# From Unemployment to Employment and Back: Professional Trajectories and Well-Being



Fabian Gander<sup>1</sup> · Jennifer Hofmann<sup>1</sup> · Willibald Ruch<sup>1</sup>

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# Abstract

So far, only few studies have considered different aspects of well-being in studying losing or gaining employment. We examined life satisfaction, mental health, and the orientations to pleasure, engagement, and meaning over two years in a large sample of the Swiss labor force (N=1231). We analyzed four different trajectories: Individuals always being employed, never being employed, those who lost employment, and those who gained employment. Results showed that losing and gaining employment went along with expected changes in life satisfaction and mental health. Additionally, gaining employment went along with increases in the orientations to pleasure, engagement, and meaning while a decrease in the orientation to pleasure was observed in the constantly unemployed. Further, life satisfaction was predictive for gaining employment status. We conclude, in line with earlier studies, that well-being might be an important resource for coping with vulnerabilities and could be used for identifying risk groups with regard to employment status.

Keywords Life satisfaction  $\cdot$  Mental health  $\cdot$  Orientations to happiness  $\cdot$  Employment  $\cdot$  Unemployment

Unemployment is well-known to go along with markedly reduced levels of well-being (e.g., Argyle 1999; Frey and Stutzer 2002; Inglehart 1990; McKee-Ryan et al. 2005). Evidence from several longitudinal panel studies (e.g., Di Tella et al. 2001; Lucas et al. 2004) and, more importantly, natural experiments (i.e., studies examining the effects of

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Fabian Gander f.gander@psychologie.uzh.ch

<sup>1</sup> Department of Psychology, University of Zurich, Binzmuehlestrasse 14 Box 7, 8050 Zurich, Switzerland

unemployment on well-being following mass layoffs; Paul and Moser 2009) gives strong evidence for causal effects of unemployment on reduced life satisfaction and mental health. Furthermore, with the duration of unemployment mental health problems continue to increase and life satisfaction to decrease (McKee-Ryan et al. 2005; Shams and Jackson 1994) and even a history of past unemployment has detrimental effects on current life satisfaction (Clark et al. 2001). Importantly, the life satisfaction of individuals who lost their job increases again after an initial drop (e.g., Lucas 2007; Luhmann et al. 2012), but it does not return to the previous levels even when being reemployed (see also Diener et al. 2006). However, some studies also suggested that the long-term declines of life satisfaction might largely be due age-related declines in life satisfaction (e.g., Anusic et al. 2014). It has been suggested that this association between unemployment and well-being can be explained by the fact that employment serves several functions, such as providing time structure, social contacts, goals and purpose, as well as helps to define identity, and foster activity (Jahoda 1981). Warr (2008) extended this view and suggested 12 environmental factors that might affect well-being (or ill-being) and are more difficult to attain or even unavailable for unemployed individuals. Thus, there are several theoretical approaches explaining the detrimental effects of unemployment on well-being that can be observed in the majority of people (see also Warr 1987).

Yet, there is evidence for a reverse direction of the effect. For example, low levels of well-being might reduce work performance or increase absenteeism what in turn might increase the probability of job loss. In the same vain, people suffering from mental health problems might have a reduced chance of being re-employed since these issues might affect employers' hiring decisions (Mastekaasa 1996). Also, the predictive power of well-being variables has been documented in several studies: Luhmann et al. (2013) report that life satisfaction predicts the occurrence of job loss, suggesting that declines in life satisfaction begin before someone loses his or her job. Similar findings were also reported for finding a new job: Claussen et al. (1993) and Taris (2002) reported that mental health problems are negatively related to the likelihood of finding a new job (see also McKee-Ryan et al. 2005). Krause (2013) extended these findings and showed that unemployed individuals with higher levels of life satisfaction are also more likely to be reemployed. However, she also reported an inverted U-shape relationship between life satisfaction and reemployment suggesting decreasing reemployment rates among the very happy. Moreover, several studies have addressed the effect of different professional trajectories on effects of well-being. For example, Johnston et al. (2016) compared in a recent longitudinal study over one year the relationships of life satisfaction and subjective health of four professional trajectories: The constantly employed, the constantly unemployed, those who regained employment in this period, and those who experienced a professional change (e.g., change of employer). Their results confirm previous findings that employed individuals report higher life satisfaction and health than the unemployed, and that gaining employment goes along with increases in life satisfaction.

Further, Luhmann et al. (2012) examined the effects of unemployment and reemployment on cognitive (e.g., life satisfaction) and affective aspects of well-being (e.g., pleasant and unpleasant affect). They concluded that both unemployment and employment have differential effects on well-being with regard to reaction (stronger effects on affective well-being than on cognitive well-being following reemployment; comparable effects after unemployment), and adaption (stronger adaption effects for cognitive wellbeing). In summary, these findings suggest that different indicators of well-being (such as life satisfaction, or mental health problems) play an important role in changes of employment status what might bear important information for public policy making.

Studying healthy work is also one central topic within positive psychology (e.g., Turner et al. 2002). However, most studies on professional trajectories usually focused on one indicator of well-being and did not also consider different orientations to well-being. Seligman (2002) suggested in his *Authentic Happiness Theory* three orientations to happiness: The *orientation to pleasure*, the pursuit of positive emotions, the *orientation to engagement*, the pursuit of states in which someone is completely absorbed by the task at hand and loses awareness of time passing (also described as flow), and the *orientation to meaning*, the pursuit of meaning and purpose in life. Several cross-sectional and experimental studies confirmed that all these three orientations to happiness are robustly related with different indicators of well-being (e.g., Peterson et al. 2005; Ruch et al. 2010). Previous studies have also shown that all three orientations are relevant in work-settings: Martínez-Martí and Ruch (2017) reported positive relation-ships between all three orientations with job satisfaction, while Ruch et al. (2010) showed that the orientation to engagement goes along with spending more time with engaging activities at work.

Although all orientations to happiness are considered to be relevant for several positive aspects of work, engagement seems to be the most important predictor (on the concept and role of engagement at work see also Bailey et al. 2017, and Truss et al. 2013). The relevance of engagement, and the associated experience of flow experiences, has also been confirmed in experience sampling studies suggesting that "work—relative to leisure—represents the most frequent opportunity for optimal experience during an ordinary week in daily life" (Delle Fave et al. 2011, p. 158). Thus, one might argue that unemployed individuals might lose an important source of flow experiences what in turn might affect the pursuit of flow experiences, that is, the orientation to engagement.

While it also has been argued that work is an important source for the experience of meaning and purpose (e.g., Jahoda 1981), it reflects one among several sources of meaning (e.g., relationships/intimacy, religion/spirituality, self-transcendence/generativity; Emmons 2003). Therefore, as opposed to the experience of flow experiences, losing one's occupation might have lesser effects on meaning and the pursuit of meaning for many people, since they might be able to find meaning in other life areas.

With regard to the orientation of pleasure, it has been shown that, while work goes along with positive activated states, most positively valenced states (such as being happy or satisfied) are reported during leisure activities (Grimm et al. 2015; Schallberger and Pfister 2001). Thus, although many people will lose important sources of pleasure following unemployment, losing work should affect the experience and pursuit of pleasurable experiences least, compared to the other orientations to happiness, since work is – as opposed to leisure – a less important source.

Considering different orientations to happiness might allow for a deeper understanding in the changes in well-being that usually go along with changes in employment status. Further, there are effective interventions targeting the orientations to happiness (e.g., Gander et al. 2016; Giannopoulos and Vella-Brodrick 2011; Proyer et al. 2016) that could also be applied in programs for the unemployed to help buffer against the effects of lower well-being hindering re-employment.

### The Present Study

The present study aims at replicating previous findings on associations of well-being (i.e., life satisfaction and mental health problems) with employment status in a sample of the Swiss labor force and at extending existing knowledge on the relationships of different orientations to happiness with employment status in a large-scale, longitudinal sample over the course of two years.

Our main aims were threefold: Firstly, we examine the relationships of employment status with baseline levels of well-being and the orientations to happiness. We assume, in accordance with previous findings, higher levels of life satisfaction and lower levels of mental health problems for the employed compared to the unemployed. Further, we expect a higher orientation to engagement and meaning in the employed, since work has been suggested to be an important source of both (Emmons 2003; Delle Fave et al. 2011; Grimm et al. 2015; Ruch et al. 2010).

Secondly, we explore whether the levels of well-being at baseline predict changes in employment status: We expect that well-being predicts who will lose his or her job and who will gain employment at a follow-up two years later. Following the findings of Luhmann et al. (2013), we assume that those with lower levels in life satisfaction or higher levels of mental health problems are more likely to lose their job. Further, we expect the same for those with lower levels of pursuing engagement and meaning due to the importance of these orientations in work-related settings. We also assume – based on the findings of Claussen et al. (1993), Taris (2002), and Krause (2013) – that mental health problems and life satisfaction predict who will gain employment. Also, we expect that life satisfaction better predicts the positive outcome (i.e., finding employment), while mental health problems better predict the negative outcome (i.e., losing employment).

Thirdly, we study the changes in well-being in four professional trajectories over two years: Those who were constantly employed (employed-employed), those who were constantly unemployed (unemployed-unemployed), and those who experienced a change of their employment status (unemployed-employed, and employed-unemployed). For the unemployed and for those who lost their job we expected decreases in all well-being variables, in line with previous research. The same was expected for the orientations to engagement and meaning, but not pleasure. For those who gained employment we expected increases in all well-being variables (except for the orientation to pleasure), but no changes in the constantly employed.

### Method

#### Participants

Based on information of the Swiss Federal Statistical Office, a random sample from participants aged 26 to 56 living in the German- or French-speaking parts of Switzerland were collected. The project started with a total sample of 2469 participants. In this sample, women and unemployed participants were oversampled with the aim to have a gender-balanced sample and a large enough sample for studying the role of unemployment. The analyzed sample consisted of N = 1231 participants who provided information on employment status at the first wave, and at the third wave two years later, while other missing information was estimated (see below).

The analyzed participants (47.8% men) had a mean age of M = 43.02 (SD = 8.32). Most participants (85.1%) were Swiss citizens. More than one third of the sample had a degree from a tertiary education institution (e.g., a university or a university of applied sciences; 39.5%), 13.7% had a diploma that would allow them to attend a tertiary education institution, 41.2% completed vocational training, and 5.6% completed secondary school or less.

At baseline, 82.0% of the participants were employed, while the remaining participants were unemployed (employed = currently exercising a professional activity; unemployed = currently without a professional activity and looking for a professional activity). At the follow-up two years later, 94.7% of the participants were employed. Over the course of two years most participants (80.0%) were constantly employed (employed-employed), 3.3% were unemployed (unemployed-unemployed), 1.9% lost their job (employed-unemployed), and 14.7% gained employment (unemployedemployed). We decided to control for gender, age, nationality (Swiss nationality vs. other nationality), education, household income, and changes in household income (decrease vs. no change vs. increase) in subsequent analyses in order to also account for minor influences of these variables.

#### Instruments

The *Satisfaction With Life Scale* (SWLS; Diener et al. 1985) is a 5-item measure for the assessment of global life satisfaction. It uses a 7-point Likert-style scale (7 = "strongly agree" to 1 = "strongly disagree"). A sample item is "In most ways, my life is close to my ideal". The SWLS is frequently used in research and shows good psychometric properties. Internal consistency in the present study was high (McDonald's omega<sup>1</sup> = .89).

The Orientations to Happiness Short Form (OTH; Ruch et al. 2014) is a 9-item measure for the assessment of the endorsement of the three routes to happiness according to Seligman's 2002 Authentic Happiness Theory: The *life of pleasure*, the *life of engagement*, and the *life of meaning*. It uses a 5-point Likert-style scale (from 1 = "very much unlike me" to 5 "very much like me"). The short form was developed by selecting items from the 18-item Orientations to Happiness Questionnaire (Peterson et al. 2005), and has shown acceptable psychometric properties for the use in large-scale studies. Sample items are "Life is too short to postpone the pleasures it can provide" (pleasure), "Regardless of what I am doing, time passes very quickly" (engagement), and "My life serves a higher purpose" (meaning). Internal consistencies in the present study were acceptable for this type of study (pleasure: McDonald's omega = .66; engagement: McDonald's omega = .57; meaning: McDonald's omega = .62).

The *General Health Questionnaire-12* (GHQ-12; Goldberg 1978) is a 12-item screening measure for mental health problems, such as depression, anxiety, or somatic symptoms. It uses a 4-point response scale (from "not at all" to "much more than

<sup>&</sup>lt;sup>1</sup> McDonald's omega has been suggested as a superior measure of internal consistency than the more widely used Cronbach's alpha (see Zinbarg et al. 2005).

*usual*"). Whereas the original scale used a bimodal scoring (0 or 1 possible points per item), several studies (e.g., Schmitz et al. 1999) suggested Likert-style scoring (1 to 4 possible points per item) which was also used in the present study. A sample item is "Have you lost much sleep over worry?". Items were recoded so that higher scores denote *fewer* mental health problems. The GHQ-12 has been frequently used in research and shown good psychometric properties (e.g., McCabe et al. 1996). Internal consistency in the present study was high (McDonald's omega = .91).

### Procedure

All data was collected as a part of the NCCR-LIVES project (Swiss National Centre of Competence in Research LIVES—Overcoming vulnerability: Life course perspectives; Maggiori et al. 2016) a nationwide, longitudinal research project of seven consecutive years, examining the impact of professional trajectories. In this article, we present data from the first (= T1) and third waves (= T2), collected in 2012 and 2014, since no data on the OTH was collected at the second wave. The present study draws from the same large research project as the study by Johnston et al. (2016), but differs in several regards: It is based on different research questions (exploring the longitudinal relationships between unemployment, well-being and the orientations to happiness in the present study; exploring the contribution of personality career adaptability and prior well-being in different occupational groups in Johnston et al. 2016), different occupational groups (the present study also considers those who lost their job), uses different measurement times (i.e., waves 1 and 3 in the present study), and examines a different set of dependent variables (i.e., life satisfaction, mental health problems, and orientations to happiness). Thus, although there is an overlap, the study explores different research questions using different, not previously reported data.

All data was collected by an institute specialized in large-scale surveys. Participants were randomly drawn based on data of the Swiss Federal Statistics Office. Questionnaires could be completed online, on phone, or in paper and pencil format. When necessary, the instruments were translated into French or German, following the guidelines by the International Test Commission for translating and adapting tests (International Test Commission 2005). After every wave, participants received a gift worth about 20 Swiss Francs for their participation. The study was conducted in line with the ethical standards of the Swiss Society of Psychology.

#### **Data Analysis**

The percentage of missing values across the variables of interest (i.e., employment, SWLS, GHQ, OTH pleasure, OTH engagement, and OTH meaning) and the control variables (i.e., gender, age, nationality, education, income, changes in income) varied between 0% (age, gender, nationality) and 10% (changes in income). In total 601 out of 20,927 data points (2.9%) were missing. We used multiple imputation and analyzed 10 multiply imputed datasets using the mice 3.6.0 package (van Buuren and Groothuis-Oudshoorn 2011). Longitudinal variables (i.e., SWLS, GHQ, OTH pleasure, OTH engagement, and OTH meaning) were imputed using a two-level normal model. Subsequently, linear mixed models were computed and the parameters of interest analyzed in each imputed dataset separately, and combined using Rubin's rules.

For the analyses based on the differences at baseline, we computed linear mixed models predicting the outcomes (i.e., the scores in the SWLS, GHQ, and the OTH pleasure, OTH engagement, or the OTH meaning scales) by age, gender, nationality, income, education, and employment status. For the analyses of the longitudinal trajectories, we computed the same linear mixed models, but included time, changes in income, and employment trajectory groups (1 = unemployed-unemployed; 2 = unemployed-employed; 3 = employed-unemployed; 4 = employed-employed), and the interaction of all predictors with time as additional predictors. In all linear mixed models, intercepts were allowed to vary between individuals. For examining our main hypotheses, we computed planned comparisons based on these models where we contrasted the groups of interest. For obtaining an estimate of effect size, we computed Cohen's *d* based on the parameter estimates of the means and the standard errors at T1 for the within-group comparisons (i.e., the well-being trajectories), and based on the pooled standard errors at T1 for the between-group comparisons.

# Results

# **Preliminary Analyses**

All well-being measures were positively related to each other but the relations were far from indicating redundancy (correlations ranged from r = .05 [GHQ and OTH-E] to r = .48 [SWLS and GHQ]; see online supplementary Table A). Furthermore, all well-being measures showed considerable stability across the two-year period ranging from  $r_{\rm tt} = .41$  (GHQ) and the  $r_{\rm tt} = .66$  (SWLS). Finally, all covariates showed small relationships to the well-being indicators, while income showed small to moderate relationships.

# **Baseline Differences**

Firstly, we examined whether unemployed and employed individuals differed in wellbeing at baseline. We computed separate regressions predicting each of the dependent variables by employment status while controlling for the covariates. Results for employment status are given in Table 1 (see online supplementary Table B for raw scores).

Table 1 shows that the employed reported higher levels of life satisfaction and lower levels of mental health problems than the unemployed, whereas no differences between the two groups with regard to the orientations to happiness were found.

# **Prediction of Employment Status**

Secondly, we examined whether there were differences among the groups at baseline depending on whether the individuals later found a job, or lost their job. For this purpose, we conducted separate linear mixed models for each dependent variable; we analyzed whether the two groups that were identical at T1 but differed at T2 with regard to their employment status (the unemployed-unemployed and the unemployed-

d

0.41

0.42

0.04

0.01

0.04

Orientations to Happiness				
	Employment Status			
	t	р		

8.01

8.03

0.67

0.10

0.79

 Table 1 Effects of Employment Status at Baseline in Life Satisfaction, Mental Health Problems, and the Orientations to Happiness

<.001

<.001

0.501

0.917

0.432

N = 1231. All df<sub>1</sub> = 1, df<sub>2</sub> = 1223. <sup>a</sup> Controlled for age, gender, nationality (Swiss nationality vs. other nationality), education, and income. Employment status: 0 = unemployed; 1 = employed

employed / the employed-employed and the employed-unemployed, respectively) differed in their well-being levels at baseline (see Table 2; between-group comparisons).

Table 2 shows that life satisfaction at T1 was predictive for who will gain employment in the future, while mental health problems at T1 were predictive of who will lose his or her job in the future, while the groups did not differ in terms of their orientations to happiness.

#### **Trajectories over Two Years**

Finally, we examined whether well-being trajectories differed among the employment groups. For this purpose, we tested the changes in the dependent variables in each group individually. Results showed (see Table 2; within-group comparisons) that those who were constantly unemployed reported decreases in the orientation to pleasure, while those who regained employment reported increases in life satisfaction, decreases in mental health problems, and increases in all orientations to happiness. Those who lost their jobs reported decreases in life satisfaction, while the constantly employed reported increases in the orientation to meaning.

### Discussion

The present study confirmed previous findings on the well-being of employed and unemployed individuals. Moreover, we extended these findings by including different orientations to happiness. In general, the findings widely met the expectations; results showed that employed individuals report higher levels of life satisfaction and fewer mental health problems than unemployed individuals. When inspecting the trajectories of well-being across two years, it was shown that gaining employment goes along with a reduction in mental health problems and an increase in life satisfaction, thus confirming previous findings (e.g., Diener et al. 2006). Losing employment went along with decreases in life satisfaction, while no changes in mental health problems were observed. It has to be mentioned that in those who lost their jobs and the constant

SWLS

GHO

OTH P

OTH E

OTH M

		Within-Subjects Comparisons (T2 - T1)				Between-Subjects Comparisons (T1)	
		Unemployed- Unemployed $(N=41)$	Unemployed- Employed (N=181)	Employed- Unemployed $(N=24)$	Employed- Employed $(N = 985)$	Unemployed- Unemployed vs. Unemployed- Employed	Employed- Unemployed vs. Employed- Employed
SWLS	Diff M(SE)	-0.16 (0.18)	0.37 (0.09)	-0.49 (0.22)	0.01 (0.05)	-0.69 (.20)	-0.38 (0.24)
	<i>t</i> (1221)	-0.94	3.95	-2.29	0.13	-3.41	-1.62
	р	.174	<.001	.011	.449	.002	.185
	Cohen's d	0.14	0.29	0.43	<.01	0.55	0.20
GHQ	Diff M(SE)	-0.09 (0.14)	0.23 (0.05)	-0.07 (0.11)	0.01 (0.03)	-0.11 (0.08)	-0.36 (0.10)
	<i>t</i> (1221)	-0.68	4.24	-0.65	-0.47	-1.38	-3.74
	р	.249	<.001	.258	.320	.257	<.001
	Cohen's d	0.19	0.45	0.16	0.02	0.22	0.51
OTH-P	Diff M(SE)	-0.28 (0.11)	0.09 (0.06)	0.04 (0.14)	-0.05 (0.03)	0.08 (.13)	-0.06
	<i>t</i> (1221)	-2.63	1.67	0.27	-1.42	0.60	0.15
	р	.005	.048	.394	.078	.467	.490
	Cohen's d	0.36	0.12	0.05	0.04	0.10	0.06
OTH-E	Diff M(SE)	0.10 (0.12)	0.11 (0.06)	-0.10 (0.15)	0.04 (0.03)	0.04 (0.13)	0.01 (0.15)
	t(1221)	0.86	1.84	-0.65	1.23	0.31	0.09
	р	.195	.033	.258	.109	.495	.500
	Cohen's d	0.13	0.14	0.13	0.04	0.05	0.01
OTH-M	Diff M(SE)	-0.09 (0.12)	0.11 (0.06)	-0.02 (0.15)	0.11 (0.03)	0.03 (0.15)	-0.06 (0.18)
	t(1221)	-0.80	1.80	-0.12	3.23	0.18	-0.34
	р	.213	.036	.454	<.001	.499	.494
	Cohen's d	0.10	0.11	0.02	0.08	0.03	0.04

 Table 2
 Within- and Between-Subject Comparisons With Regard to Employment Status in Life Satisfaction,

 Mental Health Problems, and the Orientations to Happiness at the Two Measurement Time Points

<sup>a</sup> Controlled for age, gender, nationality (Swiss nationality vs. other nationality), education, income, and changes in income between T1 and T2. Cohen's *d* was computed based on the standard error at T1 for the within-group comparisons, and based on the pooled standard errors at T1 for the between-group comparisons. Diff M=Contrast estimate of the mean difference. Contrasts were computed as follows: Within-subject comparisons: T2 minus T1 (positive differences suggest increases). Between-subject comparisons: First mentioned group minus second mentioned group (positive differences suggest higher scores in the first group). All tests are one-tailed

unemployed small effects (Cohen's d: 0.16–0.19) were observed for mental health problems, but these effects failed to reach significance due to the small sample sizes in these groups.

Further, it has been shown that mental health problems predict who will be unemployed in the future (in line with previous findings, e.g., Luhmann et al. 2013), whereas gaining employment in the future is predicted by life satisfaction (in line with Krause 2013). In summary, these findings suggest that it is more relevant to know about the negative aspects of well-being when one is interested in job loss, whereas the positive aspects of well-being are more predictive of regaining employment.

Importantly, these findings were independent of education or other important demographic characteristics (and was also observed when controlling for job search efforts). This fits well into earlier findings that people with high (trait) positive affect are more successful in job interviews (Burger and Caldwell 2000). Further, a positive, optimistic perception of one's future, which often goes along with higher life satisfaction, might support continuous effort in searching for employment, help buffering setbacks, and thus be an important resource for coping with vulnerabilities in life.

The fact that life satisfaction is a relevant predictor could be useful since it might serve as an additional predictor in distinguishing among people who are at low or high risk for not finding employment. Based on this information, resources of job offices could be assigned more effectively. Also, Positive Psychology interventions that have been shown to be potent measures for increasing well-being (see Bolier et al. 2013) could be administered to individuals during unemployment. In order to help ameliorating the negative effects of unemployment.

Unexpectedly, no relationships of the orientations to happiness with employment status were observed, nor were levels in the orientions to happiness predictive of future unemployment or reemployment. Nonetheless, some changes were observed, for example constant unemployment went along with decreases in the orientation to pleasure, while gaining employment was positively related with increases in all orientations to happiness. While these findings are line with regard to the orientations to engagement and meaning, this is somewhat surprising since living a life of pleasure seems to fit less well to the work context than the other two orientations. Nonetheless, it is possible that the general increase in well-being following finding employment also allows one to enjoy and savor the pleasurable aspects of life more (and vice versa for constant unemployment). Also, unexpectedly the constant employed reported increases in the orientation to meaning. However, this effect was very small in terms of conventions on effect sizes (Cohen's d = 0.08) and should not be overinterpreted.

Of course, several limitations of the present study have to be noted. Firstly, due to the non-experimental nature of the study no claims of causality can be made. Secondly, the samples of individuals who lost and regained employment were comparatively small. Of course, this lies in the nature of prospective studies and very large samples would be needed to study these events. Thirdly, due to the large scale of the research project, only a shortened version of the OTH could be used what lead to low internal consistencies (but still acceptable stabilities) of the scales. Thus, it is possible that some effects are underestimated in the present study. Finally, we did not consider potential subgroups among the unemployed (and employed) – some might have been only short-term unemployed while others have been unemployed for longer periods of time. Further, it would also be interesting to compare subgroups among the constant employed or the reemployed with regard to occupational status or other important environmental factors.

Despite these limitations, the present study provides further evidence for the prospective importance of well-being constructs and presents new findings on trajectories of orientations to happiness depending on employment status.

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### References

- Anusic, I., Yap, S. C. Y., & Lucas, R. E. (2014). Testing set-point theory in a Swiss national sample: Reaction and adaptation to major life events. *Social Indicators Research*, 119(3), 1265–1288. https://doi. org/10.1007/s11205-013-0541-2.
- Argyle, M. (1999). Causes and correlates of happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), Well-being: Foundations of hedonic psychology (pp. 353–373). New York: Russell Sage Foundation.
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, 19(1), 31–53. https://doi.org/10.1111/ijmr.12077.
- Bolier, L., Haverman, M., Westerhof, G., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health*, 13, 119. https://doi. org/10.1186/1471-2458-13-119.
- Burger, J. M., & Caldwell, D. F. (2000). Personality, social activities, job-search behavior and interview success: Distinguishing between PANAS trait positive affect and NEO extraversion. *Motivation and Emotion*, 24, 51–62. https://doi.org/10.1023/A:1005539609679.
- Clark, A. E., Georgellis, Y., & Sanfey, P. (2001). Scarring: The psychological impact of past unemployment. *Economica*, 68, 221–241. https://doi.org/10.1111/1468-0335.00243.
- Claussen, B., Bjørndal, A., & Hjort, P. F. (1993). Health and re-employment in a two year follow up of long term unemployed. *Journal of Epidemiology & Community Health*, 47, 14–18. https://doi.org/10.1136 /jech.47.1.14.
- Delle Fave, A., Massimini, F., & Bassi, M. (2011). Psychological selection and optimal experience across cultures: Social empowerment through personal growth. Dordrecht: Springer. https://doi.org/10.1007 /978-90-481-9876-4.
- Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, 61, 305–314. https://doi.org/10.1037/0003-066X.61.4.305.
- Di Tella, R., MacCulloch, R. J., & Oswald, A. J. (2001). Preferences over inflation and unemployment: Evidence from surveys of happiness. *The American Economic Review*, 91, 335–341. https://doi. org/10.1257/aer.91.1.335.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71–75. https://doi.org/10.1207/s15327752jpa4901 13.
- Emmons, R. A. (2003). Personal goals, life meaning, and virtue: Wellsprings of a positive life. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing* (pp. 105–128). Washington, DC: APA.
- Frey, B. S., & Stutzer, A. (2002). What can economists learn from happiness research? *Journal of Economic Literature*, 40, 402–435. https://doi.org/10.1257/002205102320161320.
- Gander, F., Proyer, R. T., & Ruch, W. (2016). Positive psychology interventions addressing pleasure, engagement, meaning, positive relationships, and accomplishment increase well-being and ameliorate depressive symptoms: A randomized, placebo-controlled online study. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2016.00686.
- Giannopoulos, V. L., & Vella-Brodrick, D. A. (2011). Effects of positive interventions and orientations to happiness on subjective well-being. *The Journal of Positive Psychology*, 6, 95–105. https://doi. org/10.1080/17439760.2010.545428.
- Goldberg, D. P. (1978). Manual of the general health questionnaire. Windsor: NFER Publishing.
- Grimm, C., Kemp, S., & Jose, P. E. (2015). Orientations to happiness and the experience of everyday activities. *The Journal of Positive Psychology*, 10, 207–218. https://doi.org/10.1080 /17439760.2014.941382.
- Inglehart, R. (1990). Culture shift in advanced industrial society. Princeton: Princeton University Press.
- International Test Commission. (2005). *ITC guidelines for translating and adapting tests*. Retrieved November 22, 2019, from https://www.intestcom.org/files/guideline\_test\_adaptation.pdf.
- Jahoda, M. (1981). Work, employment, and unemployment: Values, theories, and approaches in social research. American Psychologist, 36(2), 184–191. https://doi.org/10.1037/0003-066X.36.2.184.
- Johnston, C. S., Maggiori, C., & Rossier, J. (2016). Professional trajectories, individual characteristics, and staying satisfied and healthy. *Journal of Career Development*, 43, 81–98. https://doi.org/10.1177 /0894845315584161.
- Krause, A. (2013). Don't worry, be happy? Happiness and reemployment. *Journal of Economic Behavior & Organization*, 96, 1–20. https://doi.org/10.1016/j.jebo.2013.09.002.

- Lucas, R. E. (2007). Adaptation and the set-point model of subjective well-being does happiness change after major life events? *Current Directions in Psychological Science*, 16, 75–79. https://doi.org/10.1111/j.1467-8721.2007.00479.x.
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment alters the set point for life satisfaction. *Psychological Science*, 15, 8–13. https://doi.org/10.1111/j.0963-7214.2004.01501002.x.
- Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A meta-analysis. *Journal of Personality and Social Psychology*, 102(3), 592–615. https://doi. org/10.1037/a0025948.
- Luhmann, M., Lucas, R. E., Eid, M., & Diener, E. (2013). The prospective effect of life satisfaction on life events. Social Psychological and Personality Science, 4, 39–45. https://doi.org/10.1177 /1948550612440105.
- Maggiori, C., Rossier, J., Krings, F., Johnston, C. S., & Massoudi, K. (2016). Career pathways and professional transitions: Preliminary results from the first wave of a 7-year longitudinal study. In M. Oris, C. Roberts, D. Joye, & M. E. Stähli (Eds.), *Surveying Human Vulnerabilities across the Life Course* (pp. 131–157). Springer International Publishing. https://doi.org/10.1007/978-3-319-24157-9 6.
- Mastekaasa, A. (1996). Unemployment and health: Selection effects. Journal of Community & Applied Social Psychology, 6(3), 189–205. https://doi.org/10.1002/(SICI)1099-1298(199608)6:3<189::AID-CASP366 >3.0.CO;2-O.
- Martínez-Martí, M. L., & Ruch, W. (2017). The relationship between orientations to happiness and job satisfaction one year later in a representative sample of employees in Switzerland. *Journal of Happiness Studies, 18*, 1–15. https://doi.org/10.1007/s10902-016-9714-4.
- McCabe, C. J., Thomas, K. J., Brazier, J. E., & Coleman, P. (1996). Measuring the mental health status of a population: A comparison of the GHQ-12 and the SF-36 (MHI-5). *The British Journal of Psychiatry*, 169, 516–521. https://doi.org/10.1192/bjp.169.4.516.
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology*, 90, 53–76. https://doi. org/10.1037/0021-9010.90.1.53.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3), 264–282. https://doi.org/10.1016/j.jvb.2009.01.001.
- Peterson, C., Park, N., & Seligman, M. E. P. (2005). Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of Happiness Studies*, 6, 25–41. https://doi.org/10.1007/s10902-004-1278-z.
- Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2016). Addressing the role of personality, ability, and positive and negative affect in positive psychology interventions: Findings from a randomized intervention based on the authentic happiness theory and extensions. *The Journal of Positive Psychology*, 11(6), 609–621. https://doi.org/10.1080/17439760.2015.1137622.
- Ruch, W., Harzer, C., Proyer, R. T., Park, N., & Peterson, C. (2010). Ways to happiness in German-speaking countries. *European Journal of Psychological Assessment*, 26, 227–234. https://doi.org/10.1027/1015-5759/a000030.
- Ruch, W., Martínez-Martí, M. L., Heintz, S., & Brouwers, S. A. (2014). Short form of the orientations to happiness questionnaire for the German-speaking countries. *Swiss Journal of Psychology*, 73, 225–234. https://doi.org/10.1024/1421-0185/a000141.
- Schallberger, U., & Pfister, R. (2001). Flow-Erleben in Arbeit und Freizeit [flow experiences in work and leisure: An experience sampling study about the paradox of work]. Zeitschrift Für Arbeits- Und Organisationspsychologie A&O, 45(4), 176–187. https://doi.org/10.1026//0932-4089.45.4.176.
- Schmitz, N., Kruse, J., & Tress, W. (1999). Psychometric properties of the general health questionnaire (GHQ-12) in a German primary care sample. *Acta Psychiatrica Scandinavica*, 100, 462–468. https://doi. org/10.1111/j.1600-0447.1999.tb10898.x.
- Seligman, M. E. P. (2002). Authentic happiness. New York: Simon and Schuster.
- Shams, M., & Jackson, P. R. (1994). The impact of unemployment on the psychological well-being of British Asians. *Psychological Medicine*, 24, 347–355. https://doi.org/10.1017/S003329170002732X.
- Taris, T. W. (2002). Unemployment and mental health: A longitudinal perspective. *International Journal of Stress Management*, 9, 43–57. https://doi.org/10.1023/A:1013067101217.
- Truss, C., Shantz, A., Soane, E., Alfes, K., & Delbridge, R. (2013). Employee engagement, organisational performance and individual well-being: Exploring the evidence, developing the theory. *The International Journal of Human Resource Management*, 24(14), 2657–2669. https://doi.org/10.1080 /09585192.2013.798921.
- Turner, N., Barling, J., & Zacharatos, A. (2002). Positive psychology at work. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 715–728). New York: Oxford University Press.

- van Buuren, S., & Groothuis-Oudshoorn, K. (2011). Mice: Multivariate imputation by chained equations in R. Journal of Statistical Software, 45, 1–67.
- Warr, P. (1987). Work, unemployment, and mental health. New York, NY, US: Oxford University Press. https://doi.org/10.1073/pnas.84.22.7915.
- Warr, P. (2008). Environmental "vitamins", personal judgments, work values, and happiness. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well being* (pp. 57–85). Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199211913.003.0004.
- Zinbarg, R. E., Revelle, W., Yovel, I., & Li, W. (2005). Cronbach's α, Revelle's β, and Mcdonald's ω: Their relations with each other and two alternative conceptualizations of reliability. *Psychometrika*, 70, 123– 133. https://doi.org/10.1007/s11336-003-0974-7.

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