (transactional versus relational) with respect to sociodemographic characteristics like age and tenure. As mentioned earlier, research therefore needs to focus on whether the fourth industrial revolution has altered or will alter the types of the PC (relational versus transactional) in the context of the moderation of age and tenure and suggest ways of managing the PC.

The digital age may shift career development from being the responsibility of the employee to being the employing organisations. Organisations are likely to take more responsibility for career development in order to adapt their employee careers to the potential disruptions caused by the digital age for them (organisations) to remain alive. Research should, therefore, investigate the new definition of the PC, mainly focusing on the transactional versus the relational PC in respect of career development. In the digital era, just like tangible rewards, career development may turn out to be an essential aspect of the exchange because the career itself becomes the primary reinforcer and key to employability, which in turn results in the realisation of tangible benefits and rewards in the immediate-term.

Finally, future research needs to investigate whether the relational PC will still exist in the context of the digital era, to inform selection practices on what to promise at the selection stage. The preceding is premised on the notion that the digital era may disrupt the traditional antecedents of the relational PC like organisational identification and commitment, job security, and career security as well as their associated reward structures. It is likely that as organisations intentionally or unintentionally fail to fulfil the traditional relational PC, all PC antecedents become transactional in nature, an area which future research need to focus on.

11.7 Conclusion

Personnel selection is crucial to the management of the psychological contract because it plays an essential pre-entry socialisation role for organisations and therefore contributes to the formation of the psychological contract. The pre-emptive management of the psychological contract at the selection stage is expected to improve the engagement of employees and job performance, post-selection. The chapter demonstrated the importance of the selection stage as a pre-entry socialisation phase of covertly and overtly managing the PC to improve PC fulfilment and reduce the probability of PC breach as part of efforts to improve employee engagement and job performance, post-selection.

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Chapter 12

Total Rewards and the Potential Shift in Psychological Contract Perceptions in the Digital Era



Mark Bussin

12.1 Introduction

‘Change’ has become an everyday word in business lingo in this era of the digital revolution (Sun, 2018). Novelty and innovation are the sought after objectives, as well as the means by which the work world has begun to function. As a new generation enters the work world, it challenges the traditional, comfortable managerial approach. As technology and automation advances, it tests the resilience and creativity of those stumbling to keep up with it. As hyper-competition, global recessions, global pandemics, and other worldly challenges send organisations astray, the fight for organisations to keep afloat is exaggerated more than ever—even more so as change desecrates the psychological contract between employer and employee, as total rewards take a blow. For years, articles, textbooks, professional opinions and the likes have tackled the ‘how to’ of total reward. However, being catapulted into the fourth industrial revolution, the notion of total reward needs a completely novel and innovative approach, just as the outcome we seek. Although the concept of total reward has remained the same, its actual construct needs to be redesigned completely to tackle the talent attraction and retention dilemma in the current context. This chapter will redefine total rewards in the era of the digital revolution with the aims of addressing the psychological contract, and establishing ways to repair it within an unsettled era of change.

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12.2 Chapter Objective

The objective of this chapter is to provide a new approach to the concept of total rewards so that HR, remuneration specialists, leaders, students, or anyone interested can get a step ahead on the topic. The chapter redefines the function of total rewards today and provides a practical approach for implementing new structures that will help repair the psychological contract. This chapter covers insights from the trenches and it is hoped will contribute to the gaps in research literature. Practical insights on managing remuneration are shared from real companies in unreal times.

12.3 Total Rewards Defined

Total rewards are the combination of elements that constitute an employee's reward package, including facets of an employee's job that brings value to them (Bussin & Van Rooy, 2014). Our own definition of total rewards in this chapter is the physical and emotional reward an employee receives that determines their level of loyalty to, and their motivation and performance in an organisation. There are five factors that are often included in the total rewards package. These are remuneration, benefits, recognition, growth and development, and lifestyle (Bussin, Mohamed-Padayachee, & Serumaga-Zake, 2019).

12.4 The Elements of Total Rewards

12.4.1 Remuneration

The main function of work is to allow individuals to afford their basic necessities, causing money to be central to total rewards (Winkler & Saur, 2019). Various remuneration possibilities exist, namely:

- *Fixed pay*: Fixed pay is commonly the base salary of the employee, as determined via salary surveys which generate data from market norms.
- *Variable pay*: This form of pay fluctuates in alignment with the performance of the employee, division, or organisation. It is designed to motivate employees to reach organisational targets. Variable pay is a once-off payment, the value of which is re-determined on formulation of new targets. Two types of variable pay exist, namely, short-term incentives and long-term incentives. Short-term incentives address performance in a period of less than a year, up to a year. For instance, a sales executive with a target of 1000 sales per week, who exceeds the weekly target for the duration of 6 months, may be eligible for a mid-year bonus. Long-term incentives are awarded for an employee's performance over a year or more. Such incentives include performance shares, stock options or even cash deferred over several years (Weidemann, 2017).

12.4.2 Benefits

Benefits are another form of pay that may be an affordable and simple cost to the organisation and an extra service for the employee. They may be presented in the form of provident funds or funeral covers or even spa packages and holidays. These benefits generally consider the health and well-being of the employee (Ogbonnaya, Daniels, Connolly, & van Veldhoven, 2017).

12.4.3 Recognition

Employees differ in their preferences, however, the general rule of thumb is that high-performers strive for recognition (Gmür & Thommen, 2019). A successful way to recognise employees is to offer them something that is harder for others to come by, such as a rewarding parking spot or a plaque with their picture titled 'employee of the month'.

12.4.4 Growth and Development

From traditional times, to the present, growth remains central to employment (Sass, 2019). It appears that this will remain a trend indefinitely. However, growth is ever-more fundamental to the younger constituents of the workforce. As the younger generations no longer seek growth within a single organisation in the entirety of their life-span, but rather, company-hop, they seek growth in a way that will continue to guarantee their employability. They thus seek growth in the form of training and development where they can broaden their skill-set and knowledge and develop into sought-after talent. Common ways to encourage growth are by means of sponsoring employee's studies, training, coaching, or mentoring them, or providing them with life-experience. Dabos and Rousseau (2004) and Rump and Eilers (2013) state that employers who allow their employees to develop in skills that are externally marketable, are likely to positively contribute to the psychological contract.

12.4.5 Lifestyle

Previously, when the work world was set in its traditional ways, the life of the employee was not much of a consideration and has only become of growing importance in recent years. Now, work-life balance is an emerging, and key topic in the employment contract (Winkler & Saur, 2019). Employees generally strive to work at organisations in which they feel a sense of importance. Lifestyle benefits are now

offered, such as paternity leave, in-house organisation gyms, flexi-time, remote working, family support, and other such benefits (Forris, 2015).

The above five factors have, for some time, constituted the total rewards framework. However, as we enter the digital revolution, total rewards have taken a new approach. The workforce today has a more ‘questioning approach’ to that of the traditional workforce. With production being primarily dependent on technology and the internet, work has evolved into a virtual nature. This virtual nature does not depend on an individual’s work produced on-site, eliminating the need for micro-managing. It also means that individuals no longer need to sell themselves to organisations and work their way up the organisational structure for they are in demand, ready to be snatched up by the organisation that offers them the most enticing reward package. While employees used to be viewed as a commodity, they are now viewed as ‘talent’. Hence, a sixth factor emerges in the total rewards framework: leadership (Bussin et al., 2019).

12.4.6 Leadership

To avoid psychological contract breach, or to mend it when change has occurred, leadership plays a prominent role (Winkler & Saur, 2019). This is explored in the following section.

12.5 The Science Behind the Psychological Contract

The workforce in its traditional sense was free from emotion and characterised by stability, structure, and routine (Serifi & Dasic, 2012). The employer–employee contract was more literal in nature. It was one whereby each party was to uphold their end of the bargain. From the employers end, the promise to keep was job safety, a monthly stipend, and a way for employees to work their way up the organisational structure. In return, the employee’s end of the bargain entailed timeous arrival at the workplace, hard work, and commitment. But just as human nature transgresses (e.g. humans have now demonstrated the ever-growing commitment to recycling and reducing negative impact on the planet; and the focus on equality, such as the gender-based violence movement), so does the nature of work transgress. In today’s case, the traditional, stable, structured and emotionless workplace has evolved into one of inclusion, diversity, respect, and a change in the employer–employee contract to one of a more psychological nature. Since there is no longer a single profile of a worker, there is no longer a one size fits all approach. Each person differs in their background, characteristics, aptitudes, education, and experience, causing a diversity of employee preferences. Thus, the employer–employee contract

is no longer a concrete, measurable entity, but rather, a wavelength that requires balance between both parties.

According to Leader-member Exchange theory (LMX) the psychological contract is one subject to trust, both inside the professional context and out (Erdogan & Bauer, 2015; Graen & Uhl-Bien, 1995). The quality of the contract precedes an employee's experience in their place of work. The manner in which an employer fulfils the psychological contract, predetermines the manner in which an employee will fulfil the psychological contract as an employee is likely to mimic their employer's behaviour (Parzefall & Coyle-Shapiro, 2011). Essentially, if an employee feels their employer has treated them fairly and positively, the employee is likely to uphold their end of the bargain and provide the quality work they have been hired to produce. An employee who feels they have been treated well is likely to go the extra mile and exercise organisational citizenship behaviour (OCB) (Ashikali & Groeneveld, 2015). OCB refers to employees' commitment to an organisation that the employee demonstrates by going over and above to ensure the success of the organisation for which they work. For instance, when an employee feels they have been treated well by their place of employment, they might go around speaking well of the organisation and their colleagues. This improves the reputation of the organisation, making it a desirable place to work or to contract with.

The psychological contract manifests in the five different stages of the employee life cycle:

12.5.1 Stage 1: The Attraction Stage

To attract talent, organisations portray themselves in a certain light. The aim is to attract the highest calibre of talent and to encourage the candidates' desire to join their workforce (Selman, 2016). It is at this stage in which the psychological contract is initiated, and where the organisation communicates its opening promises to those who want to sign the employer–employee contract, formally and psychologically.

12.5.2 Stage 2: The Recruitment and Selection Stage

The psychological contract and the formal contract commence within different stages. The psychological contract already began its formation in stage 1, whereas the formal contract manifests in the present stage as an organisation begins to filter out candidates forming the talent pool for the advertised vacancy. The organisation decides on their new 'asset' in the hopes that this individual will agree to join its workforce. Thus, a formalised agreement is created with pledges made by each

party. Notably, a common occurrence is when one or both parties over-promise and under-deliver (Herrmann, 2017). This causes a hasty wreckage in the psychological contract. Oppositely, psychological contracts that are most successful are those in which party's under-promise and over-deliver. Consider the occurrence for the employer's stance: the employee promises they will complete a project in 2 weeks. The organisation is happy with the set target. Exceeding their promise, the employee then finishes the project in 1 week. This increased productivity impresses the client who will re-utilise the services of the organisation, doubles the amount of organisational productivity and production as the employee is now free to focus on supplementary projects, and the cost of labour is minimised significantly. Seeing that the organisation is now more profitable, while cutting back on costs, the desire and ability to reward that employee is greater for the organisation. Following the positive reinforcement, the employee feels well-treated by the organisation and the positive effects of the psychological contract strengthen while both parties reap reward.

Now let us consider the opposite scenario—one where the employer does not fulfil their end of the bargain. Naturally, when making application for a vacancy, we expect the conditions will be much like our everyday experiences (Kanning, 2017). Now say a candidate applies for a vacancy and signs a formal contract that stipulates and attractive delegation of tasks and remuneration. However, when they enter the workplace, the conditions are completely different to their anticipations. They are not provided with the materials they need to perform carry out their work tasks, for instance, they are required to purchase their own internet. Furthermore, although they expected to work overtime every now and then as stipulated by their contract, the employer expects them to work 8 h overtime every single day. The employee will no longer feel obligated to focus on the well-being of the organisation as they will feel thoroughly and inappropriately over-used. The bottom line: be careful of the promises you make.

12.5.3 Stage 3: The Onboarding Stage

This is the stage where the newly hired employee enters the organisation. This is where the employee begins to receive information that contributes to the psychological contract. They suss out the working conditions, the general level of contempt among their colleagues, the treatment received by others, and the overall culture of the organisation. Now the employee strives to achieve a balance between their expectations held before entering the workplace and the reality experienced subsequent to entering the workplace (Kanning, 2017). Were they promised their own office space, only to find out they have been allocated an office space directly next to the office toilets? Are they surrounded by colleagues who warn them that the pay is not worth the tiptoeing they have to do around the boss and his never-ending tantrums?

12.5.4 Stage 4: The Retention Stage

The retention stage of the psychological contract may also be referred to as the maintenance stage. It refers to the stage in which the employee is already familiar with the organisation, its policies and processes, their surroundings, and how the organisation functions. By this stage, the employer and employee have already established the basics of the psychological contract and now, changes may occur in the psychological contract (Winkler & Saur, 2019). If the employee falls short of their contractual obligations, it is at this stage that interventions may need to come into play. If the employer is the responsible party for not fulfilling their end of the bargain, they are at risk of their organisation being the victim of the employee's deviant behaviour, or of the employee turning over in stage five of the psychological contract.

12.5.5 Stage 5: Organisational Exit or Stay

The fifth stage of the psychological contract concludes the action taken by both parties in the agreement. If one or both parties are unhappy with the receiving end of the contract, they may choose to terminate the formal contract (Bankins, 2015). This will happen when the efforts created in the previous phase were insufficient. For example, an organisation that had promised an employee training and development and did not deliver might find themselves losing their talent who sought out a job where the promises are concrete. Or the organisation that expected the employee they hired to complete several projects on a monthly basis only saw the employee completing a single project per month which resulted in financial loss to the organisation, as well as reputation damage, and causing a dwindling psychological contract.

There is a very large factor contributing to the psychological contract. This factor may be the determining factor in whether a psychological contract succeeds or fails. This factor is that of total rewards.

12.6 Psychological Contract Change and Implications

Various factors pre-empt psychological contract change, but psychological contracts are more commonly violated during periods of organisational change (Bankins, 2015). During organisational change, employers tend to neglect their contractual obligations in terms of career opportunities, communication, job opportunities, remuneration, and rewards. Organisational changes may take the form of Accommodation and Transformation.

12.6.1 Accommodation

Accommodation is a lesser extent of change. It refers to modification of the existent psychological contract. Modifications to the existent psychological contract may occur as per some of the following categories:

- (a) A change in contractors: A successor may take the place of the CEO in the organisation. As the successor is in the same position but may have a different leadership style to the previous CEO, naturally, the nature of the contract between the employee and his/her employer will be altered.
- (b) A change in dynamics: An employee may be offered a promotion or they are moved to a superior role where their tasks, reporting structure, and remuneration will change.
- (c) Isolated changes: Isolated changes may include a change in an employee's working hours, performance objectives, or other such factors (Bankins, 2015).

12.6.2 Transformation

Transformation relates to changes in the systems of an organisation, such as mergers and acquisitions, or downsizing and retrenchments (Schalk & Batistic, 2018). Contract violation is specifically prominent in times of retrenchments. First and foremost, retrenchments are a stressful event for employees to undergo as this is a time of uncertainty leading them to fear the potential loss of their jobs. Employees who have contributed to fulfilling their part of the contract and who may potentially be let go may feel that they are not as valued by the organisation. Thereafter, employees who remain at the organisation may distrust the organisation, having witnessed the dismissal of their colleagues. This may evoke the fear that they could be let go at any time too and violate their sense of job security.

Most notably, the extent of the organisational change process will dictate the degree of psychological contract change, breach, and violation (Van der Smissen, Schalk, & Freese, 2013). Thus, change processes of a large scale such as downsizing or restructures, are associated with higher degrees of psychological contract breach and violation. The frequency of change is also associated with the extent of an employees' perception of contract breach and thus, violation. Higher frequencies of change unsettle employees', causing them the increasing need to readjust. It may also lead them to question their comfort and certainty of the organisation and their longevity within it.

Following organisational change, the psychological contract change may follow one of two events, namely, (1) breach and (2) violation (Schalk & Roe, 2007). Psychological contract breach occurs when one of the two parties (employer or employee) believe that the other has not fulfilled their contractual obligations. Psychological contract violation pertains to the after-effect of psychological contract breach where the disadvantaged party response negatively and affectively.

Psychological contract breaches and violations unsettle the balance in the employer–employee exchange and cause the affected party to change the terms of their contract (Bankins, 2015). Employees may respond to the psychological contract in one of several ways:

1. Exit: employees who feel strongly about the contract change may choose to exit the organisation.
2. Action: employees may choose to balance their dissatisfaction by working with colleagues to improve the situation.
3. Reduction: employees may decrease their contribution to the organisation, in terms of their extra-role behaviours.
4. Withdrawal: employees may choose to disengage from the organisation by slacking.
5. Restoration: employees may attempt to mend and recalibrate relationships.
6. Re-writing: employees may choose to re-write their work roles to match the contract change.

Research shows that an employer's breach of the psychological contract evokes a negative response from employees or influences them to withdraw their contributions to the organisation (Bankins, 2015). As an example, an employee working at an organisation may get a market-related pay. However, the daily abuse they have to undergo (such as receiving undermining comments from their managers) may cause them to feel that they are not remunerated highly enough. To increase the remuneration they receive for their daily experiences, they may choose to steal office equipment or use the office phone to make personal calls. This is also an example of what a psychological contract would look like when the employer isn't fulfilling their end of the bargain. Essentially high quality of the psychological contract generates positive employee experiences, which pre-empt constructive employee performance, which determines organisational effectiveness (Ilies, Craig, & Morgeson, 2007).

12.7 The New World of Work

The psychological contract may be mended when the balance is restored—that is, the balance of what employees put in and what they get out. This will ensure motivation, engagement, and retention. The digital era has already begun to re-define the world of work. This new era has given way to conducting work in ways that suit the employee, whereafter the employer benefits. Two such examples are contingent employees and remote employees. Regarding remote work, as per the increasing automation of jobs, many job tasks may be performed by way of laptops and tablets and do not require employees' presence in the office. With technological platforms such as Zoom, meetings may be held virtually, with all participants able to view each other's slideshow presentations. A physical presence is mostly designated to manual work, while knowledge employees have the flexibility and capability of operating remotely. Contingent employees are those who are hired by organisations

on demand. These are employees that are independent contractors or consultants and do not majorly influence the cost to company. Contingent employees differ from permanent employees as their employment contract specifies a pre-set date of expiry (Heffernan, 2018).

Some researchers, such as Hancock, Allen, Bosco, McDaniel, and Pierce (2013) argue against the use of contingent employees. They conducted a study and found that employees' exit prejudices the performance of an organisation as a result of disruption costs. Whether a worker is permanent or contingent, disruption costs will ensue for the following reasons:

- Exits or replacements can disrupt coordination, result in a collapsed communication.
- When contingent employees exit the organisation, work routines of the remaining employees in the unit, suffer (Fisher & Connelly, 2017). Contingent employees are commonly hired to work in conjunction with the organisation's employees. When the contingent employee leaves, the remaining employees need to re-organise their work, work tasks and work schedule, causing them a disruption in the work lives (Hale, Ployhart, & Shepherd, 2016). Furthermore, the remaining employees may be required to dedicate large portions of their time to attending training or training others, and thus sacrificing their own time for their work tasks, and causing their performance to suffer.
- As per the need for re-shuffling and taking time out to pick up from where the contingent worker left off, the organisation may struggle to deliver and thus, slow down. Remaining employees need to reconfigure their work routines to cover for the exit of the contingent worker. The lost time results in lost productivity and profit (Hale et al., 2016).
- Introducing new contingent employees is also costly. They need time to be induced into the organisation and to find their legs within it. Even when previous contingent employees return, they cannot just pick off where they left off and need to re-organise to fit in with other employees and their tasks.

Despite the cons, hiring contingent employees comes with many pros:

- Employers can hastily hire and let go of these individuals without the risk of breaching the employment contract. Even more so, they are able to do so without breaching the psychological contract.
- Some employees hire contingent employees to improve the organisation's performance as these employees are known to provide flexibility. When an organisation is in need of a service, they may hire an employee on a temporary basis to complete the project and then allow the employee to exit the organisation. Hiring employees on a contingent basis allows employers to expand and contract with the market. For instance, when the organisation is doing well and looking to grow, they may be able to hastily source someone to fit into their team. When the employee is no longer needed, or when the organisation is not doing so well, the employer is no longer obligated to pay excess wages (Lecuona & Reitzig, 2014). Furthermore, employers may avoid the costs of letting employees go, such as

having to pay out a retrenchment package, or being liable for legal fees when employees feel their dismissal was unfairly handled. Saved costs also manifest from preventing reputation damage to the organisation when an angry employee has been let go (Unsal, 2019).

- The cost of contingent employees is dependent on the organisation-specific experience needed (De Stefano, Bonet, & Camuffo, 2019). When considering whether to hire a contingent employee, companies should evaluate the cost of the loss that accompanies their exit from the organisation. However, one of the main perks in hiring contingent employees is that they allow for an organisation to be agile and respond hastily to demand. As both the organisation and the contingent employees benefit from this contract, in the digital era, contingent employees are on the incline, owing to the uncertainty of the economy or according to the way in which the new work world functions (De Stefano et al., 2019). In this instance, the psychological contract may define itself as the transient relationship occurring when individuals collaborate to complete a task or project and disperse thereafter. The contract rather relies upon whether the paper-based contract has been fulfilled by both parties. However, in a formal contract where employees come and go, who are not entitled to the benefits that other employees receive and are responsible for their own growth, motivation, and employment structure, how does one attend to the psychological contract? These questions will be more frequented in the digital era. Thus, this section addresses the way in which total rewards is re-defined in the digital revolution.

12.8 Re-defining Total Rewards in the Digital Era Mend the Psychological Contract

As per the revolution of total rewards, the typical total rewards elements may be re-organised in the digital era as such.

12.8.1 Remuneration

In the digital era, remuneration no longer acts as a stable source of income, but rather requires flexibility (Peetz, 2019). Remuneration may require an outcomes-based approach, rather than a set pay cheque each month. Thus, pay-for-performance us the go-to in this era, where employees are paid per outcome they achieve.

Pay-for-performance may work according to goals or outcomes. For instance, when an employee reaches a goal agreed upon by themselves and the line manager, they may be rewarded. Pay-for-performance may also be rewarded upon the completion of a project in its entirety.

Fixed pay: Remuneration in the digital revolution is a front-runner in talent retention as employees with skills that are scarce and critical skills strive for competitive pay cheques. As such, positions that are in high demand should match the market, or more preferably, exceed it. Organisations should continually revise their pay and benefits structure to ensure they remain competitive and to have the ability to attract new talent.

Variable pay: This form of pay fluctuates in alignment with the performance of the employee. It is designed to motivate employees to reach the targets required by the organisation. This may take a different form in the digital era in the form of project completion bonuses.

Long-term incentives: Long-term incentives fall away in the digital era. Most employers focus on the short-term incentives for immediate employee gratification or meeting contractual obligations agreed on a project by project basis.

When rewards are reachable, employees strive harder to reach them. This also allows for projects to be concluded more quickly so that employees can grab hold of the money and open their schedule to more work projects. This pay should account for the fact that contingent employees do not receive the benefits and bonuses of regular employees, which may then be worked into their pay. Bonuses have been in the lime light of recent research as organisations argue whether to abolish them entirely. This newfound preposition is accorded to the argument that for feedback to be effective, it needs to occur soon after the action. Thus, employees receive bonuses which do not act in the best interest of the organisation. The organisation can rather include it in the base pay for a more attractive salary. Annual bonuses will fall away (Davis, 2017).

12.8.2 Benefits

Relocation packages—if sourcing talent from abroad, a sure way to attract them is with an enticing relocation package (McNulty, 2016). This may be implemented by arranging and paying for the cost of flights and initial accommodation, and offering relocation assistance. Employees who feel they will lose too much time and effort on the relocation will be unlikely to accept the position. The organisation's assistance not only relieves these employees of the time and energy they would have to spend relocating (which is time they could be spent on other projects) but it also assures them that they will be looked after at the organisation. Employees who boast about positive treatment by the organisation, contribute to the organisation's reputation enhancement. This has yet to be tested because in times of international pandemic working from anywhere has become more acceptable. Global benefits that accrue to employees no matter where they work will be the norm (Mitra, 2017).

12.8.3 Recognition

Employee recognition is a priority for high performers (Wolf, 2016). Furthermore, in the digital era where employees work from various spaces, employees tend to feel forgotten. Simple ways to acknowledge that an employee's input is by sending an email to all stakeholders in the organisation, congratulating their hard work and using them as an example. This organisation-wide email allows employees to realise that their effort does not go amiss. Check-ins via online platforms every morning at a specified time has taken off and during these check-ins employees are also recognised.

12.8.4 Growth and Development

In digital times, jobs fall away from their traditional structure. The traditional job has been replaced by a crafted job (Wang, Demerouti, Le Blanc, & Lu, 2018). Crafting a job refers to the act of adjusting the role and requirements of a job to suit the employee skills and preferences. In the digital era, employees design their own jobs, allowing them to exercise their strengths, improving their engagement, satisfaction, motivation, and performance—to the advantage of the organisation. Thus, organisations will need to retract from their traditional approaches to accommodate employees to increase their fit in their organisation.

Crafting extends to the employee's broader career. The inclining adoption of flatter organisational structures with the diminishing hierarchical levels slowly abolishes corporate ladder-climbing. Career progression is thus dependent upon employee's proficiency in a skill, or their becoming multi-skilled. Consequently, organisations that provide employees opportunities to upskill or develop additional skills are more likely to succeed in the digital era.

Digital competence may be the golden ticket to becoming an employable candidate. It may also result in a more attractive remuneration package. Thus, organisations that provide the opportunity for employees to become digitally competent will most likely be sought after by job seekers in the digital era. In addition to digital competency, wholesale re-skilling of employees may be needed. If so, this will form part of employment costs and the employees total reward package.

Growth and career management in the future is about growing one's CV, i.e. learning additional skills and competencies (Hanif & Yunfei, 2013). If one's CV is not growing every year, one will leave. The digital era is fairly conducive to CV's growing as the opportunities are far greater than they been in the past.

12.8.5 Lifestyle

It may be argued that these employees are trading in one card, for another. Whereas permanent employees may prefer job security, contingent employees may gain their drive from the freedom they receive (Winkler & Saur, 2019). This freedom allows them to not only take an annual vacation, but rather, a monthly vacation if they so wish. It also allows them to have the flexibility of diversifying their skill-set within various fields, new fields and their own choice of work or taking a month course in a something unrelated to their jobs, or to go back to university.

Flexible working hours are more conventional in the digital era (Glowacka, 2020; Heffernan, 2018). Some employees work best during typical work hours while others work best while everyone else is asleep. If it is not crucial for the night owls to work in common work hours the option for them to work in their chosen hours may improve their performance. Flexible working locations are also part of the lifestyle reward. Some individuals are socialites who thrive from working in a group context whereas others may prefer to work independently and free from interruption. Employees who prefer to bounce ideas off one another will benefit from the opportunity to do so, and those who prefer to sit with their own thoughts will benefit from the opportunity to do so.

Personal days—Employees who have the natural 5-day working week often spend their weekends catching up on their own admin such as topping up their medication, doing the grocery shopping, perhaps even doing housework. This prevents them from getting the true rest they need on a weekend. Furthermore, many services are only open to the public during working hours, forcing employees to lose days on their accumulated leave, to renew their license disc or passport, or to settle a TAX-related dispute. Accordingly, organisations should allow provision for personal days where employees can tick off important chores, without it affecting their time off. This will leave them revived and a freed-up weekend could motivate their performance during the work week.

12.8.6 Leadership

To avoid psychological contract breach, or to mend it, employees need to know that the organisation has their best interest at heart (Winkler & Saur, 2019). Thus, it is the responsibility of leadership to ensure the health and well-being of employees, and to strengthen the psychological contract. Next Jump's CEO Charlie Kim is an inspirational example of how to fulfil a psychological contract and complete the total rewards package. He believes that talent should be nurtured and developed, just as one would nurture and develop one's child. He makes the point that when one's child underachieves, one does not simply let the child go. Rather, one assists the child and gives their all to ensure the child's success. Thus, rather than using employees as a commodity, he emphasises their importance and their need for

attention and assistance rather than their ability to be replaced. In turn, these employees are inspired to fulfil their leader's prophecy and belief in them.

In his TedTalk on how to be a great leader, Sinek (2017) makes a valid point. He preaches: '...so many people have such a visceral hatred, this sort of anger at some of the banking CEOs with their disproportionate salaries and bonus structures. It's not the numbers, it's that they have violated the very definition of leadership; they have violated this deep-seated social contract. We know that they allowed their people to be sacrificed so that they could protect their own interests, or worse, *they* sacrificed their people to protect their own interests. This is what so offends us, not the numbers. Would anybody be offended if we gave a hundred and fifty million dollar bonus to Gandhi? How about a two hundred and fifty million dollar bonus to Mother Teresa? Do you have an issue with that? None at all... none at all. Great leaders would never sacrifice the people to save the numbers they would sooner sacrifice the numbers to save the people'.

Although it would seem the role of leadership is redundant for contingent employees in the digital era, this is not the case. Employees—whether working as permanent, remotely, or contingently—need to help employees feel a sense of belongingness so that they are inspired to contribute to the organisation (Dery & Hafermalz, 2016; Winkler & Saur, 2019). Leadership thus needs to build and maintain positive relationships with these employees. Leadership also plays a concrete role in the relationship between remote employees and the organisation as working away from the organisation may cause these individuals to become estranged. Leadership should always consider employees who are working remotely—they too may appreciate being part of a collective effort. Regular virtual meetings can be held so that remote employees remember they are part of a team and that their input is sought after and appreciated.

According to The World Health Organisation, on a global basis, 50% of the primary causes of disability are mental health-related. These include bipolar disorder, schizophrenia, obsessive compulsive disorder, depressive disorders and other such disorders. Paired with anxiety and stress induced from the workplace, ill-health in the workplace may be aggravated. In fact, statistics show that one in every five people in the workplace suffers from a mental illness (World Health Organisation, 2017). Research analysis on the data gained from the U.S. National Comorbidity Survey found that 18% of employees experienced symptoms of a mental health disorder in the preceding month.

These disorders commonly go unnoticed by employers. Due to the stigma with which the disorders are associated, employees commonly leave their disorder unattended, and rather concealing them for fear of discrimination in retention efforts, promotions, or judgement from others. This is particularly relevant in the present economic climate. Employers' lack of awareness of the mental health of their employees may be an extra burden on employee's mental health as per the associated anxiety that accompanies identity concealment. Additionally, mental health issues deter the sufferer's health, work performance, and career.

Any health-related issue—be it mental health or physical health—may affect the organisation in various ways. Firstly, such health issues may lead to increased

absenteeism. More, detrimental to the organisation, however, is presenteeism. Presenteeism refers to the problem whereby employees' remain on the job but are unable to function effectively as a result of suffering their health issues. According to research, this may decrease their productivity by a third, or more than a third. The 'Health and Well-being Survey at Work 2020 Report (CIPD, 2020) reported that nine out of ten individuals reported presenteeism in the workplace.

Studies on employee mental health issues have been conclusive in their findings that companies' expenditure on such issues (in the form of medical aid contributions and other health-related costs) is minimal in comparison to the indirect costs from productivity loss from these health issues. Thus, researchers advocate for companies to financially attend to the mental health of their employees, for the sake of the employee and the sake of the organisation.

Mental health in the workplace can be managed with the assistance of the employer. When mental health is sufficiently addressed, an employee's symptoms may improve, their anxiety levels may decrease, and their job performance may incline. However, many sufferers do not receive the support as a result of their employer being unaware of their condition. Furthermore, employers who are aware and would like to assist, do not have the knowledge on how to do so. As if this was not complicated enough, the globally spread and virtual nature of work, often means that employees mental health issues are even more likely to go unnoticed now than ever before. As such, organisations will need to more than ever address mental health issues in the physical and virtual workplace (Harvard Medical School, 2010).

12.9 Performance Management in the Digital Era

As remote employees cannot be monitored on-site, total rewards needs to shift to an outcomes-based focus (Lill, 2020). Motivated individuals may find it easy to work remotely, without the pressure of the office environment or under the eye of supervision. However, this is not applicable to every employee. System logs may record employees time spent on projects, but it is also easy for employees to remain on a site while having several lunch breaks, and cause them to slack. The best way to prevent this, is by using an outcomes-based approach where employees are forced to take responsibility for their work provided within a specific time-frame.

Seeing as the digital era has given way to so much flexibility, organisations struggle to track and manage the performance of these individuals.

Goal setting: Goal setting should be conducted between the employee and their line manager on a quarterly basis, whereby the parties discuss and agree on employee goals for the ensuing quarter. Including a personal development plan in the session allows employees to air their aspired direction whilst simultaneously assisting the line manager to establish retention drivers and gauge candidates for succession plans (Sibisi, 2018). Individuals who are also members of temporary teams (such as

for projects that require the hiring of contingent employees) may receive additional goals such as mentoring other employees. Goals do not need to be final. Rather, they may be changed when line manager and employee find it necessary to revise them and mutually agree on the change.

Continuous feedback: As employee and line manager may see less of each other in the digital era, it may be increasingly difficult for the line manager to assess the employees progress and for the employee to know whether they are succeeding or straying away from the organisational goals. As such, virtual meetings may need to be held more frequently than meetings held on-site (Dery & Hafermalz, 2016). Thus, bi-monthly conversations may take place. This is a more casual form of conversation that serves as constructive feedback to assess how the employee is doing and what areas can be improved. By having more frequent conversations, employees deviating from the path can be helped back onto the path. This saves time as employees who are left to go astray for too long may have completely diverted from the organisational goals, needing to start right from the beginning again, and having wasted time and the organisations resources.

Constructive feedback is given via the following:

- **Making use of positive psychology:** As per its title, positive psychology focuses on the positives, rather than the negatives (Vaniala, 2016). A study on sports teams was conducted by comparing a teams who received feedback in a negative sense (according to what they had done wrong and should improve) and in a positive sense (according to what they had done right and should continue). Improvement was most evident in teams who received positive feedback. As such, leadership should highlight the strengths and achievements of employees. Recognition encourages motivation.
- **Pointing out blinds spots:** Sometimes only highlighting the positives may be insufficient. In cases where employees have a blind spot, point out the blind spot and suggest ways these can be improved. Make sure not to criticise them communicate the blind spot in a matter-of-fact way, ensuring them that you are there to help them move forward.

Quarterly performance reviews: Every quarter, the line manager should hold a virtual, formal performance review with employees (Warrilow, Johnson, & Eagle, 2020). Employees may complete a self-evaluation whilst a line manager may provide an evaluation of the employee. Both parties can discuss the evaluation and the way forward for the next quarter.

Contingent and remote employees may also be part of a team. The team should be measured only on its output or results achieved. Such measures implemented could include the following:

- The working solution delivered by the team
- The final report of the team
- The team's adherence to time and budget constraints.

12.10 Motivation and Engagement

Employers need not implement motivational interventions or the likes as it is the onus of the employee to ensure that they produce a high standard of work (Eshun & Duah, 2011). Sub-par performance will ultimately result in employee reputation damage or the decision of the employer to choose to look elsewhere for subsequent contracts.

Engagement, for contingent employees, is dependent on projects, rather than the organisation. As these employees have the freedom to choose their own projects, it is likely they will choose those in which they have a high proficiency or for which they have a strong passion. As erratic and flexible a contingent position may be, oppositely, the success to contingency work relies in the planning of the organisation.

Thus, the following factors are of importance to organisations when considering contingent employees:

- Provide a transparent and straightforward definition of the relationship. Always be sure to be consistent in usage of this definition.
- Prior to the commencement of a new project, employees should be required to sign a standard Non-disclosure agreement.
- Your contingent worker should be treated in the same manner as your employee when on-boarding. Hence, reference checks should be conducted, CV's and portfolios, certified qualifications, and any other mandatory documentation or procedures should be undertaken.
- Ascertain the necessary on-boarding and off-boarding procedures are in place. This may trim down organisational costs significantly.
- Return of investment assessments should be assessed (Beeline, 2017).

Without the effort of the organisation to engage, motivate and retain these employees, they may often feel a sense of loneliness. As such, employers need to reduce individuals' feelings of loneliness whilst increasing their feelings of belongingness (Dery & Hafermalz, 2016). This may be achieved by requesting workers that prefer to work as a team, to do so. Colleagues can meet virtually to complete work as a team. Additionally, more frequent, virtual meetings could be held.

12.11 Implications for Organisational Practices

Being catapulted into the fourth industrial revolution relative to the time spas of the previous era's has been exciting. Sweeping changes in almost every HR practice will need to be made if we are to successfully navigate this new era. From a total reward point of view the most poignant implications are:

1. The importance of procedural justice has escalated exponentially. Organisations need to be fair, defensible and explain in very clear terms how their reward systems work.

2. Performance management can only be done by measuring outcomes. This will require a rewrite of many of our KPA's and KPI's and Job Profiles.
3. Job evaluation is almost extinct and only broad bands will survive.
4. The psychological contract needs to be strengthened via leadership and communication.
5. Remote working will lead to professional loneliness and mental health issues. Organisations need to keep their finger on the pulse and address this swiftly and compassionately.

12.12 Implications for Research

As the digital era is relatively new in a practical sense, research should concentrate on how to form, maintain, and mend the psychological contract from a virtual perspective. Quantitative studies should focus on the different phases of the psychological contract and the critical success factors contributing to a healthy psychological contract. Qualitative studies could focus on employees' thoughts and feelings relating to their employees' attempts of building or sustaining the psychological contract.

12.13 Conclusion

From an academic point of view there are many opportunities for research and to close the gap in our body of knowledge. The time has arrived for us show some thought leadership in this space and be proactive with line management. There is no doubt that we are in for interesting times. We have always been told to be careful what we wish for.

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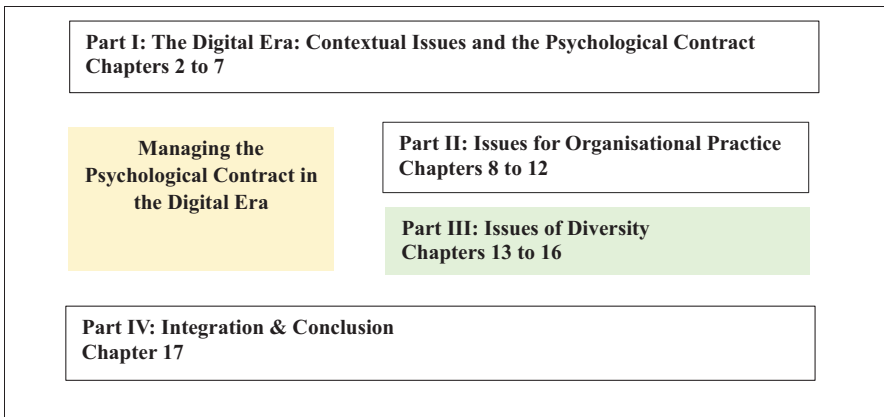
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Part III

Managing the Psychological Contract: Issues of Diversity

Conceptual Overview of the Book Volume



Overview

Aderibigbe reminds the reader in Chap. 13 (*The Dynamism of Psychological Contract and Workforce Diversity: Implications and Challenges for Industry 4.0 HRM*) of the challenge of complexity management in terms of diverse beliefs, expectations and obligations of employees and employers. The author highlights new evolving diversity perspectives such as the eight powerful truths associated with Industry 4.0 workforce diversity. The author discusses four key imperatives that business leaders and HR professionals will need to implement from the digital era relational psychological contract and diversity perspectives.

In Chap. 14 (*Psychological Contract and Retention Practices: A Guide for Addressing the Needs of Different Race Groups in Higher Education*) Snyman deals with the perceptions and expectations of different racial groups within the higher

education environment, with regard to the psychological contract and retention practices. The author's empirical study highlights differences between Black and White racial groups that need to be considered in practices pertaining to psychological contract fulfilment and the retention of valuable staff members from these groups. The chapter offers new insights regarding the psychological contract needs of diverse racial groups in the academic context.

The chapter contribution of **Bulinska-Stangrecka and Naim** (Chap. 15: *Brace Up for the New Generation: Decoding the Psychological Contract Expectations of Gen Z in a Digital World*) helps us to better understand the work expectations and preferences of Gen Z members of the workforce. The authors come up with an appealing conceptual framework of psychological contract expectations of Gen Z employees. The framework covers expectations such as use of technology, learning and development, feedback, financial rewards, and workplace flexibility. The authors view the conceptual framework as a guiding mechanism for human resource managers to tailor generation-specific policies to tap the potential of this upcoming workforce segment.

Deas (Chap. 16: *Psychological Contract of Digital Natives: Are We Measuring What They Expect?*) critically reflects on current psychological contract measures to determine whether these are still relevant in measuring the content of the psychological contract of digital natives. The chapter enhances our insight into the characteristics and work values of digital natives, including the link to certain inputs and outcomes of the digital native psychological contract. Based on a review of the content of current psychological contract measures, the author makes a convincing case for scholars to re-examine and augment the content in order to address the psychological contract expectations and work values of digital natives.

Chapter 13

The Dynamism of Psychological Contract and Workforce Diversity: Implications and Challenges for Industry 4.0 HRM



John K. Aderibigbe

13.1 Introduction

Workforce diversity and psychological contract continue to find themselves among the relevant themes for HR professionals' discourse, especially during conferences, seminars, and workshops on human resource management (HRM) and training holding in the present century. Diversity and psychological contract are not just moral issues; they are rather important HRM matters that call for progressively scientific attention (Stevenson, 2019). In other words, workforce diversity is probably now considered by companies as a critical factor to the development of resilience in organisations and bottom-line results across time. On the other hand, psychological contract perhaps remains the biggest contemporary challenge to organisations. One of the reasons frequently offered by scholars is the fact that employee aspiration is continually changing (Litt, Patnaik, & Chakrabarti, 2018; Savarimuthu & Rachael, 2017; Zaidman & Elisha, 2016).

The rise of new digital industrial technology has powered the changing dynamic of organisations. The Fourth Industrial Revolution (4IR) or Industry 4.0 (I4.0) is a transformation that empowers quicker, increasingly adaptable and progressively effective procedures to create more quality goods at lower prices (Shamim, Cang, Yu, & Li, 2016). The manufacturing revolution is therefore increasing productivity, fostering industrial development, and ultimately, modifying the profile of the labour force (Klötzer & Pflaum, 2015). Hence, competition among companies to hire the few technologically branded individuals with the required knowledge, skills, abilities, and other (KSAO) characteristics is now intensified. This situation is thereby producing an atmosphere of doubt for managers and their subordinates (Rousseau,

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2011). The existing scenario provides more HRM challenges and at the same time increases activities of the HR practitioners, while strategic management of the exchange agreement between employees and employers is sacrosanct to ensure a diversified workforce for organisational performance.

13.2 Chapter Objective

The overall objective of this chapter is to review the dynamism of psychological contract and workforce diversity. The learning objectives are to understand the trend of psychological contract and workforce diversity in the 4IR; learn about the new diversity perspectives and revolution such as the eight powerful truths associated with Industry 4.0 workforce diversity; know about psychological contract perspectives and revolution, including its components; appraise the previous empirical studies on the association between psychological contract and workforce diversity; evaluate the implications and challenges of the new psychological contract and workforce diversity for HRM during the 4IR; and provide recommendations for implementing the new relational contract and achieving an inclusive diversity climate.

13.3 Conceptual Background of Industry 4.0 Psychological Contract and Workforce Diversity

Diversity is a two-split concept that combines the inherent elements and acquired experiences (Stevenson, 2019). The inherent diversity includes individuals' innate characteristics such as sexual orientation, skin colour, gender, and introversion/extroversion. The acquired diversity, on the other hand, involves attributes gained from experience. For example, a worker who has worked abroad will be more accepting to cultural differences. Hence, employees with 2-D are said to have at any level three natural and three gained diversity characteristics (Stevenson, 2019). By implication, it is expected that companies with 2-D workforce will be highly innovative and perform outstandingly compared with those without it. It then becomes a big challenge for organisations to retain 2-D employees since their KSAO unique characteristics are increasingly demanded by competitors. Thus, the knot between employees and employers called psychological contract, gradually, becomes loose (Litt et al., 2018).

The emergence of workforce diversity targets at promoting equal opportunities in the workplace, to further enrich the human capital of organisations. The equal opportunities created by workforce diversity also provide more prospects for organ-

isations, by converting the assorted KSAOs to organisational asset rather than losing the associated talents and brains which might serve organisations advantageously (Ongori & Agolla, 2007). Diversity ushers in heterogeneity, which is meant to be nurtured and appreciated as a strategy to increase organisational effectiveness in the era of global competition. Although a multicultural workplace generates more challenges to human resource managers, it strengthens their capacities to deal with the important changes in management practices (Ayega & Muathe, 2018). Hence, cultivating diversity and heterogeneity is beneficial if it is objectively managed.

Diversity had been a niche area of research that emanated from the anti-discrimination movements in the United States (US) during the 1960s. It nevertheless began to gain the attention of social and management sciences scholars from 1994, especially in South Africa (Ayega & Muathe, 2018). Diversity is now considered as a valuable means of building social capital connection with business ventures around the world, thereby creating opportunities for foreign investors to run businesses in their locations. Thus, there are various opportunities generated by the mix of KSAOs gained from a broad diversity.

Prior to the present dispensation, the term diversity basically referred to female workers and the minority, but now focuses on individuals and contextual constructs (Sri Handayani, Suharnomo, Sugeng, & Tri, 2017). Consequently, the characteristics of diversity now form four main domains such as external qualities (e.g., marital status, culture, religion, and nationality), personality (e.g., skills, abilities, and traits), organisational features (e.g., department, union, and position), and internal characteristics (e.g., ethnicity, sexual orientation, gender, intelligence, and race). The new knowledge of diversity includes more than expanding racial, national, sexual orientation, or class portrayal. Thus, workforce diversity is a strategic human resource management technique, which seeks beyond just recruiting and retaining more individuals from the previously underrepresented identity groups on the payroll. Diversity of workforce is rather best comprehended as the diverse points of view and ways to deal with work that individuals from various identity groups hold (Sri Handayani et al., 2017).

Women, Black race, White race, Hottentots race, Amerindian race, Australian Aborigine and Papuan race—these groups and others do not carry with them simply their customs. They bring significant and pertinent information and points of view about how to really design processes, arrive at objectives, outline tasks, make successful teams, and impart thoughts and leads (Thomas & Ely, 1996). When permitted, individuals from these various groups can assist organisations to develop and improve by challenging basic assumptions about an organisation's strategies, procedures, practices, functions, and operations. In doing so, they are able to bring more of their whole selves to the workplace and identify more fully with the work they do, setting in motion a virtuous circle (Thomas & Ely, 1996). The components of workforce diversity are summarised in Fig. 13.1.

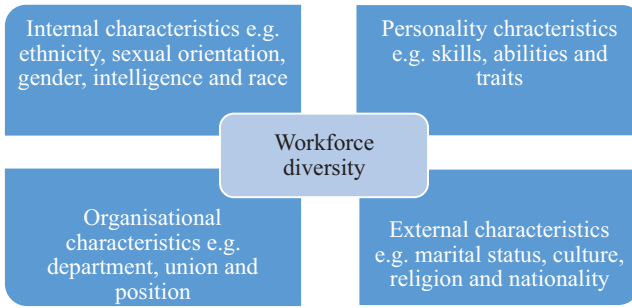


Fig. 13.1 Dimensions of workforce (Author's own work)

13.4 The Diversity Revolution

There are eight powerful truths associated with Industry 4.0 diversity as identified by Bourke and Dillon (2018) and discussed in this chapter. *The diversity of thinking* concerns looking beyond demographic parity to a definitive result. Although, demographic attributes, for example, sex and race are part of essential elements of diversity, organisations still need to guarantee that work environments are liberated from discrimination and empower individuals to reach their maximum capacity. Moreover, diversity of thinking is a source of innovativeness, upgrading development by around 20%. It likewise empowers teams to spot dangers, diminishing these by up to 30%. Furthermore, it smooths the usage of choices by creating trust. The question is, how can managers make this understanding pragmatic, and not disregard demographic diversity? The appropriate response lies in watching out for both. In all, ideal diversity of thinking will not be accomplished without a common platform for all talents, and obviously there is still more ahead to achieve (Bourke & Dillon, 2018).

Diversity without inclusion is not enough: This second powerful truth according to Bourke and Dillon (2018) explains that diversity without inclusion is valueless compared to the two when combined. Individuals feel included when they are managed fairly and with dignity. At the most elevated point, inclusion is communicated as having a sense of security to speak without the fear of humiliation or reprisal, and when individuals feel engaged to develop and accomplish their best work (Alnuaimi, Robert, & Maruping, 2010). In actual fact, only when organisations are clear about the goal, they would be able to direct their concentration toward the drivers of inclusion, make a move, and measure outcomes (Bourke & Dillon, 2018). Furthermore, an expansion in people's sentiments of inclusion converts into an expansion in group performance, cooperation and quality decision-making—*Inclusive leaders can cast a long shadow* (Graham & Cvach, 2010).

The fourth truth—*Middle managers matter*—also emphasises inclusion. Middle management is a previously underserved group. While numerous officials have been given time to learn, reflect, and discuss, mid-level managers are frequently given mandates. A change-management procedure that leaves questions unaddressed

leads to supervisors feeling incapable to push ahead (Byrnes, 2005). It is therefore necessary to include mid-level managers in managerial training as a way of succession planning. This leads to the fifth truth—*Rewire the system to rewire behaviours*. Training is the most well-known answer for workforce diversity (Dobbin & Kalev, 2016). Diversity training programmes conducted with the voluntary, experiential, inspiring, or practical approach could raise awareness, surface historically implicit convictions and make a common language to examine diversity on a daily basis. However, when it comes to actual behaviour change, training is regularly just a scene-setter. Thus, without the organisational system being adjusted to completely eliminate biases, employees’ behaviour will be difficult to change (Bourke & Dillon, 2018).

The setting of specific diversity objectives has been discovered as one of the best strategies for expanding the portrayal of women and other minority groups—*Tangible goals make ambitions real change* (Bourke & Dillon, 2018). Goals imply quantifiable goals set by an organisation at its own will. However, their effect is attached to four conditions: communication, inclusion, responsibility, and support. Without fittingly created substantial objectives, aspirations are simply vaporous wishes. Another infallible truth is, *Match the inside and the outside*. The reality here is that while numerous organisations have prioritised workforce diversity over client diversity, both are similarly imperative to business achievement.

The final truth—*Perform a culture reset, not a tick-the-box programme*—is the truth that underpins the seven previously mentioned. Several organisations will have to change their cultures to become fully diversified. This is, however, no straightforward task as cultural change is tremendous regardless of the objectives. Nevertheless, huge change would not occur until organisations exceed tick-the-crate programmes and contribute the fitting degree of exertion and resourcing in creating diverse culture (Bourke & Dillon, 2018). It will therefore stimulate the workforce to remain competitive and increasingly dynamic, as the nature of an internet of things facilitates cultural change to cope with complex situations. The eight powerful truths associated with I4.0 workforce diversity are presented in Fig. 13.2.

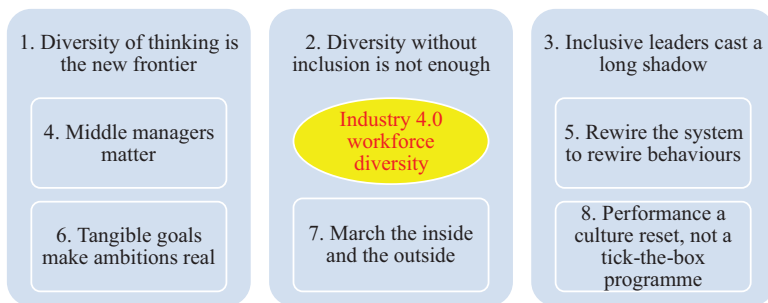


Fig. 13.2 Eight powerful truths related to Industry 4.0 workforce diversity (Author’s own work)

13.5 Psychological Contract Perspective

As work changes, so does the nature of the relationship between employees and employers. In the contemporary work setting, the casual, psychological contract between employers and employees' centres on competency advancement and constant training and work-life balance. However, the old psychological contract was about job security and consistent development inside the organisation (Dhanpat, Nemarumane, Ngoben, Nkabinde, & Noko, 2019; Subramanian, 2017). These changes are driven by new technologies associated with Industry 4.0, which facilitates employee flexibility and simple access to data.

Psychological contract is a progressively pertinent part of the workplace relationship. Research on psychological contract began in the 1960s, remarkably in the work of Chris Argyris and Edgar Schein. Several other scholars have contributed thoughts to the subject from that point forward (Dhanpat et al., 2019; Subramanian, 2017). Mainly, psychological contract explains the relationship between an employer and its employees, specifically concerning shared desires for inputs and results. It is typically viewed from the perspective of the employee's feelings. In other words, in a corporate setting, psychological contract is the parity (normally as perceived by the employee) between how the employee is treated by the employer and what the employee contributed to the job. At its heart, is a philosophy—not a process, tool or formula. This reflects its deeply significant, changing, and dynamic nature. At a more profound level, the idea turns out to be progressively complex and critical in work and administration (Dhanpat et al., 2019; Subramanian, 2017).

In HRM, the term psychological contract commonly implies the actual—but unwritten—expectations an employee or workforce has of the employer. In its basic sense, psychological contract refers to the commitments, rights, and rewards that a worker accepts to be questioned by their manager, in return for good work and loyalty (Rousseau & Schalk, 2000; Subramanian, 2017). The concept of psychological contract in organisations and employment is incredibly flexible and complex (if not for all intents and purposes difficult) to quantify in regular ways, as we may for instance benchmark salaries and pay against market rate, or duties with qualifications. Moreover, psychological contract is very dissimilar to physical contract, since it speaks to the idea of relationship, trust or understanding that can exist for one or various workers, rather than a formal document, which might vary across employees (Conway & Birner, 2005; Subramanian, 2017). In other words, psychological contract depicts the idea of an understanding held by a person or team.

In view of the above descriptions, it is clear that the phenomenon of psychological contract is open to diverse understandings and has various complex components, notably the following:

1. The contract has an alterable nature (being a liquid concept itself and being liable to such a significant number of potential impacts, including social and passionate elements that are not really work-driven).
2. Several shared obligations exist, which incorporate critically, insignificant variables that can be difficult to quantify ordinarily.

3. The obligations are partially or completely subject to the perceptions of the two sides that include further complexities, since perceptions are varied. By their subjective inclination and attitudinal nature, perceptions have recurring cause/impact circles, which are scientifically work-driven.
4. Psychological contract is almost never written or formalised in organisations, which makes it intrinsically hard to manage, and particularly hard for employees, supervisors and officials to relate to. Psychological contract is quite often a simply imaginary system or comprehension, which organisational authority infrequently prioritises as progressively genuine or bearable issues (Subramanian, 2017).

Psychological contract is influenced by the presumption that individuals make about their associations with one another at work. These frequently untested suppositions impact their performance and actions towards one another (Mackenzie, 2020). Rousseau (2004) differentiated between transactional contract and relational contract that overlap with, and ideally complement, each other. *Transactional contract*—a formal contract of employment is basically what we know as a standard, explicit employment contract. They are typically concurred on when somebody joins a specific organisation, and they contain written statements that cover official terms and conditions of service, including remuneration and different rewards, together with sanctions, if the contract is not diligently fulfilled. On the other hand, *relational contract* implies the maintenance and quality of emotional and interpersonal relationships between employer and employee and between peers (Rousseau, 2004; Mackenzie, 2020).

In the most recent time, psychological contract is viewed from the perspective of ‘Old’ versus ‘New’ (Mackenzie, 2020). The old or traditional psychological contract is generally less formalised than the employment contract and contains a component of employee desires too. It is typically dared to be generally fixed and continues to reflect an assumption of ‘permanent’ employment, and a long-term profession within a single employing organisation or sector. The new psychological contract on the other hand, is increasingly unstable, since it could be temporary or impromptu. It takes a more prominent sense of ‘partnership’ between employer and employee, for the most part based on the desire for a less permanent period of salaried ‘employment’. There is a developing pattern towards employment arrangements with ‘interim workers’, contract workers, portfolio or knowledge workers, or ‘interim managers’—promoted by the 4IR (Mackenzie, 2020; Schwab, 2016).

13.6 The Psychological Contract Revolution

Previously, the psychological contract was more about job security and pay. It was almost accepted that the relationship was unequal. The employer had more control or power over the employee—and this was understood by both parties. But as human resources develop, the psychological contract has become richer, and the

balance of power has shifted to more of an even keel. Employees want more, and employers recognise the value of mutual beliefs, common ground and a commitment to treat each other fairly (Campolo, 2005). As a new generation has entered the labour market, and as technology and society have evolved, so has psychological contract.

The twenty-first century employees want more. There may be records of employment levels, but the current trends show that companies are struggling to fill vacancies amid mounting fears over skills shortages. If organisations do not shift their traditional assumption about the psychological contract they are going to miss that talent (Griep et al., 2019). The contemporary employees want more than simply a job—they want a purpose and to feel the difference they are making. This does not mean the financial rewards they are producing for the business—but the real difference they are making to customers, society, or the environment. Something to really care about. The new generation individuals are raised to believe they could change the world. They want organisations and managers to show them how their work matters, even if just a little.

Employees also care about the organisation's culture—not games, free drinks, funky décor, but the real stuff that makes a purposeful culture (Knowles, Morris, Chiu, & Hong, 2001). They want to be surrounded by people who are passionate about what they are doing. They want a manager who pushes boundaries and thinks differently, is open to new ideas and opinions, and who is comfortable with change regardless of the 'colour' of its driver. Interestingly, organisations with a purpose bigger than money **have a growth rate triple** that of their competitors. Research shows that the more employees are positively engaged with the organisation they work for, the higher customer satisfaction is. And the higher that customer satisfaction is, the better the overall performance of the organisation (Osborne & Hammoud, 2017). Engagement starts with a healthy and mutually beneficial psychological contract. Hence, employers are challenged to be brave, bold, and start to make the change, because the Fourth Industrial Revolution is not going away without fulfilling its purpose.

13.7 Scientific Evidence: Dynamism of Psychological Contract and Workforce Diversity

DelCampo and Blancero (2007) reported in their study that Hispanics in the US differ in their assessment of the fairness of the psychological contract. Due to years of discrimination, they have low expectation of fairness in the workplace. Most Hispanics believe that their psychological contract has been violated. The unique cultural norms and values based on their race influence their evaluation of the contract. Likewise, Sia and Bhardwaji (2009) reported in their study of the role of psychological contract in shaping diversity climate among a sample of 207 employees at lower and middle management levels of two public units of Orissa. The results showed that psychological contract has a significant relationship with organisational

inclusiveness. However, there was no significant relationship between psychological contract and personal diversity value.

Similarly, Buttner, Lowe, and Billings-Harris (2010) found in their study of the relationship between psychological contract violation and employee diversity that the US professionals' perceptions of breach in diversity promise fulfilment, after controlling for more general organisational promise fulfilment, led to lower reported organisational commitment and higher turnover intentions. In addition, Chrobot-Mason and Aramovich's (2013) study of the role of psychological outcome of employee perceptions of diversity climate among a sample of 1731 public employees showed that when employees perceive equal access to opportunities and fair treatment, they tend to be more committed. It was also revealed that psychological outcomes played a significant mediating role.

Triana, Jayasingle, and Pieper (2015) studied the perceived workplace racial discrimination and its correlates. The findings of the study showed that perceived racial discrimination was negatively related to psychological health, while perceived diversity climate positively related to coping behaviour. Furthermore, Seopa, Wöcke, and Leeds (2015) also investigated the impact of inclusion in the talent pool on psychological contract among a sample 195 employees from three different companies. Findings of that study showed that employee inclusion had a positive impact on relational psychological contract.

In a study of diversity-related psychological contract, Tufan, De Witte, and Wendt (2017) reported that data from 361 Turkish employees working as ethnic minorities for majority-dominated and minority-owned organisations in Belgium support their research model. The model presumes that diversity psychological contract breaches may increase the intergroup anxiety of ethnic minority employees, while the results of the study showed that avoidant behaviour was expressed towards the organisation in terms of reduced organisational citizenship behaviour.

In another study of the influence of psychological contract within a diverse environment, conducted by Poisat, Mey, and Sharp (2018), it was found that a significant relationship exists between the diversified work environment and psychological contract. Moreover, Hatipoglu and Inelmen (2018) investigated the relationship between demographic diversity principles and evaluations of employee using data from a survey of 707 employees working in 37 hospitality institutions. The results of their investigations confirmed that employee evaluations of voice opportunities were found to display differences between male and female employee groups.

The assumed process changes in psychological contract and workforce diversity during the 4IR are summarised in the conceptual model presented in Fig. 13.3.



Fig. 13.3 The dynamism of psychological contract and workforce diversity: Conceptual model (Author's own work)

13.8 Discussion on the Conceptual Model

The above conceptual model depicts the process of assumed changes in psychological contract and workforce diversity as a result of the influence of the 4IR. The model states that the 4IR world of work, which is characterised by volatility, uncertainty, complexity, and ambiguity (VUCA), has a resolute force to champion the cause of a new employment relationship by virtue of the inherent talents and KSAOs it produces. The model also assumes that the 4IR employee attributes such as the ability to make complex decisions and sound judgments coupled with the critical thinking ability, data analysis skill, problem sensitivity, fluency of ideas, and openness to new methods of doing things will place employees in a better position. Thus, it enables employees to legally bargain for flexible employment contracts. This would consequently promote employees' value and make it a big challenge to retain 2-D employees. Employers would therefore have no choice other than to give way to a new relational contract. Hence, the knot between employees and employers, called psychological contract, will gradually loosen while it attracts diversification of the workforce and employment conditions.

Moreover, the new psychological contract according to the conceptual model is also characterised by unstable, temporal, and ad hoc peculiarities, which operates on the expectation of a less permanent period of salaried employment, and will promote an inclusively diversified workforce. This is because the inherent forces in the 4IR are constantly driving the sense of partnership between employer and employee. Consequently, employers will better appreciate employees who possess the I4.0 KSAOs regardless of their socio-cultural backgrounds, thus creating wide opportunities gained from a broad diversity (Mackenzie, 2020; Schwab, 2016). In other words, an inclusively diversified workforce is realisable with the experience of a new rational contract during this dispensation of the 4IR. It is a mission which the scientific HRM process needs to achieve.

Although the conceptual model has presented and explained the direction of the relationships between psychological capital, workforce diversity, and the 4IR, it is not sufficient to rely completely on the model's assumptions since they are not based on evidence. Nevertheless, this piece of scholarly deduction has set a basis for empirical studies in the niche areas and contributed to the movement towards redefining the psychological contract and promoting an inclusive diversity work climate.

13.9 Implications for Organisational Practice

The four key imperatives that business leaders and HR professionals will need to implement from the new psychological contract and diversity perspectives so as to help their organisations adapt to the volatility, uncertainty, complexity, and ambiguity characterising I4.0, are indicated below.

- Metrics for valuing human capital have to be established in order to manage a mutually beneficial relationship between employee and employer. For instance,

a sustainable HR database that shows evidence of commitment to treating each other fairly and will help in tracking the effectiveness of such HR policies that aimed at fostering a trusting relational contract, equality, and fairness. Hence, organisations should make it essential for HR to persistently show that there is a clear business case for valuing mutual beliefs, common ground, inclusion, and diversification of the workforce.

- It is also imperative for organisations to embed diversity and inclusion in their policies, while opening to trends in the twenty-first century employment relations, which present an opportunity for healthy and mutually benefiting psychological contract. Business leaders and HR professionals are therefore challenged to be innovative as they seek workable HR strategies to cope with the accompanying demands of the 4IR employees. Employees should rather be considered as sovereign business partners.
- Business leaders and HR professionals now need to shift from the traditional master-servant, employee–employer kind of relationship to a competence-based and mutual benefits relationship. Focusing on KSAOs and mutual values will produce outcomes that better the world of work.
- Lastly, as the Fourth Industrial Revolution transforms work and the workforce, business leaders and HR professionals must respond proactively to manage the future work, by supporting and encouraging the workforce to develop the Industry 4.0 KSAOs, which are the ability to make complex decisions and sound judgments, critical thinking ability, data analysis skill, problem sensitivity, fluency of ideas and the smart digital technology skill.

13.10 Recommendations for Future Research

Bearing in mind that the information contained in this chapter and its conclusions are exclusively based on a review of the literature, it is recommended that future studies in this niche area should be designed to generate evidence. It is also recommended that subsequent scholarly efforts should be directed towards testing and validating the propositions in the conceptual model of the dynamism of psychological contract and workforce diversity.

13.11 Conclusion

The chapter has reviewed the encouraging challenges associated with Industry 4.0, especially with regard to HRM from the perspectives dynamism of psychological contract and workforce diversity. Evolving issues such as inclusive diversity climate and the new relational contract have been examined with the lens of conceptual and empirical literature, while various implications for the contemporary HR profes-

sionals have being highlighted. The chapter finally suggests that business leaders and HR professionals heed the various implications as indicated, to avoid violation of mutual trust between employee and employer, which may trigger negative behavioural responses in the workplace.

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Chapter 14

Psychological Contract and Retention Practices: A Guide for Addressing the Needs of Different Race Groups in Higher Education



Annette M. Snyman

14.1 Introduction

Employees are the most vital assets within an organisation and the success of any organisation is largely dependent on the performance of its employees (Abu-Doleh & Hammou, 2015; Gunjal, 2019; Turner, 2020). It is thus of utmost importance for an organisation, in order to be successful and competitive, to retain its highly skilled and valuable staff (Alex & Golhar, 2020; Cloutier et al., 2015). Higher education institutions (HEIs) in South Africa are facing extreme problems in terms of skilled human resources, and this can be attributed, to a large extent, to an inability to retain their valuable staff members (Abugre, 2018; Debrah et al., 2018; Grobler & Jansen van Rensburg, 2019; Ng'ethe et al., 2012; Van Rensburg & Rothmann, 2020).

Various research studies have found that one of the most important factors in the retention of staff, is the type of relationship that exist between employees and their employer (Armstrong, 2009; Dhanpat & Parumasur, 2014; Festing & Schäfer, 2014; Gondo et al., 2016; Guo, 2017). The relationship between an employer and an employee is typically guided by formal agreements such as the employment contract, collective agreements and labour legislation. There is, however, a further unwritten contract that may be even more important, namely, the psychological contract between the employer and the employee (Rousseau, 1995; Stormbroek & Blomme, 2017).

Any employment relationship is shaped to a large extent by the psychological contract that exist between employers and employees (Le Roux & Rothmann, 2013; Stormbroek & Blomme, 2017). The psychological contract is a subjective, open-ended contract, based on individual perceptions regarding the expectations,

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obligations and promises made within an employment relationship (Maharaj et al., 2008; O'Meara et al., 2016; Rousseau, 1989, 2011; Schreuder et al., 2017). In other words, the psychological contract forms the basis of the employment relationship and is shaped by the expectations of employees regarding the benefits to which they believe they are entitled (Wärmich et al., 2015).

When an employee experiences psychological contract breach, it refers to a perception that one's organisation did not meet one or more commitments within the psychological contract (Abu-Doleh & Hammou, 2015; de Ruiters et al., 2016; Morrison & Robinson, 1997; Tziner et al., 2017). Countless research studies have proven that there is an undeniably strong relationship between positive psychological contracts and higher staff commitment and strong retention, and on the other hand, psychological contract breach and lower employee commitment and high staff turnover (Bonilla, 2018; Bunderson, 2001; Chartered Institute of Personnel and Development (CIPD), 2010; Clinton & Guest, 2014; Collins, 2010; De Vos & Meganck, 2009; Johnson & O'Leary-Kelly, 2003; Guo, 2017; Raja et al., 2004; Robinson, 1996; Robinson & Rousseau, 1994; Rodwell & Ellershaw, 2016; Sauzo et al., 2005; Schreuder et al., 2017; Turnley & Feldman, 1999; Van der Vaart et al., 2013; Zhao et al., 2007).

The workforce in South Africa is complex and racially diverse in a post-apartheid era (Snyman et al., 2015; De Beer et al., 2016). It has been determined by several scholars that employees from different race groups differ significantly with regard to their psychological contract preferences (Chrobot-Mason, 2003; Maree, 2016; Mishra & Kumar, 2017; Pant & Vijaya, 2015; Snyman et al., 2015; Thomas et al., 2003; Thomas et al., 2016). Thus, if South African HEIs want to solve the current staff retention problems that they are experiencing, HEIs need to take cognisance of the expectations and preferences of different racial groups in terms of their psychological contracts and implement retention practices in order to address these unique expectations (Coetzer et al., 2017; De Beer et al., 2016).

14.2 Chapter Objective

This chapter is aimed at outlining the differences between racial groups with regard to their psychological contract preferences and their satisfaction with retention practices, within the context of higher education. HEIs should take notice of these differences when developing retention strategies to strengthen the psychological contracts of different racial groups and so doing, improve the retention of key staff. The chapter firstly provides a theoretical overview of the context of retention in the higher education environment, the psychological contract and also the relationship between the psychological contract, retention and race. Secondly, the chapter addresses the empirical research findings of the differences in the psychological contract preferences between racial groups in terms of their satisfaction with retention practices. The chapter ends with a synopsis and discussion of the various

implications of the theoretical and empirical research addressed in the chapter, for retention practices in HEIs.

14.3 Theoretical Background

14.3.1 *Retention in the Higher Education Environment*

Institutions in the higher education environment in South Africa operate in a complex setting, due to the apartheid past and its associated racial inequalities, as well as the affirmative action and employment equity (EE) legislation which are aimed at addressing and redressing these inequalities (Fernandez, 2020; Higher Education of South Africa, 2011; Masango & Mpfu, 2013; Oosthuizen et al., 2019; Republic of South Africa, 1998a, 1998b, 2000, 2003; Webster & Francis, 2019). Also, HEIs in South Africa are experiencing concerning levels of employee turnover (Erasmus et al., 2015; Kinman, 2016; Robyn, 2012; Robyn & Du Preez, 2013). Specifically, at the Open Distance Learning (ODL) institution where the empirical research relevant to this chapter was conducted, employee turnover rates are extremely high (Erasmus et al., 2015; Erasmus et al., 2017; Naidoo, & Joubert, 2017; Dube & Ngulube, 2013). HEIs therefore need to investigate retention practices and strategies which can be implemented in order to retain highly skilled, talented and excellent performing employees as a means to achieve their goals and objectives (Fatima, 2011; Iqbal & Hashmi, 2015; Kumar & Santhosh, 2014).

Employee retention can be described as deliberate policies, procedures and practices applied in order to ensure that valuable employees remain dedicated to the organisation for the longest period of time (Balakrishnan & Vijayalakshmi, 2014; Idris, 2014). Employee retention thus encompasses the complete assortment of human resource policies, strategies and activities implemented by an organisation to ensure that the finest talent, skills and capabilities are attracted and retained for the maximum period of time (Balakrishnan & Vijayalakshmi, 2014; Idris, 2014; Shekshnia, 1994). Retention strategies such as improving employees' compensation packages, introducing flexible working environments, improving employees' career development and training opportunities and so forth are critical in South African HEIs in order to address the growing problem of major employee turnover (Chabault et al., 2012; Döckel et al., 2006; Ferreira & Coetzee, 2010; Terera & Ngirande, 2014).

Döckel (2003) identified seven critical retention factors/practices which should be considered by organisations, such as HEIs, in retaining employees with high technology skills (Das & Baruah, 2013; Döckel et al., 2006; Van Dyk & Coetzee, 2012). These factors comprise compensation, job characteristics, opportunities for training and development, supervisor support, career opportunities, work-life balance and commitment.

In South Africa, EE legislation, including the Employment Equity Act 55 of 1998 (as amended), the Skills Development Act 97 of 1998 (as amended), The Promotion of Equality and Prevention of Unfair Discrimination Act, 4 of 2000 (as amended), as well as the Broad Based Black Economic Empowerment Act, 53 of 2003 (as amended), require particularly of public institutions such as HEIs, to appoint and develop a diverse workforce, comprising of various racial groups (Nyoni, 2019; Republic of South Africa, 1998a, 1998b, 2000, 2003; Sadiq, Barnes, Price, Gumedze, & Morrel, 2019). Moreover, these EE laws are not only aimed at ensuring a diverse workforce, but to eradicate and repair the discrimination from the apartheid past, by providing appointment, promotion, training and development as well as career development opportunities to those previously disadvantaged groups (Oosthuizen et al., 2019).

Another complex, two-sided challenge faced by HEI's, is that the apartheid past resulted in a predominantly white and ageing workforce on the one side (Dube & Ngulube, 2013; Mafini, 2014). On the other side, the EE laws promulgated to transform South African workplaces post-apartheid, have resulted in an oversupply of opportunities for previously disadvantaged employees and a resulting inclination among black staff members to job-hop (Nzukuma & Bussin, 2011). Deas (2017) as well as Gonzalez and Denisi (2009) also found black employees to be less committed to their organisation than their white colleagues, because of a surplus of employment prospects and job-hopping.

This creates a serious problem for HEIs, firstly because in around a decade, most senior academic employees will have retired and there is no influx of young academic employees entering HEIs, and secondly, because these institutions keep on losing their valuable black African, Indian and Asian employees (previously disadvantaged groups) to more lucrative offers in other sectors (Badat, 2010; Dube & Ngulube, 2013; Erasmus et al., 2017; Mmako & Schultz, 2016; Sadiq et al., 2019).

This ageing workforce in HEIs and the increasing retention problems, are causing both a void and an imbalance in terms of scholarly and academic productivity and excellence of HEIs (Erasmus et al., 2017). HEIs in South Africa are not only losing qualified employees as a result of retirement but also they face numerous other challenges related to the retention of key employees, including downsizing, financial constraints, emigration, employment equity, mergers, acquisitions, globalisation and uncompetitive remuneration packages (Dube & Ngulube, 2013; Martins, 2010; Mmako & Schultz, 2016; Notshulwana, 2011; Tettey, 2006, 2010; Wamundila & Ngulube, 2011). Kinman (2016) adds that poor salaries, limited promotion opportunities and job insecurity are some of the foremost factors which contribute to high turnover rates in HEIs.

Various researchers concur that HEIs face an excess of burdens, such as financial constraints, employment equity, uncompetitive remuneration packages, limited promotion opportunities and a lack of resources; but are not equipped with the response mechanisms or strategies required to address burdens (Erasmus et al., 2015; Erasmus et al., 2017; Dube & Ngulube, 2013; Mmako & Schultz, 2016; Theron et al., 2014). This overload of burdens on the employees at HEIs often results in employees leaving the institution, which further creates instability and places additional workload

Table 14.1 Retention challenges in higher education

Key retention challenges in South African HEIs	
Financial constraints	Employment equity
Uncompetitive remuneration packages	Mergers
Poor salaries	Acquisitions
Limited promotion opportunities	Job insecurity
Limited growth and development opportunities	Unfair/inconsistent/judgemental performance management systems
Lack of resources	Globalisation
Overload of demands placed on employees	Emigration

Source: Author's own work

and stress on the remaining employees, leading to job dissatisfaction, lower commitment and a higher possibility of more turnover (Janse van Rensburg et al., 2017; Mahomed, 2019; Mmako & Schultz, 2016; Terera & Ngirande, 2014).

Table 14.1 summarises the retention challenges faced by HEIs in South Africa, as discussed in the paragraphs above.

Thus, from the preceding discussion regarding the context of retention in the higher education environment, it is clear that HEIs need to improve and implement retention practices and strategies aimed at increasing employees' commitment to the organisation and lowering employee turnover.

14.3.2 *The Psychological Contract*

The psychological contract encompasses an individual's views concerning the terms and conditions of a joint exchange agreement between that person and another person (Guo, 2017; Peirce et al., 2012; Rousseau, 1995, 2011). The psychological contract is fundamentally determined by a belief that a promise has been made and an outcome offered in exchange, which binds the parties to a series of reciprocal accountabilities (Rousseau, 1989; Schreuder et al., 2017; Stormbroek & Blomme, 2017). The psychological contract can also be described as the obligations, rights, justice and rewards to which employees feel they should get from their employer in return for their work, commitment, responsibility and loyalty (Grobler, 2014). Thus, the psychological contract is the subjective, individual perception of the obligations that an employee has towards his/her organisation and of the obligations that the employer has towards his/her employee (Maharaj et al., 2008; O'Meara et al., 2016; Rousseau, 2011).

The state of the psychological contract is determined by the perceptions that employees hold of fairness, justice and trust in their employer (Stormbroek & Blomme, 2017). However, employees often perceive their organisation as having failed to satisfactorily fulfil their side of the contract, which is referred to as psychological contract breach (de Ruiter et al., 2016; Person et al., 2011). Psychological

contract breach is essentially the identification of perceived unmet responsibilities and obligations within an employment relationship (Rayton et al., 2015). The state of psychological contract influences job satisfaction, organisational commitment, a sense of organisational security, employment relations, motivation, organisational citizenship as well as the intention of the employee to leave the organisation (Abu-Doleh & Hammou, 2015; Baharuddin et al., 2017; Bonilla, 2018; Collins, 2010; de Ruiter et al., 2016; Guest, 1998; Kraak et al., 2017; Lapointe et al., 2014; Tziner et al., 2017; Zhao et al., 2007).

Thus, a perceived breach of the psychological contract may alter an employee's commitment to the organisation and lead to heightened absenteeism and staff turnover and may have a detrimental effect on employee retention (Bonilla, 2018; Maguire, 2001; Peirce et al., 2012; Stormbroek & Blomme, 2017; Van Dijk & Ramatswi, 2016). On the other hand, a positive state of the psychological contract may have an enormous positive impact on staff retention, increasing employees' commitment and making employees less likely to leave their organisation (Deas, 2017; Grobler, 2014; Grobler & Grobler, 2016; Kraak et al., 2017; Peirce et al., 2012; Stormbroek & Blomme, 2017; Van der Vaart et al., 2013; Van der Vaart et al., 2015).

Furthermore, Deas (2017) found significant positive correlations between the psychological contract and the human resource (HR) retention practices identified by Döckel (2003). These results suggest that a positive state of the psychological contract is associated with high satisfaction with these HR retention practices, including compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work-life balance and organisational commitment (Deas, 2017; Döckel et al., 2006).

Significant amounts of research have been done over the past decade regarding the importance of the psychological contract in employment relationships. Various researchers concur that the contents of the psychological contract can be described as *employer obligations* (individuals' perceptions regarding duties and responsibilities that an employer has in the employment relationship), *employee obligations* (the perceived duties and responsibilities that an employee has in the employment relationship), *job satisfaction* (employees' valuation of their work, working situation and employment conditions) and the *state of the psychological contract* (the extent to which employees feel that they are rewarded and paid fairly, whether they trust senior management to look after their best interests, to keep its promises and commitments) (Guest et al., 2010; Psycones, 2006).

In summary, the psychological contract can be regarded as a crucial factor in the retention of employees, seeing that a positive psychological contract might result in higher commitment, lower turnover and increased staff retention-and a negative psychological contract may lead to higher intention to leave and increased turnover. Thus, HEIs need to take cognisance of the impact of the psychological contract on employee retention, and more importantly, diverse employees' varying psychological contract preferences, in in order to implement retention practices and strategies aimed at lowering turnover.

14.3.3 Race and the Psychological Contract

Numerous researchers concur that employees from varying racial groups differ significantly pertaining to their psychological contract preferences (Chrobot-Mason, 2003; Deas, 2017; Maree, 2016; Mishra & Kumar, 2017; Pant & Vijaya, 2015; Snyman et al., 2015; Thomas et al., 2003, 2016). It has also been found that employees from racial minority groups within an organisation, such as the white racial group in South African HEIs, may differ in terms of their perceptions and expectations with regard to the psychological contract, from the majority racial group within an organisation, which is the black African group within South African HEIs (Chrobot-Mason, 2003; Pant & Vijaya, 2015). Thomas et al. (2003) furthermore determined that employees from different races vary regarding the establishment of the psychological contract, their views of violations of the psychological contract, plus their reactions to perceived violations.

In another study, Snyman et al. (2015) found significant differences in the psychological contract perceptions and preferences between designated groups (women, disabled people and black people, namely Black Africans, Asians and Coloureds) and non-designated groups (white males). Likewise, Thomas et al. (2016) concluded that staff members from different racial groupings had dissimilar psychological contract preferences when it came to the formation and fulfilment of the psychological contract. Lastly, Mishra and Kumar (2017) determined that different races within organisations did not show similar perceptions and expectations in terms of their psychological contracts.

In conclusion, it is evident from the preceding literature study that HEIs in South Africa are experiencing high staff turnover rates, which can be detrimental to the success and flourishing of these institutions. Furthermore, it became clear that the psychological contract between an employee and his/her employer, may have a noteworthy effect on employee retention. Lastly, the discussion showed that South African HEIs comprise a racially diverse workforce, and that various racial groups differ significantly in terms of their psychological contract expectations and preferences. Thus, it is crucial that HEIs implement retention strategies aimed at strengthening the psychological contracts of their employees, specifically addressing the unique needs and preferences of different races, in order to retain their highly skilled and valuable staff. In the following section, the empirical research relevant to this chapter is discussed.

14.4 Research Method

14.4.1 Participants and Procedure

A purposive sample of both academic and support staff employees ($N = 493$) of an ODL HEI in South Africa participated in the study. Data was collected through an online survey and participation was voluntary and anonymous. As shown in

Table 14.2 Racial distribution in the sample ($n = 493$)

Race group		Frequency	Percent	Valid percent	Cumulative percent
Valid	Black African	236	47.9	47.9	49.5
	Coloured	14	2.8	2.8	52.3
	Indian/Asian	25	5.1	5.1	57.4
	White	210	42.6	42.6	100
	Other	8	1.6	1.6	1.6
	Total	493	100.0	100.0	

Source: Author's own work

Table 14.2, Black Africans comprised 47.9%, Coloureds comprised 2.8%, Indian/Asians, 5.1% and Whites 42.6% of the total sample of research participants. Overall, the black racial group comprised the majority of the sample (47.9%), following the white racial group (42.6%). Permission to conduct the survey and ethical clearance was provided by the HEI.

14.4.2 *Measuring Instruments*

The selected measuring instruments used in this research, including a biographical information questionnaire, the Psycones Questionnaire (PQ) (Psycones, 2006) and the Retention Factor Measurement Scale (RFMS) (Döckel, 2003), are discussed below.

The Biographical information questionnaire comprised of 12 questions, aimed at determining the participant's race, age, gender, marital status, employment status, job level, qualification and tenure.

The Psycones Questionnaire (PQ), developed by the Psycones project (de Cuyper et al., 2011), was used to assess whether participants evaluated their psychological contracts positively. The PQ comprises 44 items, assessing employer obligations, which relates to an individual's perception of promises made by the organisation, including for example questions such as: 'Has your organisation promised or committed itself to providing you with a job that is challenging?' and 'Has your organisation promised or committed itself to allowing you to participate in decision-making?'. Also, the PQ evaluates employee obligations, which relates to an individual's perception of his/her promises made to the organisation and consists questions such as: 'Have you promised or committed yourself to showing loyalty to your organisation?' and 'Have you promised or committed yourself to being a good team player?'

Furthermore, the PQ measures job satisfaction, which is aimed to determine the emotions associated with the psychological contract, including statements like: 'I feel happy', 'I feel sad', 'I feel pleased'. Participants must state the extent to which they agree with a statement. Lastly, the state of the psychological contract is assessed

through the PQ, through measuring the overall state of the psychological contract. This section includes questions such as: ‘Do you feel that organisational changes are implemented fairly in your organisation?’ and ‘Do you feel fairly treated by managers and supervisors?’

Both employer and employee obligations, uses a six-point Likert-type scale to capture responses (0 = no, the promise has not been made; 1 = yes, but promise has not been kept at all; 6 = yes, promise fully kept). Satisfaction with the psychological contract and state of the psychological contract were assessed by means of a five-point Likert-type scale (1 = strongly agree; 5 = strongly disagree). The Cronbach’s alpha coefficients for the PQ have been reported by previous research as very high, with employer and employee obligations ($\alpha = .95$), emotions associated with the psychological contract ($\alpha = .70$) and the state of the psychological contract ($\alpha = .93$) (Psycones, 2006). In another study, a high reliability for employer obligations ($\alpha = .94$), employee obligations ($\alpha = .93$), and state of the psychological contract ($\alpha = .90$) was reported by Van der Vaart et al. (2013). Also, Snyman (2014) found the Cronbach’s alpha coefficient for the satisfaction with the psychological contract to be high as well ($\alpha = .70$). Finally, in a detailed analysis by Freese and Schalk (2008), it was concluded that the PQ was a highly recommended measurement for psychological contract research.

The Retention Factor Measurement Scale (RFMS), developed by Döckel (2003), was used to assess participants’ satisfaction with several factors within their organisation, including compensation, job characteristics, training, supervisor support, career opportunities, work-life balance and organisational commitment (Döckel et al., 2006). Organisational commitment was excluded in the statistical processing and analysis of the data, seeing that organisational commitment is not regarded as an HR practice. Organisations should realise the importance of these retention factors in endeavouring to retain their talented employees (Döckel et al., 2006; Van Dyk & Coetzee, 2012) as it can be considered as substantial human resource practices effecting both turnover intention and employee retention (Coetzee et al., 2015). In this chapter, the terms retention practices and retention factors are therefore used intermittently at times, to denote the same construct.

The RFMS consists of 35 items, where participants have to indicate how satisfied or dissatisfied they feel about their organisation regarding certain statements. The compensation subscale measures participants’ opinions about the importance of compensation and contains statements such as: ‘My benefits package’ and ‘My most recent raise’. In the job satisfaction subscale, participants’ views with regard to the importance of job satisfaction is measured with statements such as: ‘The job requires me to use a number of complex or high level skills’ and ‘The job is quite simple and repetitive’. The training subscale measures participants’ views on the significance of training, for example: ‘This company provides me with job-specific training’ and ‘Sufficient time is allocated for training’.

In the supervisor support subscale, participants’ perceptions about the importance of supervisor support, is measured and it encompasses items, including: ‘I feel undervalued by my supervisor’ and ‘My supervisor seldom recognises an employee for work done well’. The career opportunities subscale determines participants’ outlooks on the significance of career opportunities. The subscale consists of six items,

for instance: ‘My chances for being promoted are good’ and ‘It would be easy to find a job in another department’. The last subscale, namely the work-life balance subscale, examines participants’ views on the importance of a work-life balance, with statements such as: ‘I often feel that there is too much work to do’ and ‘My work schedule is often in conflict with my personal life’.

A six-point Likert-type scale was used to capture the responses for the six subscales relevant to this research, namely compensation, job characteristics, training, supervisor support, career opportunities and work-life balance (1 = strongly dissatisfied; 6 = strongly satisfied). Döckel (2003) confirmed construct validity of the RFMS and Döckel et al. (2006) reported internal consistency reliability for compensation ($\alpha = .90$), job satisfaction ($\alpha = .41$), training ($\alpha = .83$), supervisor support ($\alpha = .90$), career opportunities ($\alpha = .76$), and work/life balance ($\alpha = .87$).

14.4.3 Statistical Analysis

The first statistical technique which was used in the study, was bivariate correlations, in order to measure the strength and direction of the relationship between the socio-demographic variable of race, the psychological contract and satisfaction with retention practices. Specifically, to test the strength and direction of this relationship, the Pearson’s product moment correlation coefficient (r) and the Spearman’s rank correlation coefficient (p) was employed. In order to establish the practical significance of the correlations, the cut-off points applied was $r \geq .30$ (medium effect) and $p \leq .05$ (Humphreys et al., 2019; Liu, 2019).

Secondly, in order to assess whether the data had a normal distribution, using SAS version 9.4 (SAS, 2013), the Shapiro–Wilk, Kolmogorov–Smirnov, Cramer–von Mises and the Anderson–Darling tests were utilised. The results of these tests showed that the data was normally distributed, and thus parametric tests, specifically ANOVAS and post hoc tests, were used to measure the differences between the racial groups within the sample with regard to their psychological contracts and their satisfaction with retention practices. A significance level of $p \leq .05$ indicates that the test are significant and valid. With the purpose of examining the practical effect size of the mean differences between the different races, Cohen’s d was used. The effect sizes of Cohen’s d are suggested as follows: $d = .02$; small effect; $d = .05$; medium effect; $d = .08$; large effect (Gravetter et al., 2016).

14.5 Results

14.5.1 Correlations

Table 14.3 shows the descriptive statistics and bivariate correlations of all the subscales of the psychological contract-related variables (PQ), the retention practices-related variables (RFMS) and race. Overall, the results indicated a significant

Table 14.3 Descriptive statistics and bivariate correlations: race

Variables	Means	SD	α	CR	AVE's	Race
Employer obligations	3.56	1.26	.94	.94	.50	-.06
Employee obligations	5.27	.69	.90	.90	.41	-.14***
Job satisfaction	4.06	.96	.90	.89	.58	-.17***
State of the PC	2.98	.89	.87	.90	.46	-.16***
Overall PQ	4.09	.72	.94	n/a	n/a	-.11**
Compensation	3.50	.82	.94	.94	.56	.03
Job characteristics	4.40	1.05	.64	.60	.30	.02
Training and development opportunities	3.94	1.30	.90	.90	.61	-.07
Supervisor support	3.96	1.30	.85	.83	.47	-.01
Career opportunities	3.16	1.26	.80	.80	.46	-.27***
Work-life balance	3.35	1.55	.89	.90	.70	-.38
Overall RFMS	3.74	.72	.93	n/a	n/a	-.12

Notes: $N = 493$; PC Psychological contract; *** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$; $r \leq .30$ (small practical effect size), $r \geq .30 \leq .49$ (moderate practical effect size), $r \geq .50$ (large practical effect size)

Source: Author's own work

negative bivariate correlation between race and employee obligations [PQ scale] ($r = -.14$; small practical effect size; $p \leq .001$); job satisfaction [PQ scale] ($r = -.17$; small practical effect size; $p \leq .001$); and state of the psychological contract [PQ scale] ($r = -.16$; small practical effect size; $p \leq .001$). The results further showed a significant negative bivariate correlation with the overall PQ ($r = -.11$; small practical effect size; $p \leq .01$) and career opportunities [RFMS] ($r = -.27$; small practical effect size; $p \leq .001$).

In summary, the results indicated significant correlations between race and the PQ scale as well as career opportunities (RFMS), with small practical effect sizes.

14.5.2 Significant Differences in Mean Scores for Race Groups (PQ and RFMS)

Table 14.4 provides a summary of the ANOVAs and post hoc tests investigating the relationship between race, the psychological contract-related variables (PQ) and the retention practices-related variables (RFMS). This section only reports on the variances between variables that were significant.

(a) The psychological contract (PQ scale)

With regard to the psychological contract-related variables, Indians/Asians scored significantly higher than Whites on overall PQ (Indians/Asians: $M = 4.45$; $SD = .65$; Whites: $M = 3.99$; $SD = .65$; $d = .71$; moderate practical effect) as well as state of the psychological contract (Indians/Asians: $M = 3.36$; $SD = .95$; Whites: $M = 2.83$; $SD = .84$; $d = .59$; moderate practical effect).

Table 14.4 Significant mean differences on the psychological contract and satisfaction with retention practices in terms of race

Variable	Source of difference	N	Mean	SD	ANOVA Sum of squares	Mean square	F	p	Source of significant differences between means	Cohen d
Psychological contract-related variables (PQ)										
Overall psychological contract	Black African	236	4.17	.79	7.71	1.93	3.75	.005	Indian/Asian—White: .46***	
	Coloured	14	3.86	.50					White—Indian/Asian: -.46***	
	Indian/Asian	25	4.45	.65						
	Other	8	3.85	.63						
	White	210	3.99	.65						
Job satisfaction	Black African	236	4.22	.96	17.07	4.27	4.77	.0009	Black African—White: .35*** White—Black African: -.35***	
	Coloured	14	3.75	1.07						
	Indian/Asian	25	4.35	.81						
State of the psychological contract	Other	8	3.96	.96						
	White	210	3.87	.93						
	Black African	236	3.11	.90	14.03	3.51	4.58	.0012	Indian/Asian—White: .53***	
	Coloured	14	2.69	.74					Black African—White: .28*** White—Indian/Asian: -.53***	
	Other	8	2.72	.89					White—Black African: -.28***	
Retention practices-related variables (RFMS)										
Overall retention practices	Black African	236	3.82	.72	8.77	2.19	4.33	.002	Indian/Asian—White: .45*** Black African—White: .20*** White—Indian/Asian: -.45*** White—Black African: -.20***	
	Coloured	14	3.48	.49						
	Indian/Asian	25	4.08	.84						
	Other	8	3.50	.90						
	White	210	3.63	.68						

Variable	Source of difference	N	Mean	SD	ANOVA Sum of squares	Mean square	F	p	Source of significant differences between means	Cohen d
Relationship with supervisor	Black African	236	3.98	1.21	16.76	4.19	2.50	.041	Indian/Asian—White: .80***	
	Coloured	14	3.64	1.33					White—Indian/Asian: -.80	
	Indian/Asian	25	4.66	1.21						
	Other	8	4.31	1.40						
Development opportunities	White	210	3.86	1.39						
	Black African	236	3.48	1.35	66.01	16.50	11.24	.0001	Indian/Asian—White: .83***	
	Coloured	14	3.27	.87					Black African—White: .72***	
	Indian/Asian	25	3.59	1.20					White—Indian/Asian: -.83***	
Work-life balance	Other	8	2.50	1.03					White—Black African: -.72***	
	White	210	2.76	1.07						
	Black African	236	3.94	10.45	172.60	43.15	20.85	.0001	Black African—White: 1.21***	
	Coloured	14	3.23	1.2					Black African—Other: 1.67***	
	Indian/Asian	25	3.42	1.74					White—Black African: -.12***	
	Other	8	2.28	1.48					Other—Black African: -1.7***	
	White	210	2.73	1.40						

Note: N = 493; 95% Confidence limit; ***p ≤ .0001
 Source: Author's own work

Furthermore, Black Africans scored significantly higher than Whites in terms of job satisfaction (Black African: $M = 4.22$; $SD = .96$; Whites: $M = 3.87$; $SD = .93$; $d = .37$; small practical effect) as well as state of the psychological contract (Black African: $M = 3.11$; $SD = .90$; Whites: $M = 2.83$; $SD = .84$; $d = .32$; small practical effect).

(b) *Satisfaction with retention practices (RFMS)*

In terms of the satisfaction with retention practices-related variables, Indians/Asians scored significantly higher than Whites for overall RFMS (Indians/Asians: $M = 4.08$; $SD = .84$; Whites: $M = 3.63$; $SD = .68$; $d = .59$; moderate practical effect), relationship with supervisor (Indians/Asians: $M = 4.66$; $SD = 1.21$; Whites: $M = 3.86$; $SD = 1.39$; $d = .61$; moderate practical effect), as well as career opportunities (Indians/Asians: $M = 3.59$; $SD = 1.20$; Whites: $M = 2.76$; $SD = 1.07$; $d = .73$; moderate practical effect).

In addition, Black Africans scored significantly higher than Whites in terms of overall RFMS (Black African: $M = 3.82$; $SD = .72$; Whites: $M = 3.63$; $SD = .68$; $d = .27$; small practical effect), career opportunities (Black African: $M = 3.48$; $SD = .1.35$; Whites: $M = 2.76$; $SD = 1.07$; $d = .59$; moderate practical effect), and work-life balance (Black African: $M = 3.94$; $SD = 1.45$; Whites: $M = 2.73$; $SD = 1.40$; $d = .85$; large practical effect). Blacks also scored significantly higher than other racial groups in terms of work-life balance (Black African: $M = 3.94$; $SD = 1.45$; other: $M = 2.28$; $SD = 1.48$; $d = 1.13$; large practical effect).

14.6 Discussion

The research presented in this chapter explored the differences between racial groups with regard to the psychological contract and satisfaction with retention practices, within the context of higher education. The results revealed that participants from different racial groups differ considerably with regard to their psychological contracts as well as their satisfaction with retention practices.

With regard to the *psychological contract*, Indians/Asians were found to be significantly more satisfied than their white colleagues, with their overall psychological contracts as well as the state of their psychological contracts. This corresponds with the findings of Shuping (2009) who determined that employees from the Indian racial group generally perceived their psychological contracts with their employer in a more positive light and were more involved with their employer, than the white racial group. Furthermore, Black Africans similarly showed meaningfully more positive perceptions regarding their job satisfaction as well as the state of their psychological contracts, than their white colleagues. These findings concur with the studies of Ehlers and Jordaan (2016), Hofhuis et al. (2014), as well as Wöcke and Sutherland (2008) who concluded that Black African employees were generally

more satisfied than white employees, in terms of their psychological contracts and their perceptions of fairness and trust.

Hofhuis et al. (2014) similarly concluded that employees from the minority racial group often displayed more dissatisfaction than the majority racial group in terms of their psychological contracts as a forecaster of turnover intents. Also, Strydom (2009) concluded that employees from the non-designated group (white males) felt that their employers gave more favourable treatment to employees from designated groups (women, disabled people and black people, including Black Africans, Indians/Asians and Coloureds). Within the context of higher education, Deas (2017) found the black racial group to perceive the state of their psychological contracts more positively than the white racial group. Correspondingly, in a large scale public sector study, Ronnie (2016) found Black Africans to be more satisfied in terms of their psychological contracts than all other races.

In terms of *satisfaction with retention practices*, once again Indians/Asians were found to be significantly more satisfied with their institution's overall retention practices, their relationship with their supervisors as well as their career opportunities, than their white counterparts. Maharaj et al. (2008) argue that white employees might feel less satisfied than other races, with regard to both their psychological contracts, as well as their organisation's retention practices, due a feeling of being disregarded by EE legislation and affirmative action measures.

Likewise, Black Africans had significantly more positive perceptions about their organisation's overall retention practices, their career opportunities and their work-life balance than their white colleagues. Black Africans were also found to have significantly more positive perceptions regarding the work-life balance in their organisation, than all of the other racial groups in the study. Van Dyk and Coetzee (2012) similarly found Whites to be the least satisfied with their work-life balance of all the racial groups in that study and in a different study, it was concluded that black employees were more satisfied than other races, with regard to work-life balance (Oosthuizen et al., 2016).

In a South African HEI, the researcher concluded that overall, black employees were more satisfied than white employees with the institution's retention practices, specifically in terms of career opportunities and work-life balance (Deas, 2017). Coetzee and Stoltz (2015), João and Coetzee (2012) as well as Van Dyk and Coetzee (2012) found black employees to be more satisfied than white employees in terms of career development opportunities, training and development opportunities and work-life balance.

These findings might be related to the regulations stipulated in the Employment Equity Act (EEA) 55 of 1998 (as amended), the Skills Development Act 97 of 1998 (as amended), The Promotion of Equality and Prevention of Unfair Discrimination Act, 4 of 2000 (as amended), as well as the Broad Based Black Economic Empowerment Act, 53 of 2003 (as amended), which are aimed at redressing South African workplaces and eradicating the racial discrimination from the apartheid past (Fernandez, 2020; Maharaj et al., 2008; Oosthuizen et al., 2019; Wöcke & Sutherland, 2008). These regulations might result in white employees perceiving

their employers as providing more favourable career development and training opportunities, as well as promotion and financial benefits to Black African employees, as well as Indian/Asian employees, seeing that these groups experienced discrimination and lack of opportunities based on their race, during the apartheid past (Fernandez, 2020; Snyman et al., 2015).

One could argue that only white male employees ought to experience these regulations as marginalising, and that only white males would be inclined to feel less satisfied in terms of their psychological contracts and retention practices, seeing that white females are included in the definition of designated employees (women, disabled people and black people, namely Black Africans, Indians/Asians and Coloureds) according to the EEA. However, the EE-related Acts promulgated after 1998, as well as the amendments made to the EEA, provide substantial benefits to organisations for the appointment and advancement of non-white employees, in a stronger effort to curb the persisting inequality in South African workplaces. This could clarify why in this study as well as various other research studies, Black Africans and also Indians/Asians were found to be significantly more satisfied than Whites, with their psychological contracts as well as the institution's retention practices.

The research presented in this chapter may assist employers in the development of retention strategies aimed at strengthening the psychological contracts of different racial groups within the diverse South African workforce and so doing, increasing their satisfaction with their organisation's retention practices. Especially in the digital era context, organisations are becoming more and more diverse in terms of their employees, and thus even more than ever, employers should take cognisance of different racial groups' preferences in terms of the psychological contract and retention practices, when developing and implementing retention strategies.

14.7 Limitations

The empirical research addressed in this chapter was limited to a single HEI and the results cannot be generalised to South African higher education institutions in general. Hence, it would be advisable for more research to be conducted in this regard, including various institutions in the higher education environment. Furthermore, the sample of the research comprised only 493 participants from a HEI and a larger sample would provide more insight into the differences between racial groups with regard to the psychological contract and satisfaction with retention practices. Lastly, the research did not focus on the differences between other socio-demographic variables, for instance age, gender, marital status, employment status, job level, qualification and tenure, terms of the psychological contract and retention practices, and therefore further research is needed in this regard.

14.8 Implications and Recommendations for Retention Practices in Higher Education

HEIs in South Africa operate in a complex, multifaceted environment. Like all public sector establishments, HEIs have to implement the EE-related laws and regulations in order to comply with EE targets set by government, but moreover to eradicate the inequalities that stem from South Africa's apartheid past and ensuring a diverse workforce. The EE legislation is a factor that HEIs and its management have no control over, thus it bides a challenge when these regulations could be the root cause of white employees' dissatisfaction in terms of their psychological contracts and retention practices. However, HEIs need to strengthen the psychological contracts of all races by focussing on the aspects that they do have control over, while still ensuring fairness, equality of opportunity and complying with EE regulations.

It is thus firstly recommended that HEIs take cognisance of the differences and preferences of various racial groups and especially, of the factors with which certain racial groups are dissatisfied with. Secondly, HEIs should ensure that supervisors provide adequate support to all of their employees, seeing that the type of relationship that exist between employees and their supervisors, could immensely strengthen the psychological contracts of employees and so doing, increase employees' satisfaction with retention practices. Thirdly, the work-life balance policies and programmes that are offered by HEIs is an important retention factor which could assist in strengthening the psychological contacts of employees and increase their satisfaction with retention practices.

Lastly, even though HEIs have to implement EE regulations, these institutions should aim to provide equitable training and career development opportunities to employees of all races. Fairness, equitable opportunities and organisational justice fosters trust and this, along with strong supervisor-employee relationships and attractive work-life balance policies, may strengthen the psychological contracts of all races, increase satisfaction with retention practices and so doing, enhance staff retention.

14.9 Conclusion

This chapter provided an overview of the diverse higher education environment in South Africa and the staff retention challenges that HEIs are experiencing. Moreover, the chapter provided a theoretical and empirical understanding of the perceptions and expectations of various races within HEIs, regarding the psychological contract and satisfaction with retention practices. It is concluded that there are significant differences in the perceptions and expectations of different racial groups, and HEIs should consider these preferences when developing retention strategies with the aim of retaining valuable staff.

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Chapter 15

Brace Up for the New Generation: Decoding the Psychological Contract Expectations of Gen Z in a Digital World



Helena Bulinska-Stangrecka and Mohammad Faraz Naim

15.1 Introduction

The recent years of scholarly research are fraught with numerous studies focusing on generations. Even popular press is not far behind in publishing articles on the concept of generations. Importantly, the advent of the digital economy has further increased the attention paid to generations in the workplace. This dramatic technological shift has created a sea of change in the contextual environment of organizations globally. Moreover, with the emergence of Generation Z (born after the year 1996) (hereafter referred as Gen Z) in the workplace has added to the multigenerational profile of the contemporary workforce. It has led to serious implications for human resource (HR) managers, who have to manage a multigenerational workforce with potentially different perspectives about the employment relationships and on how employers perceive the psychological contract they have with their organization. Importantly, there are few academic studies that emphasize the characteristics and expectations of the Gen Z segment. It is anticipated that Gen Z will be the largest segment of the US population by 2023 (Reily, n.d.).

The psychological contract is viewed by many researchers as a useful concept for understanding apparent changes to the employment relationships brought about by novel organizational circumstances such as demographic diversity and increased reliance on digital pathways (Adams, Adams Quagraine, & Klobodu, 2014). Therefore, the present contextual environment will influence the psychological contract of young workforce segments, particularly of Gen Z. In this chapter, we

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therefore argue that employees develop the mental schemas about their psychological contracts based on their broad range of formative experiences and propose how Gen Z cohort's formative experiences have an impact on their psychological contract (see Fig. 15.1). The concept of generational cohorts is deeply rooted in the literature of sociology (Mannheim, 1952), and several studies have shown that generational differences exist in people's values and life choices (Eyouna, Chen, Ayoun, & Khelifat, 2020; Kalleberg & Marsden, 2019). Moreover, within the scope of Human resource management, a wide plethora of research on generational differences has focused on work values and work attitudes of different generations (Lyons & Kuron, 2014; Parry & Urwin, 2011). Still, in recent years, the research on generational differences in work values and work attitudes is flourishing (Kalleberg & Marsden, 2019). However, compared with work values, a more appropriate way of investigating generational responses to organizational cues is through the perspective of the psychological contract (Lub, Bal, Blomme, & Schalk, 2016).

The psychological contract describes the reciprocal exchange of mutual obligations between the employee and the organization (Rousseau, 1995). This means that an employee perceives the employer to have certain obligations towards him/her and will reciprocate fulfillment of these obligations with positive work attitudes such as affective commitment, organizational citizenship behavior or intention to stay (Eyouna et al., 2020). Although perceived obligations themselves may trigger these positive work attitudes (in anticipation of obligations fulfillment), it is the actual fulfillment of obligations that truly triggers positive work attitudes (Kodden & Roelofs, 2019).

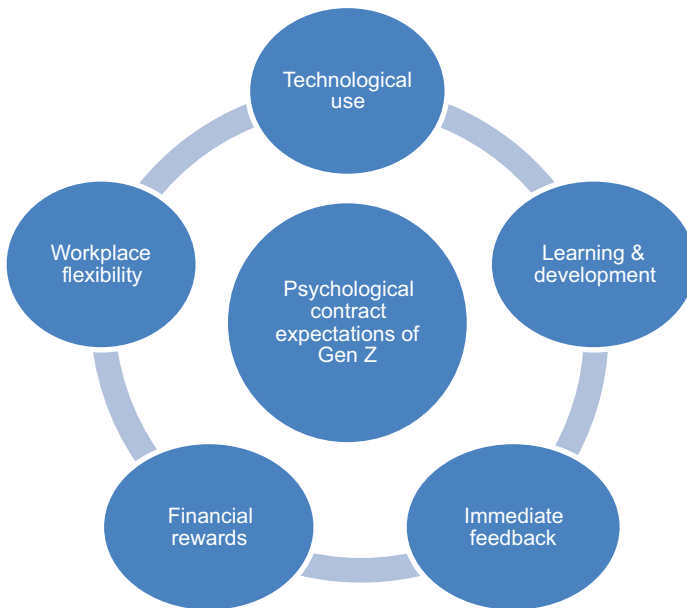


Fig. 15.1 Conceptual framework of psychological contract expectations of Gen Z. Source: Authors' own work

So, why would this be different for different generations? As Rousseau (2004) points out employees' developmental schemas about their psychological contracts because of a broad range of sources, including societal influences (e.g., social contracts and norms) and formative pre-employment factors (e.g., motives and values). These schemas affect the creation of meaning around reciprocity and mutuality that parties to the contract should demonstrate (Knapp, Diehl, & Dougan, 2020). We thus resort to 'generational cohort theory' to unravel the aforementioned question. As per this theory, the term generation is conceived as a cohort that encompasses individuals of a similar age-group, who have experienced the same events and circumstances in a formative phase of their lives and have developed different mental schemas about the world they live and work in (Andrade & Westover, 2018; Mannheim, 1952). These different mental schemas are likely to affect the psychological contract of different generations in two ways: through the development of generationally specific perceived employer obligations (Lub, NijeBijvank, Matthijs Bal, Blomme, & Schalk, 2012); and through the way different generations respond to the fulfillment of employer obligations (Lub, Bal, Blomme, & Schalk, 2014). Such collective experiences shape a distinct consciousness (Amaral & Brites, 2019) shared by a generation. Furthermore, such a collective understanding differentiates one cohort from another (Wachelder, 2019). These shared experiences affect generational values, behavioral patterns, and perceptions (Becton, Walker, & Jones-Farmer, 2014). As such, it forms a unique perspective typical of a given generation. As a result, such individuals can be considered as a distinguishable cohort.

The generational effect is noticeable among groups differentiated on the basis of age. The most common separation divides the working population into following categories: Baby boomers (born between 1946 and 1960) approaching retirement and withdrawing from work; Generation X (born 1961–1980) representing a progressively smaller share of the pool of employees; Generation Y (born 1981–1995) constituting the largest part of the current workforce; and Gen Z (born after 1995) rapidly emerging on the talent market. Due to the relatively short period of time spent in the talent market, Gen Z is the least studied among the generational cohorts. However, they are gaining in importance due to their growing numbers in organizations (Mohr & Mohr, 2017; Seemiller & Grace, 2016). The characteristics of Gen Z indicate the important role of technology in shaping their distinctiveness (Chillakuri & Mahanandia, 2018; Turner, 2015). This generation has been shaped by a volatile economy, social justice, and growing reliance on advanced technological solutions (Seemiller & Grace, 2016). Gen Z is often linked to collective thinking, as a result of social media usage (Csobanka, 2016). They are embedded in the ubiquitous world of social media and technological dependence (Csobanka, 2016). Moreover, in the current digital era, it is undeniable that the Internet and technology have influenced and affected almost every aspect of our lives. Notably, the young generation is particularly addicted to the Internet and social media. Therefore, we have proposed that the technology and digital dimension must be incorporated into the psychological contract as desired by Gen Z employees, to complement their personality model and to reflect their lifestyles. The results of this study help describe the workplace expectations of Gen Z and may be further applied by researchers and

practitioners in other fields for academic and occupational purposes. Therefore, the chapter explores the psychological contract expectations of Gen Zs from a digital economy perspective.

15.2 Chapter Objective

This chapter endeavors to identify Gen Z's workplace expectations. In addition, the analysis presented is aimed at describing the mechanism that shapes these expectations based on the psychological contract theory and the generational perspective. Therefore, the main objective of this chapter is to develop a conceptual framework depicting the workplace expectations of Gen Z from the lens of psychological contract theory in a digital world context.

15.3 Understanding Psychological Contract Theory

The psychological contract represents an exchange (with reference to the Social Exchange Theory) or as a mental model linking employees and employers (Petersitzke, 2009). The first concerns the unwritten expectation in the employee-employer exchange (Rousseau, 2004). The psychological contract refers to the belief concerning workplace relationships, such as obligations, mutual dependence, responsibilities, contributions, and expectations. It is broadly defined as a mutual obligation that drives employees' participation and work motivation and reflects the mutual relationship between an employee and an employer. The exchange that takes place between them provides a platform to elucidate and understand the basic mechanisms of motivation and involvement in the organization. In other words, shared mental models shape employees' collective behaviors. Since the psychological contract encompasses subconscious, unexpressed employees' beliefs regarding their relationships with employers in the organizational context. The psychological contract can be characterized by following facets: promises, fulfillment, and breach (Anderson & Schalk, 1998). In this respect, both promises and fulfillment are linked to the assumption of one party that the other party will honor the commitments in exchange for commitment and contribution (Rodwell & Ellershaw, 2015). When an employee notices that his or her contribution is not adequately rewarded, the breach of the psychological contract will occur (Aranda, Hurtado, & Topa, 2018; Ghani et al., 2020). Usually a breach of contract has negative consequences for the relationship between the employee and the employer and results in weakening of commitment and reduced talent input.

There are broadly two types of contracts: transactional and relational (Rousseau, 2004). The transactional psychological contract is usually well defined, clear, and precisely specifies the items to which it relates, such as working hours or pay. It is typically associated with a low level of commitment (Corder & Ronnie, 2017).

Contrastingly, the relational contract emphasizes on developing a healthy relationship between employees and employers. It contributes to a sense of commitment, attachment, loyalty, and the internalization of values (Lambert, 2011). This type of contract often comprise of rewards such as praise, appreciation, or recognition of the employee. In this chapter, we will focus on the relational aspect of the psychological contract. The key characteristic of relational perspective of the psychological contract is mental models.

There are three main functions of mental models: heuristic (providing compensating for missing information), simulation (anticipating upcoming situations), and pragmatic (guiding behaviors) (Brauner, 1994). The psychological contract involves the assumption that such mental models guide attitudes and behaviors in the workplace. Furthermore, mental models are derived from schema, a way cognitive information is organized (Dutke, 1994; Stein, 1992). It provides a cognitive base for interpretation of the outside world, and by thus simplifying the understanding of various situations. The psychological contract plays a critical role in binding employees together in organizations (Robinson, Kraatz, & Rousseau, 1994). Additionally, it is essential for the continuous harmonious relationships in the workplace. Its implications concern the psychological bond between employees and employers. Consequently, psychological contract influences employees' attitudes and behaviors such as employee engagement, job involvement, and employees' commitment (Guzzo & Noonan, 1994; Meyer & Allen, 1997).

15.4 Framework: Digital World and Gen Z's Workplace Expectations

The current economy has undergone tremendous technological changes. State-of-the-art technological solutions facilitate processes in the workplace. Both in a world characterized by remote collaboration settings (such as those triggered by the COVID-19 pandemic), technology is at the cornerstone of Gen Z's personal and professional lives (Goldfarb & Tucker, 2019). Technology is likely to drive the way organizations operate, which is why it is so important to consider its multifaceted impact on employees.

Furthermore, Gen Z employees have different expectations of using technology in the workplace than previous generations. The extant research indicates that Gen Z expects instant feedback on their work (Dolot, 2018; Goh & Lee, 2018; Ozkan & Solmaz, 2015). It allows them to gain more confidence and as a result, improves their job performance. Therefore, technology enables immediate feedback through the use of social media (Lee & Lee, 2020). Indeed, empirical studies confirm that using computer-mediated communication at work can enhance the information flow and lead to better performance (Turner, 2015). Work-related communication via social media may provide the necessary support for employees. Likewise, previous studies confirm that employees of the Gen Z highly value communication at work

(Grow & Yang, 2018; Reddy & Dawlinmaria, 2020). The representatives of this cohort highly appreciate the efficient transmission of information in the authority lines. Social media support internal communication processes and are an important tool for improving internal communication.

Moreover, in light of the psychological contract theory, instant messaging platforms permit managers and employees to build strong relationships. In this respect, social media make it possible to strengthen the links between employees and the organization (Lee & Lee, 2020). It is pointed out that social media can indeed enhance employee involvement (Sharma & Bhatnagar, 2016). This is the reason why the role of social media in providing immediate feedback to Gen Z employees is important. By providing instant feedback, it is possible to build relationships with the organization and at the same time strengthen job performance by providing guidance and answers to various doubts about the work (Lee & Lee, 2020).

The second significant expectation of Gen Z concerns learning and development in the workplace (Reddy & Dawlinmaria, 2020). Employees representing the Gen Z segment appreciate the development of professional skills (Schwieger & Ladwig, 2018). Recent studies suggest that Gen Z is to a considerable extent oriented towards the improvement of professional competences. Moreover, representatives of this cohort put emphasis on opportunities to advance their careers by acquiring new and valuable work-related skills (Reddy & Dawlinmaria, 2020). Described as career-driven (Deas, 2019), Gen Z values the actual support of personal development facilitating professional advancement. Hence, it is so important to ensure that employees of the Gen Z have the opportunity to gain new competencies by participating in developmental opportunities. Technological solutions including blogs, wikis, and communities of practices (CoPs) help to provide a wide range of opportunities to improve employees' competences (Czarnecka & Daróczy, 2017). Learning based on IT tools ensures constant access to teaching materials, individualized learning and adaptation to the needs of individual participants. Therefore, the digital environment can support the acquisition of new skills by employees of Gen Z. Recent evidence indicates that employees representing Gen Z are proficient in using various technological solutions (Schwieger & Ladwig, 2018). Therefore, it seems particularly beneficial to incorporate IT enabled learning tools aimed at this group of employees. This will allow for an effective adaptation of the content provided to the perception of Gen Z. As a result, such learning will be more effective and will contribute to enrichment of competencies in employees.

When analyzing the need for professional development in relation to the psychological contract theory, it should be pointed out that enabling the acquisition of new knowledge is an important element of the exchange relationship between the employee and the employer. Using this theory, the question of obligations arises in the interpretation of mutual relations in the workplace (Petersitzke, 2009). The implementation of learning practices affects the behavior of employees at the individual level. Employees accept that learning is a way for the organization to invest in them and therefore feel obliged to reciprocate. Therefore, learning of employees allows fulfilling the employer's obligations to invest in employees and, consequently, to build a positive relationship. With regard to psychological contract

theory, learning is a vital element in preventing a breach of contract (Chambel & Castanheira, 2012). Therefore, learning is an important part of building positive relations with Gen Z employees. Consequently, providing opportunities for competence development, through technological tools, is an important part of fulfilling employers' obligation in the workplace.

The third dimension of Gen Z expectations is work flexibility (Deas, 2019) and work-life balance (Kirchmayer & Fratričová, 2020). Recent studies imply that achieving a work-life balance is an important value for Gen Z's (Pulevska-Ivanovska, Postolov, Janeska-Iliev, & MagdincevaSopova, 2017). Digital technology provides the ability to implement solutions for flexible working hours or remote working. Moreover, the use of IT tools allows employees to bypass the time and space constraints and establish global cooperation in collaborative workflows. Additionally, a technologically savvy Gen Z (Chicca & Shellenbarger, 2018). Employees will appreciate the flexible solutions that allow them to develop a balanced working style (Chillakuri & Mahanandia, 2018). Applying the psychological contract theory, the work-life balance is another element of shaping a positive relationship within an organization. It reflects the fulfillment of employers' obligation by providing flexible forms of work that allow employees to adapt the discharge of their duties to their individual schedules. Thus, flexible work opportunities are another vital component of establishing a positive ties under the psychological contract theory from Gen Z's perspective.

Furthermore, prior research demonstrates the impact of financial rewards on the job satisfaction of Gen Z employees (Kirchmayer & Fratričová, 2020). It is another dimension that needs to be considered in dealing with mutual relations at work. Ensuring attractive remuneration for workers representing Gen Z, especially in the context of appreciation of the performance, strengthens relationships and leads to positive behavioral outcomes. This is because the theory of psychological contract assumes that positive rewards from the organization stimulate equilibrium in the employer-employee relationship (Coyle-Shapiro, Jacqueline, & Parzefall, 2008). Hence, the reciprocal relationship can be built upon a mutual satisfactory exchange. The following figure (Fig. 15.1) illustrates the presented framework, describing key aspects of workplace expectations of the Gen Z, deriving from the psychological contract theory.

It is evident from the above figure that various factors resulting from the assumptions of the psychological contract theory, refer to the specific needs of Gen Z. This includes technological use, learning and development, immediate feedback, financial rewards, and flexibility.

15.5 Discussion and Implications

The workforce in the current, talent market is undergoing generational changes. The emerging Gen Z is characterized by specific expectations and needs. Understanding the antecedents of the Gen Z psychological contract requires a critical scrutiny of

the idiosyncratic expectations of this group. Comprehension of generational diversity in the psychological contract formation is an important challenge for contemporary organizations (Deas, 2019). The forces that shape employee-employer relationships at workplace influence the attitude and behavior of employees. It has been confirmed that psychological contract affects employees' attitudes, behaviors, and performance (Wellin, 2016). Therefore, examining how Gen Z's expectations differ and what factors distinguish their psychological contract formation is an important contribution to the management of young employees in the digital age.

The digital tools allow organizations to better address Gen Z's expectations. Social media play an important role in meeting this cohort's need for immediate feedback (Naim & Lenka, 2017). Furthermore, it can help strengthen the ties between the employee and the employer by enhancing internal communication and information flow. By maintaining positive social relationships, social media contributes to the fulfillment of the psychological contract's obligations, especially pertaining to its relational aspect. Therefore, a positive mutual relationship in social media represents a key element of reciprocity and exchange which constitutes the pivotal foundation of the psychobiological contract. In addition, information technology provides an opportunity to improve the professional competences of employees adapted to the individual learning cycle. Moreover, learning based on IT tools is an attractive way of acquiring knowledge for Gen Z, which is central to their quest to learn at workplace (Chicca & Shellenbarger, 2018).

The major contribution of the present chapter is to map workplace expectations of Gen Z from the perspective of psychological contract theory. Next, it contributes to the scant literature on generational research, specifically on Gen Z. In addition, it extends the literature on psychological contract theory by adding a dimension of Gen Z. This will act as a guiding principle to design Gen Z specific psychological contract, which will enable policy formulation in organizations. Considering the individual antecedents of the psychological contract, it is extremely important to understand the characteristics of Gen Z. Individual perceptions and interpretations are elements that determine the formation of a psychological contract. This chapter will act as a launching pad to spawn further research in the domain of Gen Z. The theory advancement will act as a guiding torch for data collection and analysis into the perceptions of Gen Z for their work values, perspectives, and motivational factors. Finally, the conceptual framework of this chapter is original and one of the first of its kind highlighting the workplace expectations of Gen Z.

15.6 Implications for Organizational Practice

The present study has following practical implications. From the managerial vantage point, HR managers gain the understanding on Gen Z's needs and expectations, to develop their strategies accordingly. In the related vein, this chapter has sensitized the HR managers towards idiosyncratic needs of Gen Z, which will help them to be better prepared for this coming generation of workers. Also, the differentiated

focus on psychological contract content in this chapter allows us to make more relevant and specific recommendations for HR practitioners in comparison with the more mainstream generational differences literature. The conceptual framework of this chapter will assist HR managers to design commensurate HR practices for effective talent engagement and retention of Gen Z. Importantly, organizations must leverage sophisticated technological solutions including social media, learning and developmental interventions, workplace flexibility, consistent performance-related feedback, and lucrative rewards. Moreover, examining the needs and expectations of Gen Z, which underlie these contractual relationships, provides the necessary guidance to develop a strategy to effectively implement HR practices.

15.7 Limitations and Future Research Agenda

Although the findings of this analysis contribute to the advancement of generational research, it should be interpreted with respect to this chapter's limitations. First, this is a theoretical analysis; therefore, further empirical verification of the suggested framework of Gen Z should be conducted. Future research is encouraged to examine the Gen Z expectations in relation to the psychological contract formation. To do so, qualitative studies employing interviews and focus group discussions can be conducted to get insights from Gen Z. Likewise, work values-based psychological profile of Gen Z can also be examined. Next, we have indicated the links between the generation-specific expectations of the employees and the organization's fulfillment of its psychological contract obligations based on information technology. Thus, future research is needed to focus on particular digital solutions and the possibilities of using them in the workplace. In this line, it is recommended to investigate the impact of social media solutions on the fulfillment of psychological contract for Gen Z employees. Additionally, researchers should also examine the differences within Gen Z cohort in terms of workplace expectations, career preferences, and organizational attributes.

15.8 Conclusion

Human resource managers require flexibility and adaptability to effectively manage an evolving workforce. Understanding Gen Z's expectations provide an opportunity to adapt organizational processes to meet the needs of employees from this generation. This chapter provides an insight into the expectations of Gen Z in light of the psychological contract theory. Furthermore, it demonstrates how digital technology may help to address these unique needs. More specifically, this chapter focuses on the Gen Z work-related expectations and the psychological contract formation.

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Chapter 16

Psychological Contract of Digital Natives: Are We Measuring What They Expect?



Alda Deas

16.1 Introduction

The Fourth Industrial Revolution or Industry 4.0 “tsunami” is changing various facets of our existence (Abod, 2017; Ismail, Kadir, Khan, Yih, & Al Hosaini, 2019). Through digitalisation, globalisation, and virtualisation, we are exposed to innovative technologies, new flairs of governing and policy-making styles, developments in mass media, new modes of transportation, creative living spaces as well as new ideologies of work (Scholz, 2019). Organisations are subsequently hard-pressed, through technological and digital forces, to adapt their strategies in terms of managing their human resources (Liboni, Cezarino, Jabbour, Oliveira, & Stefanelli, 2019). In addition to the effects of Industry 4.0 on the workplace, Generation Z, the youngest generation and natives to this globally connected world, is entering the workplace with a renewed way of thinking about the world of work (Kirchmayer & Fratričová, 2020). Kirchmayer and Fratričová (2020) further postulate that the members of this generational cohort exhibit a fresh set of preferences and perceptions in terms of what they expect from their employing organisation. Managing these preferences and expectations is seen as a critical challenge for organisational performance, especially in this ever-changing work environment (Kutaula, Gillani, & Budhwar, 2019).

The psychological contract is seen as an important measure used to determine employees’ idiosyncratic perceptions and expectations of their employment relationship (De Vos, 2002; Rousseau, 1989; Sheehan, Tham, Holland, & Cooper, 2019). Misalignment of employees’ perceptions and expectations of their employment relationship may have a negative impact on their performance, engagement,

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and overall work experience (Solomon & Van Coller-Peter, 2019). Therefore, in order to avoid this misalignment and ultimately a breach or violation of the psychological contract, a pro-active approach is needed (Van Niekerk, Chrysler-Fox, & Van Wyk, 2019). Although research in the psychological contract theory has experienced a great deal of interest, substantial gaps persist in our knowledge regarding the distinctions of the psychological contract, which may be as a result to how researchers have attempted to measure this concept (Bankins, 2011; Sherman & Morley, 2020). Overcoming challenges regarding the measuring of the psychological contract is a critical issue in psychological contract research (Sherman & Morley, 2020).

Previous research on the psychological contract has focused on three distinct focus-areas including content-focused area (concentrating on the specific terms included in the contract), feature-focused area (linking the psychological contract to a specific characteristic or dimension), and evaluation-focused area (determining the fulfilment, or lack thereof, of the contract) (Santos, Coelho, Gomes, & Sousa, 2019).

16.2 Chapter Objective

Against this backdrop, the purpose of this chapter is to draw upon existing generational literature to determine the specific terms included in the contents of the psychological contract of digital natives. The typical characteristics of members of the digital natives' cohort may raise many theoretical questions for the field of HRM and specifically psychological contract theorists and HRM practitioners. Linking the psychological contract theory to generational cohorts will allow us to determine the specific characteristics of the emerging digital natives cohort in order to determine whether current psychological contract measures, focusing on the content of the psychological contract, are actually measuring what the digital natives expect. The following section provides a conceptualisation of the psychological contract theory.

16.3 The Psychological Contract

The concept of the psychological contract has its origin in the social exchange theory (Blau, 1964) and was expanded by the equity theory (Adams, 1965). Based on these theories, exchanges between parties in an exchange relationship in terms of certain inputs accord with certain accompanying outcomes for each party (Emerson, 1976; Van Niekerk et al., 2019). According to Rousseau (1995), the psychological contract refers to an employee's schematic understanding of the subjective terms encompassed in the exchange agreement of the employment relationship. Consequently, a psychological contract occurs as soon as an employee accepts that

an agreement has been made in terms of the inputs provided, in exchange for the outcomes received from the organisation, thereby binding the parties to the employment relationship to a set of mutual commitments (Sheehan et al., 2019). The most important aspects of the definition of the psychological contract are that it is subjective in nature, concerning an employee's schematic perspective in terms of the exchange relationship; and it is reciprocal, considering the mutual commitments of both employee and employer in the employment relationship (Santos et al., 2019; Sels, Janssens, & Brande, 2004).

An employee's schematic perspective is developed from different experiences and societal influences, economic factors, and organisational fluctuations (Rousseau, 2001; Santos et al., 2019; Solomon & Van Coller-Peter, 2019). Therefore, Lub, Bal, Blomme, and Schalk (2016) posit that the schematic perspectives of different generational cohorts will differ, resulting in generation-specific inputs and outcomes in terms of the exchange relationship. The schematic perspective will thus have an effect on the content of the psychological contract (Solomon & Van Coller-Peter, 2019). Sherman and Morley (2015, 2020) subsequently postulate that a deeper understanding into the elements of the psychological contract is necessary for psychological contract measurement.

Previous research has focussed on determining the elements of the psychological contract. Rousseau and McLean Parks (1993) identified four dimensions forming the foundation of the elements of the psychological contract, which include time frame (duration of employment relationship), stability (flexibility/restrictions of contract), scope (boundary between employment relationship and personal life), and tangibility (terms of contract clearly specified and observable). Sels et al. (2004) included two more dimensions including exchange symmetry (acceptability of unequal employment relationship) and contract level (individual/collective regulation of employment relationship). De Vos and Maganck (2009) in their study identified career development, social atmosphere, and job content as important elements of the psychological contract.

Linde (2015) provided a summary of the content elements underlying the psychological contract as important outcomes from the employer, which include job content, rewards, management policy, social aspects, career development, and organisational support. Job performance, loyalty, ethics, extra-role behaviour, and flexibility were identified as important employee inputs as content elements of the psychological contract (Linde, 2015; Van Niekerk et al., 2019). Further research on the elements of the psychological contract also identified job content, job security, and rewards as important elements (Lub et al., 2016; Solomon & Van Coller-Peter, 2019). However, with the digital natives starting to enter the workforce, it is important to determine whether these inputs and outputs are still relevant for the new generational cohort. The characteristics of the digital natives will be discussed next to determine the specific inputs and outcomes they value in terms of the employment relationship.

16.4 Characteristics of Digital Natives

The emergence of a new generation into the workplace captivates both scholars and practitioners attempting to understand this new cohort of employees (Kirchmayer & Fratričová, 2020). Generational theory, originated by Mannheim (1952), refers to the notion that persons from a specific generational cohort are fused by not only their similar birth years but also shared social and historical experiences during critical developmental life stages (Karaivanova & Klein, 2019; Kirchmayer & Fratričová, 2020; Maloni, Hiatt, & Campbell, 2019). The experiences or events influencing generational cohorts can include wars, politics or economic calamities, globalisation and technology, work and family life, fashion, movies, music, celebrities, and prominent figures (Kuron, Lyons, Schweitzer, & Ng, 2015; Maloni et al., 2019; Scholz, 2019). These shared experiences and events subsequently result in generational cohorts sharing consciousness and collective thoughts (Karaivanova & Klein, 2019), which consequently result in similar opinions, attitudes, behaviours, and principles (Kirchmayer & Fratričová, 2020). Kirchmayer and Fratričová (2020) therefore postulate that, in order to attract and retain talented employees, it is critical to understand the specific opinions, attitudes, behaviours and principles of each generation.

At present, the workplace consists of three dominant generational cohorts, which include Baby Boomers (1946–1964), Generation X (1965–1979), and Generation Y (1980–1994) (Kirchmayer & Fratričová, 2020). The youngest generational cohort, the digital natives (1995–2012), is now making an entry into the workforce. According to Kirchmayer and Fratričová (2020), a reasonable possibility exist that this generational cohort will transform the workplace significantly in the forthcoming years. Therefore, in order to successfully integrate this generation into the workforce, academics and practitioners have to obtain a better understanding of their specific behaviour and needs (Schroth, 2019), which will subsequently assist in a better understanding of the elements that will form the content of their psychological contract.

In order to appreciate the digital natives, it is important to comprehend the specific formative experiences and events that have contributed to their development as future employees (Schroth, 2019). Their familial setting is characterised by older parents, fewer relatives, traditional morals and principles, working mothers, tight schedules, while being monitored and protected (Rothman, 2016). The developmental years of the digital natives were influenced by continuous exposure to economic downturns, calamitous global events, and uncertain outlooks for the future (Chicca & Shellenbarger, 2018; Hampton, Welsh, & Wiggins, 2019). This include aspects such as terrorism and extremism, climate change and global warming issues, the global economic recession, the growth of mobile device usage as well as the internet and cloud computing (Meret, Fioravanti, Iannotta, & Gatti, 2018; Rothman, 2016). The digital natives is the first generational cohort that has always been exposed to the internet (Goh & Lee, 2018) and in a sense, connected to technology from the day they were born (Lanier, 2017). As Singh and Dangmei (2016) posit,

this generation is brought up in a digital world, therefore being digital centric and connected with the digital world through social media.

As a result of the shared formative experiences and events, this generation exhibit different characteristics than their predecessors. Growing up with technology as part of their identity (Singh & Dangmei, 2016), members of this generation is technologically fluent with integrated technological systems being part of their daily existence (Kirchmayer & Fratričová, 2020). Consequently, they are globally connected with the world through electronic devices, such as smart phones and tablets (Hampton et al., 2019; Moore, Jones, & Frazier, 2017). Being constantly connected, this generation can consume information much faster than any other generation (Lanier, 2017); however, having all the information available at the click of a button, they lack critical-thinking skills and being able to differentiate between truthful facts and opinions (Hampton et al., 2019). Adding to this, the digital natives also lack face-to-face communication skills, which is a consequence of relying on electronic devices for socialisation, entertainment, relaxation, education, and exercising (Schroth, 2019).

With social media platforms, their global connectedness expands even more, being exposed to different cultures, upbringings, and environments from all and any part of the world (Lanier, 2017). Consequently, this generation is more diverse in terms of ethnicity, race, and gender (Schroth, 2019) and thus expects diversity (Lanier, 2017; White, 2018) and equality (Schroth, 2019) in the workplace. They are also conscious about environmental matters and very concerned with preserving natural resources (Singh & Dangmei, 2016). Digital natives are expected to become the most educated generation, favouring an engaged, interpersonal and interacting environment for learning (Kirchmayer & Fratričová, 2020; McCrindle, 2014) and appreciating being socially connected with their peers during groupwork (Hampton et al., 2019).

Previous research has recognized seven personality characteristics for this generation, which include (1) their perception of themselves as special, trusting in their abilities to change the future; (2) their sense of being protected by both families and supervisors; (3) they feel confident and positive about the future; (4) they are seen as conventional; (5) they thrive in teamwork; (6) their purpose in life is to feel blessed and to accomplish greater personal achievements in the future by concentrating on education; and (7) they feel pressurised to be successful (Howe & Strauss, 2007; Meret et al., 2018; Withe, 2016).

16.5 Digital Natives and the Psychological Contract

Human resources practitioners and researchers should consider the unique characteristics of digital natives in an attempt to best manage and understand this group of employees (Schroth, 2019). For instance, members of the digital natives expect a positive workplace culture through open and transparent conversations about decisions affecting business (Deloitte, 2017; White, 2018). Subsequently they value

managers that demonstrate honesty and integrity (Goh & Lee, 2018; Half, 2015; Singh & Dangmei, 2016). Although communication on social media platforms is highly regarded by digital natives (Goh & Lee, 2018), they prefer face-to-face communication with their supervisors (Lanier, 2017; Schawbel, 2014). They expect their supervisors to pay attention when they share their ideas and voice their opinions (Singh & Dangmei, 2016). Feedback on performance should be provided in small, concise, and swift chunks (Chicca & Shellenbarger, 2018; Twenge, 2017) and should be ongoing instead of the traditional annual formal performance evaluations (Goh & Lee, 2018; Goh & Okumus, 2020). Research has found that this generation seeks constant nurturing, direction, and support from their supervisors (Chicca & Shellenbarger, 2018; Twenge, 2017).

In terms of their physical workplace, this generation prefer corporate offices to be simple and adjustable (Goh & Lee, 2018; Singh & Dangmei, 2016). Simultaneously, they value flexibility in terms of work arrangements such as working hours and work location (Kirchmayer & Fratričová, 2020). For them, flexibility and personal freedom are aspects of their work ethics that are non-negotiable (Bascha, 2011; Singh & Dangmei, 2016). Adding to their work ethic, this generation is loyal to their employing organisation and respect positions of authority (Chicca & Shellenbarger, 2018); however, they prefer to work independently and not to be micro-managed (Goh & Okumus, 2020; Ozkan & Solmaz, 2015). Studies have also indicated that the members of this cohort seek opportunities to enhance their skills (White, 2018) in a work environment that promotes mentoring, coaching, training and development opportunities (Singh & Dangmei, 2016) with the assistance of a motivating supervisor (Schroth, 2019). According to Goh and Okumus (2020), digital natives have the expectation of a strong trajectory in their career path and to advance quickly in the career pecking order, working in more than only a single country during this career (Goh & Lee, 2018).

Aspects of an organisation that attracts this generation includes the brand and reputation of the organisation as well as how innovative and adaptive to change the organisation is (Kirchmayer & Fratričová, 2020; Sidorcuka & Chesnovicka, 2017). Karaivanova and Klein (2019) postulate that digital native employees wants to work for an organisation that has a cause and they prefer to be involved in purposeful work. Corporate social responsibility and close ties with the community in which they operate therefore attracts this generation to an organisation (Singh & Dangmei, 2016). Digital natives view the success of work through the lens of personal fulfilment; therefore, organisations should present the purpose of the organisation in such a way to attract the digital natives cohort (Karaivanova & Klein, 2019).

According to previous research, digital natives are motivated by career advancement opportunities, monetary compensation, and purposeful work (Kirchmayer & Fratričová, 2020; Kubatova, 2016; Schawbel, 2014). Meret et al. (2018) found the following aspects as important for members of the digital natives' cohort: (1) networking and relationship-building; (2) job security; (3) sound workplace relationships; (4) training and development opportunities; (5) trust; and (6) independence. Digital natives also expect adequate compensation in exchange for the work they do

(Karaivanova & Klein, 2019). A study by Deloitte (2018) found positive organisational culture, monetary rewards/benefits, flexibility, and continuous learning opportunities as important workplace values for digital natives (White, 2018). Questioning digital native employees on what they expected most of their supervisors in the workplace, open communication and continuous feedback and clearly set objectives were cited (Bresman & Rao, 2018; Schroth, 2019). A study conducted by Sharma and Pandit (2020) found that digital natives valued flexibility, a supervisor that act as their guardian, well-defined targets, good rapport with colleagues, and a friendly and positive work environment.

In an attempt to link the work values of digital natives with the psychological contract, Deas (2019) provided a list of certain inputs and outcomes of the psychological contract for digital natives as indicated in Table 16.1.

Re-examining the current psychological contract measures, specifically those measuring the content of the psychological contract, should be considered as members of the digital natives are entering the workplace. Over the years, various studies have resulted in different conceptualisations of psychological contract content measurements. As such, scholars don't generally agree on the content elements of the basic schematic structure of the psychological contract (Sherman & Morley, 2020). Table 16.2 provides a summation of the different psychological contract measures focussed on the content of psychological contracts of employees.

Table 16.1 Inputs and outcomes of the psychological contract for digital natives

Inputs	Outcomes
Diverse in terms of race and ethnicity	Provide a multi-cultural workforce Open-minded supervisors
Individualistic	Provide personalised feedback Flexible work schedule Work/life balance Face-to-face communication
Impatient and seek immediate feedback	Regular feedback on performance
Independent, self-reliant	Provide autonomous work
Social activists	Provide purposeful work where they can make a difference Ensure reputational brand
Socially connected	Provide communication through social media
Team player	Provide team work
Technologically savvy	Provide technological and digital devices; interactive communication
Career-driven	Career opportunities
Financially conservative	Fair compensation

Source: Author's own work

Table 16.2 Summary of psychological contract measures

Psychological contract measure	Author(s)	Elements measured
Psychological contract inventory	Rousseau (2001, 2008)	<p>Employer obligations:</p> <ul style="list-style-type: none"> – Short-term (example short-term employment, a job for a short time only) – Loyalty (example concern for my long-term well-being, concern for my personal welfare) – Narrow (example limited involvement in the organisation, training me only for my current job) – Performance support (example support me in meeting increasingly higher goals, help me to respond to ever greater industry standards) – Development (example advancement within the firm, opportunities for promotion) – External marketability (example help me develop externally marketable skills, potential job opportunities outside the firm) – Stability (example secure employment, wages and benefits I can count on) <p>Employee obligations:</p> <ul style="list-style-type: none"> – Short-term (example quit whenever I want, leave at any time I choose) – Loyalty (example protect this organization's image, commit myself personally to this organization) – Narrow (example perform only required tasks, do only what I am paid to do) – Performance support (example accept new and different performance demands, accept increasingly challenging performance standards) – Development (example make myself increasingly valuable to my employer, build skills to increase my value to this organization) – External marketability (example build contacts outside this firm that enhance my career potential, increase my visibility to potential employers outside this firm) – Stability (example remain with this organization indefinitely, plan to stay here a long time)
Psychological contract content questionnaire	De Vos, Bruyens, and Schalk (2003)	<p>Employer inducements:</p> <ul style="list-style-type: none"> – Career development – Job content – Social atmosphere – Financial rewards – Work-life balance <p>Employee contributions</p> <ul style="list-style-type: none"> – In-role and extra-role behaviour – Flexibility – Ethical behaviour – Loyalty – Employability

(continued)

Table 16.2 (continued)

Psychological contract measure	Author(s)	Elements measured
Psychological contracting across employment situations (PSYCONES)	Isaksson et al. (2003)	<p>Employer obligations:</p> <ul style="list-style-type: none"> - Provide you with interesting work - Provide you with a reasonably secure job - Provide you with good pay for the work you do - Provide you with a job that is challenging - Allow you to participate in decision-making - Provide you with a career - Provide you with a good working atmosphere - Ensure fair treatment by managers and supervisors - Be flexible in matching demands of non-work roles with work - Provide possibilities to work together in a pleasant way - Provide you with opportunities to advance and grow - Provide you with a safe working environment - Improve your future employment prospects - Provide an environment free from violence and harassment - Help you deal with problems you encounter outside work <p>Employee obligations</p> <ul style="list-style-type: none"> - Go to work even if you don't feel particularly well - Protect your company's image - Show loyalty to the organisation - Work overtime or extra hours when required - Be polite to customers or the public even when they are being rude and unpleasant to you - Be a good team player - Turn up for work on time - Assist others with their work - Volunteer to do tasks outside your job description - Develop your skills to be able to perform well in this job - Meet the performance expectations for your job - Accept an internal transfer if necessary - Provide the organisation with innovative suggestions for improvement - Develop new skills and improve your current skills - Respect the rules and regulations of the company - Work enthusiastically on jobs you would prefer not to be doing - Take responsibility for your career development

(continued)

Table 16.2 (continued)

Psychological contract measure	Author(s)	Elements measured
Psychological contract measure	Coyle-Shapiro and Conway (2005)	<p>Obligations:</p> <ul style="list-style-type: none"> - Up to date training and development - The necessary training to do my job well - Support when I want to learn new skills - Interesting work - Opportunity to be involved in decisions that affect me - Freedom to do my job well - Good career prospects - Fair pay compared to staff doing similar work in other organizations - Fringe benefits that are fair compared to what staff doing similar work in other organizations get - Fair pay for responsibilities in job - Pay increases to maintain my standard of living - Long term job security <p>Inducements:</p> <ul style="list-style-type: none"> - Up to date training and development - The necessary training to do my job well - Support when I want to learn new skills - Freedom to do my job well - Opportunity to be involved in decisions that affect me - Interesting work - Fair pay for responsibilities in job - Fair pay compared to staff doing similar work in other organizations - Pay increases to maintain my standard of living - Fringe benefits that are fair compared to what staff doing similar work in other organizations get - Long term job security
The Tilburg psychological contract questionnaire	Freese, Schalk, and Croon (2008)	<p>Perceived organisational obligations:</p> <ul style="list-style-type: none"> - Job content - Career development - Social atmosphere - Organizational policies - Rewards <p>Employee obligations:</p> <ul style="list-style-type: none"> - In-role obligations - Extra-role obligations

(continued)

Table 16.2 (continued)

Psychological contract measure	Author(s)	Elements measured
Swiss psychological contract questionnaire	Raeder, Wittekind, Inauen, and Grote (2009)	Expectations from employer: <ul style="list-style-type: none"> - Loyalty - Opportunities for identification - Job security - To promote a positive organisational culture - Interesting work - Opportunities for responsibility in the work task - Opportunity to change the field of activity within the company - Opportunities for promotion - A career in the company - Support in developing a wide range of skills - Opportunities to apply my skills in a variety of contexts - Information about important decisions - Involvement in decision making - Participation in decision making Contributions toward company: <ul style="list-style-type: none"> - Identification with the work task - Achievement orientation - Responsibility in the work task - Identification with the company - To protect the employer’s reputation vis-à-vis third parties - Participation in professional training without employer support - To develop my knowledge and my occupational experience autonomously

Source: Author’s own work

16.6 Discussion

Against this backdrop and considering both Tables 16.1 and 16.2, all the elements measured in the psychological contract content measures are elements that have been indicated by the literature as important to the digital natives, though some to a lesser extent. However, there are inputs and outcomes identified by the literature that are lacking from the current measures. For instance, it is indicated that digital natives value a diverse and multi-cultural workplace. According to Lanier (2017), the digital natives is the first generation to prodigiously expect their workplace to be diverse. They expect equal treatment, respect, compensation, and promotion of all individuals in the workplace (Schwieger & Ladwig, 2018) and they have a strong cultural philosophy which is driven by social justice (Lanier, 2017).

Meehan (2016) mentions that digital natives will fight for themselves and others if they are being treated in an unfair manner due to their gender, sexual preference, race, salary, or the environment. Marthur and Hameed (2016) further augment that a cross-cultural mentoring programme will assist in the orientation and induction of this young generation. Another element not addressed in the current psychological contract content measures is that digital natives want to work for an organisation with a reputable brand where they can contribute meaningfully. Organisations should therefore focus on their branding strategies in order to attract and retain new employees (Tanwar, 2017). In a study conducted by Sidorcuka and Chesnovicka (2017), they found that the image of the organisation was the third most important aspect in terms of factors attracting digital natives to an organisation and that this image should be renowned, growing, and energetic. According to a more recent study conducted by Kirchmayer and Fratričová (2020), digital natives indicated that they value jobs where they can contribute meaningfully. Adding to this, digital natives prefer to be employed by organisations that have established open and honest commitments with their surrounding communities demonstrating social responsibility (Singh & Dangmei, 2016). As these aspects are important to digital natives, it should be considered when measuring the content of the psychological contract.

16.7 Implications for Organisational Practice

Various aspects have influenced the digital natives to reason and act in the way that they do. As a result, they bring a fresh set of perspectives to the table in terms of what they expect from their employing organisation. Organisations should therefore understand the behaviour and distinct expectations of the youngest generational cohort in order to successfully integrate them into the industry 4.0 workplace (Schroth, 2019). An understanding of the expectations and preferences of the digital natives will assist organisations in the development and implementation of human resource practices specifically designed to attract and retain this young generation. Schroth (2019) therefore suggests that managers should engage with new employees in terms of their expectations of the employment relationship. Organisations should furthermore specifically focus on creating diversity management practices and interventions in order to overcome generational differences within the organisation (Meret et al., 2018).

16.8 Future Research Directions and Limitations

Although the concept of the psychological contract has been investigated quite extensively, limited studies have focused on the psychological contract from a generational perspective (Lub et al., 2016). The arrival of the digital natives into

the workplace therefore necessitates new and cutting-edge research ideas, especially for human resource practitioners and researchers in this field (Deas, 2019). Researchers have also postulated that the schematic perspective of the psychological contract is best understood by primarily identifying the inherent inputs and outcomes of the psychological contract (Sherman & Morley, 2020). This chapter signifies an initial footstep in the evolvement of the content measures of the psychological contract specifically taking generational differences into account.

Maioli (2017) posits that digital natives have different psychosocial characteristics than the generations before them and organisations should therefore be aware of their specific expectations in order to successfully recruit and retain this generation. As this generational cohort is still emerging into the workforce, limited research on their specific work values are available (Kirchmayer & Fratričová, 2020). Adding to this, research on this generational cohort have resulted in mixed reviews and results (Sharma & Pandit, 2020). Consequently, this presents a critical gap for future research in order to gain a deeper understanding into the work values and expectations of the digital natives. This chapter proposes that the content of the psychological contract of digital natives can assist in defining the work values and expectations of this group of employees; however, current psychological contract content measures fail to address all the anticipated expectations of this generational cohort. It is however not the intention of this chapter to refute current psychological contract content measures but rather to enhance these measures by addressing the specific work values and expectations of members from the digital natives generational cohort. While this chapter provides insights into the work values and expectations of digital natives, there are limitations for future researchers to consider. This chapter was based on a narrative review of the current literature, therefore presenting a fundamental gap for future systematic and empirical research. A narrative review of the literature also presents an element of subjectivity.

16.9 Conclusion

This chapter sought to demonstrate that the emerging generational cohort, the digital natives, are joining the workforce with their own unique characteristics, work values, and expectations. The psychological contract is a very effective tool to determine their specific inputs and outcomes in terms of their expectations of their employment relationship; however, current psychological contract content measures may fail to measure what the digital natives expect from their workplace. This chapter subsequently concluded by providing future research directions in the field of Human Resource Management and Industrial and Organisational Psychology to extend current psychological contract content measures in order to include the expectations of the digital natives cohort.

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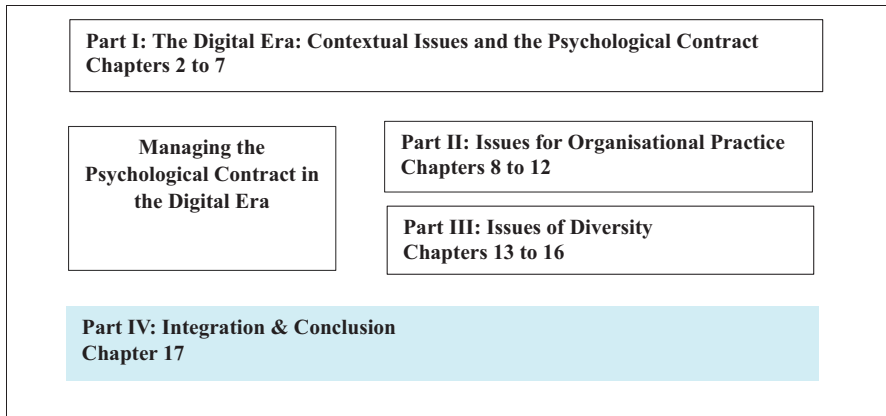
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Part IV Integration and Conclusion

Conceptual Overview of the Book Volume



Overview

Deas and Coetzee (Editors) critically reflect in Chap. 17 (*Reflection on the Digital Era Psychological Contract: Issues for Research and Practice*) on the issues for research and practice highlighted by the various chapters. The chapter concludes this book volume and adds to the valuable insights and suggestions provided by the various authors by summarising the core themes that emerged in the chapters.

Chapter 17

Reflection on the Digital Era Psychological Contract: Issues for Research and Practice



Alda Deas and Melinde Coetzee

17.1 Introduction

The chapter contributions in the different sections of the book presented a coherent, innovative narrative on the phenomenon of the psychological contract in the fast-emerging future workplace. The gig economy, digital revolution, Industry 4.0, a global pandemic, and a global economy herald the emergence of a new world of work. This unprecedented work world is characterised by revolutionary and evolutionary changes in inter alia the nature of jobs and occupations, the emergence of gig workers and a new generational cohort, boundaryless careers, and greater worker mobility, all of which contribute to shifts in the employer–employee relationship. Apart from theoretical premises and research perspectives, the chapter contributions also evaluated the practical utility of theory and practice together with psychological interventions. We add to the valuable insights and suggestions provided by the various authors by summarising the core themes that emerged in the chapters.

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17.2 Issues for Research

In general, the chapter contributions provided evidence-based practical implications supported by empirical research. However, the nature of the psychological contract and the onset of Industry 4.0 remains an important area of inquiry and more research is needed to understand the psychological contract in the digital landscape. The various chapters presented measures and frameworks that were mostly developed from theoretical reviews of research literature. In some instances, measures and frameworks stem from cross-sectional research in specific contexts. Table 17.1 provides a summary of recommendations made for future research.

It is evident from Table 17.1 that nine major themes for future research emerged from this book volume. Specific examples for each theme are included in the table:

- **Theme 1:** Examine the impact of multiple employment
- **Theme 2:** Examine the extent of psychological contract fulfilment or breach
- **Theme 3:** Examine the impact of the fourth industrial revolution on the psychological contract
- **Theme 4:** Determine how to form, maintain, and mend the psychological contract from a virtual perspective
- **Theme 5:** Determine how sophisticated workplace technologies are shaping employees' work experiences and the technology specific components of their psychological contracts
- **Theme 6:** Explore the shared nature of the psychological contract
- **Theme 7:** Link technological advancements within the Industry 4.0 era with HRM-related constructs
- **Theme 8:** Link job embeddedness and the psychological contract
- **Theme 9:** Expand on the body of knowledge on the best-practice use of talent assessment techniques, particularly where technological application is prevalent

Based on the recommendations made for future research, it is evident that longitudinal studies in various organisational and cultural contexts are needed to establish causal effects between constructs and the manifestation of the changing psychological contract in the digital era among individuals from diverse socio-demographic and cultural backgrounds. Research evaluating the effectiveness and accuracy of psychological contract measures focusing on the content and evaluation of the psychological contract should also enjoy attention of scholars. More empirical evidence is required on how the psychological factors, internal organisational context factors, individual characteristics, employer–employee relationship, and organisational practices influence the psychological contract of employees in the digital era.

Table 17.1 Summary of recommendations for future research

Recommendation	Specific examples	Contributing chapter
1 Examine the impact of multiple employment	<ul style="list-style-type: none"> • Examine the prohibition of multiple jobs versus psychological contract breach and the effects of multiple jobs on psychological contract fulfilment • Examining the functioning of multiple and distributed psychological contracts 	<ul style="list-style-type: none"> • Chapter 11 (Dhliwayo) • Chapter 7 (Pereira-Costa)
2 Examine the extent of psychological contract fulfilment or breach	<ul style="list-style-type: none"> • Examine the extent of psychological contract fulfilment or breach where expectations are formally specified • Examine whether there are significant differences in psychological contract fulfilment for more specified and less specified contracts of employment • Examine the reciprocation process after psychological contract breach 	<ul style="list-style-type: none"> • Chapter 11 (Dhliwayo) • Chapter 11 (Dhliwayo) • Chapter 7 (Pereira-Costa)
3 Examine the impact of the fourth industrial revolution on the psychological contract	<ul style="list-style-type: none"> • Investigate the new definition of the psychological contract, mainly focusing on the transactional versus relational psychological contract • Research should determine whether the relational psychological contract is still relevant in the context of the digital era • Investigating the content of the emergent psychological contract • Quantitative studies may also be useful to measure the extent to which gig workers have a transactional, relational, or balanced psychological contract • Exploring the perceptions of obligations from the employer's point of view to better understand the principle of psychological contract reciprocity in the digital world of work 	<ul style="list-style-type: none"> • Chapter 11 (Dhliwayo) • Chapter 11 (Dhliwayo) • Chapter 7 (Pereira-Costa) • Chapter 7 (Pereira-Costa) • Chapter 6 (Coetzee)
4 Determine how to form, maintain and mend the psychological contract from a virtual perspective	<ul style="list-style-type: none"> • Quantitative studies should focus on the different phases of the psychological contract and the critical success factors contributing to a healthy psychological contract • Qualitative studies could focus on employees' thoughts and feelings relating to their attempts of building or sustaining the psychological contract • Qualitative studies may provide additional insights about what gig workers expect from the employment relationship of such nature • More studies are needed to address what are the causes of psychological contract breach of gig workers 	<ul style="list-style-type: none"> • Chapter 12 (Bussin) • Chapter 12 (Bussin) • Chapter 7 (Pereira-Costa) • Chapter 7 (Pereira-Costa)

(continued)

Table 17.1 (continued)

Recommendation	Specific examples	Contributing chapter
<p>5 Determine how sophisticated workplace technologies are shaping employees' work experiences and the technology specific components of their psychological contracts</p>	<p>• Investigating how AI technology and its use as a key driver of psychological beliefs influence the nature of the employee–employer exchange</p> <p>• Integrating technology specific frameworks into the study of the psychological contract, particularly by outlining the role of technology frames in driving norms of AI resistance, neutrality or reciprocity amongst employees, which flow from the beliefs about employee–employer obligations</p> <p>• Embedding psychological contract research in the multilevel contexts in which it is situated, particularly when analysing the impact of a global phenomenon such as AI</p> <p>• Investigating the impact of social media solutions on the fulfilment of psychological contracts for Gen Z employees</p> <p>• Understanding how reciprocity operates in digitally enabled work arrangements</p>	<ul style="list-style-type: none"> • Chapter 4 (Bankins and Formosa) • Chapter 4 (Bankins and Formosa) • Chapter 4 (Bankins and Formosa) • Chapter 15 (Stangrecka) • Chapter 6 (Coetzee) • Chapter 7 (Pereira-Costa)
<p>6 Explore the shared nature of the psychological contract</p>	<ul style="list-style-type: none"> • Investigating multiple microsocioal contracts amongst diverse employee groups • Examining the role of group-level technology frames as a form of shared cognitions that will also inform individual's psychological contracts • Examining how groups of employees compare and contrast their different microsocioal contracts and how this informs perceptions of breach at both group and individual levels • Conducting qualitative studies employing interviews and focus group discussions to get insights from Gen Z • Examining the differences within the Gen Z cohort in terms of workplace expectations, career preferences, and organisational attributes • Gaining a deeper understanding into the work values and expectations of the digital natives 	<ul style="list-style-type: none"> • Chapter 4 (Bankins and Formosa) • Chapter 4 (Bankins and Formosa) • Chapter 4 (Bankins and Formosa) • Chapter 10 (Bester and Stander) • Chapter 10 (Bester and Stander) • Chapter 16 (Deas)

Recommendation	Specific examples	Contributing chapter
7 Link technological advancements within the Industry 4.0 era with HRM-related constructs	<ul style="list-style-type: none"> • Linking Industry 4.0 technologies such as the Internet of Things, cloud computing, big data, and analytics to HRM-related constructs • Qualitative insights will assist in conceptualizing the terms and conditions of employee expectations in the digital workspace • Quantitative research should explore the way in which psychological contracts are perceived by the employer and employee during Industry 4.0 • Establishing how employees' expectations fluctuate during times of change and the advent of Industry 4.0 	<ul style="list-style-type: none"> • Chapter 3 (Chinyamurindi) • Chapter 2 (Dhanpat) • Chapter 2 (Dhanpat) • Chapter 2 (Dhanpat)
8 Link job embeddedness and the psychological contract	<ul style="list-style-type: none"> • Reciprocal relationships involving job embeddedness and psychological contracts • Psychological contract breach as "shocks" • Advancing integration with theory • Common antecedents of job embeddedness and psychological contracts • Collective job embeddedness and psychological contracts 	<ul style="list-style-type: none"> • Chapter 9 (Holtom, Sekiguchi, Kiazad and Qin) • Chapter 9 (Holtom, Sekiguchi, Kiazad and Qin) • Chapter 9 (Holtom, Sekiguchi, Kiazad and Qin) • Chapter 9 (Holtom, Sekiguchi, Kiazad and Qin) • Chapter 9 (Holtom, Sekiguchi, Kiazad and Qin)
9 Expand on the body of knowledge on the best-practice use of talent assessment techniques, particularly where technological application is prevalent	<ul style="list-style-type: none"> • Expanding on the available empirical evidence for AI, ML, automation and big data analytics in assessing employees • Providing guidance and frameworks for practitioners to conduct validity and reliability studies within the application of these technologies • Understanding the predictive validity of assessment techniques and its application within a complex, interconnected, and modern workforce 	<ul style="list-style-type: none"> • Chapter 10 (Bester and Stander) • Chapter 10 (Bester and Stander) • Chapter 10 (Bester and Stander)

17.3 Issues for Organisational Practice

Table 17.2 shows that 14 major themes for organisational practices in the digital era emerged from this book volume. Specific examples for each theme are included in the table:

- **Theme 1:** The selection stage should be used as a pre-entry socialisation phase in order to covertly and overtly manage the psychological contract and to improve psychological contract fulfilment
- **Theme 2:** Organisations should accommodate employees who prefer multiple employment
- **Theme 3:** The importance of procedural justice has escalated exponentially
- **Theme 4:** Performance management should be done by measuring outcomes
- **Theme 5:** Remote working will lead to professional loneliness and mental health issues
- **Theme 6:** Organisations should consciously take advantage of the strengths of electronic systems that support communication and coordination with and between employees
- **Theme 7:** Organisations should understand employees' responses to AI use
- **Theme 8:** There is a heightened focus and need to continually position the importance of HRM within the Industry 4.0 context
- **Theme 9:** Metrics for valuing human capital have to be established in order to manage a mutually beneficial relationship between employee and employer
- **Theme 10:** Organisations should embed diversity and inclusion in their policies, while opening to trends in the twenty-first century employment relations, which present an opportunity for healthy and mutually benefitting psychological contract
- **Theme 11:** Higher education institutions need to strengthen the psychological contracts of all races by focusing on the aspects that they do have control over, while ensuring fairness, equality of opportunity and complying with EE regulations
- **Theme 12:** A more human-centred organisational design approach is necessary
- **Theme 13:** Interventions to increase fit, links, and sacrifice
- **Theme 14:** Emphasizing the important role of HR and talent assessment practices in establishing a positive employer value proposition and employee experience

In summary, the chapter contributions highlight the following practical implications for the psychological contract in the digital workspace:

Table 17.2 Summary of recommendations for practice

Recommendation	Specific examples	Contributing chapter
1 The selection stage should be used as a pre-entry socialisation phase in order to covertly and overtly manage the psychological contract and to improve psychological contract fulfilment	<ul style="list-style-type: none"> • Organisations should clarify expectations at the selection stage to reduce the probability or perceptions of psychological contract breach • Organisations should focus on selecting employees capable of adapting to different environments and careers • Promises of job security should be replaced by promises of support in career adaptation 	<ul style="list-style-type: none"> • Chapter 11 (Dhliwayo) • Chapter 11 (Dhliwayo) • Chapter 11 (Dhliwayo)
2 Organisations should accommodate employees who prefer multiple employment	<ul style="list-style-type: none"> • Organisations should institute mechanisms such as tight confidentiality and non-disclosure agreements to protect trade secrets 	<ul style="list-style-type: none"> • Chapter 11 (Dhliwayo)
3 The importance of procedural justice has escalated exponentially	<ul style="list-style-type: none"> • Organisations need to be fair, defensible and explain in very clear terms how their reward systems work • Fairness can be obtained through inspecting the algorithms of artificial intelligence underlying decision making 	<ul style="list-style-type: none"> • Chapter 12 (Bussin) • Chapter 8 (Reader)
4 Performance management can only be done by measuring outcomes	<ul style="list-style-type: none"> • Organisations will have to rewrite many of their KPA's and KPI's and job profiles 	<ul style="list-style-type: none"> • Chapter 12 (Bussin)
5 Remote working will lead to professional loneliness and mental health issues	<ul style="list-style-type: none"> • Organisations need to keep their finger on the pulse and address this swiftly and compassionately • Opportunities should be created for employees to discuss and explore the contents of their psychological contract • Organisations should strengthen the role of the supervisor to represent all aspects of the organisational psychological contract 	<ul style="list-style-type: none"> • Chapter 12 (Bussin) • Chapter 8 (Reader) • Chapter 8 (Reader)
6 Organisations should consciously take advantage of the strengths of electronic systems that support communication and coordination with and between employees	<ul style="list-style-type: none"> • Communication systems should be used to provide abundant and consistent information about the psychological contract that is offered and expected in the organisation • Communication systems should support employees in coordinating and planning their work autonomously 	<ul style="list-style-type: none"> • Chapter 8 (Reader) • Chapter 8 (Reader)

(continued)

Table 17.2 (continued)

Recommendation	Specific examples	Contributing chapter
<p>7 Organisations should understand employees' responses to AI use</p>	<ul style="list-style-type: none"> • Leaders should be mindful that employees' pre-existing views of technology, both individually and collectively, will shape where and how they believe AI should be adopted and how it will alter reciprocal employee–employer obligations • Understanding employees' responses to AI use, leaders can identify what group-level technology frames may be operating and whether these norms are clustering around AI receptivity, neutrality, or resistance • Digital platform organisations need to clarify the worker status as well as what is expected from each party in the work arrangement • Organisations need to clearly define expectations and rewards 	<ul style="list-style-type: none"> • Chapter 4 (Bankins and Formosa) • Chapter 4 (Bankins and Formosa) • Chapter 7 (Pereira-Costa) • Chapter 7 (Pereira-Costa)
<p>8 There is a heightened focus and need to continually position the importance of HRM within the Industry 4.0 context</p>	<ul style="list-style-type: none"> • There is a need to continually value the role of employees in the Industry 4.0 era through efforts that show employees they are deemed critical in such contexts • Business leaders and HR professionals should support and encourage the workforce to develop the Industry 4.0 KSAOs, which are the ability to make complex decisions and sound judgements, critical thinking ability, data analysis skill, problem sensitivity, fluency of ideas and the smart digital technology skill • An option for organisations is to survey their employees regarding their expectations and structure their rewards systems according to what their workers expect • Organisations should have a “face”, a manager, who would be responsible for a group of employees, making a bridge between the worker and the organisation and promoting organisational values and culture 	<ul style="list-style-type: none"> • Chapter 3 (Chinyamurindi) • Chapter 13 (Aderibigbe) • Chapter 7 (Pereira-Costa) • Chapter 7 (Pereira-Costa)
<p>9 Metrics for valuing human capital have to be established in order to manage a mutually beneficial relationship between employee and employer</p>	<ul style="list-style-type: none"> • A sustainable HR database that shows evidence of commitment to treating each other fairly, will help in tracking the effectiveness of such HR policies aimed at fostering a trusting relational contract, equality, and fairness • Organisations need to consider a differential approach to employees' unique career development needs and their psychological contract expectations • Consideration should be giving to idiosyncratic deals (i-deals) that help shape the modern psychological contract • An i-deals approach to shaping the psychological contract should involve opportunities for greater control and autonomy in charting career development and personal growth in performance management discussions • Employee engagement practices should focus on cognitive engagement interventions that help employees understand how their job fits into and contribute to the organisational culture and strategic purpose 	<ul style="list-style-type: none"> • Chapter 13 (Aderibigbe) • Chapter 6 (Coetzee) • Chapter 6 (Coetzee) • Chapter 6 (Coetzee) • Chapter 6 (Coetzee)

Recommendation	Specific examples	Contributing chapter
<p>10 Organisations should embed diversity and inclusion in their policies, while opening to trends in the twenty-first century employment relations, which present an opportunity for healthy and mutually benefiting psychological contract</p>	<ul style="list-style-type: none"> • Business leaders and HR professionals should be innovative as they seek workable HR strategies to cope with the accompanying demands of Industry 4.0 • Business leaders and HR professionals should shift from the traditional master-servant, employee-employer kind of relationship to a competence-based and mutual benefits relationship • HR managers should gain an understanding on Gen Z's needs and expectations and develop strategies accordingly • The needs and expectations of Gen Z, underlying contractual relationships should be examined to provide the necessary guidance to develop a strategy to effectively implement HR practices • Organisations should determine the extent to which the career values of different generational cohorts play a role in their perceptions of employee and employer obligations and in negotiating mutually satisfying i-deals • Organisations should understand the behaviour and distinct expectations of the youngest generational cohort in order to successfully integrate them into the industry 4.0 workplace • Organisations should specifically focus on creating diversity management practices and interventions in order to overcome generational differences within the organisation • The prevalence, saliency, antecedents, and outcomes of value-oriented ideological currency in different organisations, occupations and cultural contexts should be examined 	<ul style="list-style-type: none"> • Chapter 13 (Aderibigbe) • Chapter 13 (Aderibigbe) • Chapter 15 (Bulinska-Stangrecka and Naim) • Chapter 15 (Bulinska-Stangrecka and Naim) • Chapter 6 (Coetsee) • Chapter 16 (Deas) • Chapter 16 (Deas) • Chapter 6 (Coetsee)
<p>11 Higher education institutions need to strengthen the psychological contracts of all races by focusing on the aspects that they do have control over, while ensuring fairness, equality of opportunity and complying with EE regulations</p>	<ul style="list-style-type: none"> • Higher education institutions should take cognizance of the differences and preferences of various racial groups • Institutions should provide equitable training and career development opportunities to employees of all races • Work-life balance policies and programmes offered by HEIs could assist in strengthening the psychological contracts of employees and increase their satisfaction with retention practices 	<ul style="list-style-type: none"> • Chapter 14 (Snyman)
<p>12 A more human-centred organisational design approach is necessary</p>	<ul style="list-style-type: none"> • Taking cognizance of the internal organisation through a targeted employee value proposition • Value proposition should be aligned to the critical skills required to execute the organisational design, specifying the type of talent that needs to be attracted or grown 	<ul style="list-style-type: none"> • Chapter 5 (Veldsman and Van Aarde)

(continued)

Table 17.2 (continued)

Recommendation	Specific examples	Contributing chapter
<p>13 Interventions to increase fit, links and sacrifice</p>	<ul style="list-style-type: none"> • Providing realistic job previews through gamification • Making use of artificial intelligence to funnel new employees into the best role for them • Increasing the probability of fit pre-hire through enhanced reference-checking • Using online professional communities to close gaps of disconnectedness • Making use of pulsing technology to increase the sense of sacrifice employees would make if they were to consider leaving 	<ul style="list-style-type: none"> • Chapter 9 (Holtom, Sekiguchi, Kiazad and Qin)
<p>14 Emphasizing the important role of HR and talent assessment practices in establishing a positive employer value proposition and employee experience</p>	<ul style="list-style-type: none"> • Employee satisfaction and engagement should be the fulcrum of all digitally enabled talent assessment experiences • Digitally enabled experiences should be utilised in a valid and impactful manner • Utilising assessments with proven validity and reliability data • Developing digitally enabled assessment experiences which are robust in their ability to protect personal data • Using data from various digital assessment sources to enable integrated talent management and employee lifecycle experiences • Future HR policies will need to deliberately promote the wellbeing of assessment candidates through active promotion and expression of talent, fair opportunities, inclusivity and diversity 	<ul style="list-style-type: none"> • Chapter 10 (Bester and Standert)

The 14 themes and examples provide rich suggestions that could be put into practice. Readers of this book volume can perhaps, by reading through the book volume, apply their own themes and structure to the synopsis provided by us. We presented the themes as at least a starting point for applying new thinking and approaches to the digital era psychological contract in diverse multi-cultural and multi-generational work settings.

17.4 Conclusion

The synopsis for research and practice we presented here is intended to highlight themes that appear in various forms in the chapters of this volume. Each chapter elaborates on a relevant theme and makes its own outstanding contribution to new thinking about the digital era psychological contract. We trust that the reader enjoys working through the various chapters and finds the synopsis presented here inspiring and filled with possibilities for applicability in the social sciences research space and work setting of the digital era.

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