

Frustration of Life Goals Mediates the Negative Effect of Unemployment on Subjective Well-Being

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Abstract The present study investigated whether unemployment influences the importance and the realization of life goals and whether a reduced realization of life goals mediates the negative effect of unemployment on subjective well-being. A sample of 256 employed and unemployed German adults was studied with scales measuring six different life goal domains (power, achievement, variety, altruism, intimacy, affiliation). Only weak differences between unemployed and employed people were found for importance ratings of life goals. However, current realization of life goals, particularly of agency goals such as power, achievement and variety, was significantly lower among unemployed persons than among employed persons. Thus, unemployment did not change the goals people wanted to achieve in their lifetime, but it inhibited the success of these strivings. Furthermore, current realization of life goals was found to be a mediator of the detrimental effect of unemployment on life satisfaction and positive/negative affect.

Keywords Unemployment · Life goals · Subjective well-being · Eudaimonic well-being · Hedonic well-being · Mental health

1 Introduction

Five years after the peak of the global financial crisis in 2009 unemployment rates are still elevated compared to pre-crisis levels in many countries such as the USA, the UK, or France. And in several developed and developing countries catastrophic levels of unemployment persist with more than a quarter of the economically active population being excluded from work (e.g. Greece, Spain, South Africa) (International Labour Office 2014). The psychological consequences of unemployment, particularly those consequences pertaining to mental health and subjective well-being, have been demonstrated to be negative

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(for meta-analyses of this research, see McKee-Ryan et al. 2005; Paul and Moser 2009). However, the question of whether unemployment is an obstacle for the attainment of major life goals has not been scrutinized yet, although it probably is of high relevance for public health. If the frustration of such goals can be shown to be a mediator of the negative effects of unemployment on mental health and well-being, a better understanding would be gained for the high prevalence of mental disorders among unemployed persons, which is estimated to be 35 % in contrast 16 % among employed persons (Paul and Moser 2006). Such a better understanding could then be helpful for the development of new interventions for this group of people.

Life goals are long-term goals that are located on a high level of an individual's goal hierarchy. They serve as landmarks for decisions about a person's further life course and describe how one wishes to shape his or her personal future. As a consequence, they give consistency to the person's decisions and tend to stabilize behavior across varying contexts (Pöhlmann and Brunstein 1997).

From the theoretical perspective of eudaimonic well-being (see below), striving for life goals can be seen as an essential part of a worthy human life. Thus, a block in the attainment of such goals resulting from job loss would be an important finding in itself. Furthermore, a reduced level of attainment of personally relevant goals is likely to act as a mediator explaining the negative effects of unemployment on subjective well-being. Therefore, the present paper reports a study concerned with effects of unemployment on the *importance* of life goals and the degree of current *realization* of life goals. The mediating effect of life goals on life satisfaction and positive and negative affect will also be tested, using a sample of employed and unemployed German adults.

2 Life Goals, Well-Being, and Unemployment

2.1 Life Goals and Eudaimonic and Hedonic Well-Being

Well-being was mostly scrutinized in its hedonic form by psychologists, measuring for example life satisfaction or positive/negative affect. However there exists another tradition of conceptualizing well-being, eudaimonic well-being, that is of particular relevance for life goals. It has instigated increasing research interest in recent decades (Ryan and Deci 2001). In its essence, this concept, which was first developed in Aristotle's *Nicomachean Ethic*, relates to self-realization. Each human being is thought to be obliged to strive to the realization of his or her true potential, to "achieve the best that is within us" (Ryff and Singer 2008, p.17) and to "become what you are" (Norton 1976, p. 16).

According to Ryff and Singer (2008), Ryff (1989) purposeful activity, having goals in life, and a sense of directedness, are core aspects of the concept of eudaimonia. Any event or situation—for example unemployment—that could block a person's continuous movement towards attainment of his or her life goals would thus represent a direct impairment of the individual's eudaimonic well-being. Since empirical results show that the two types of well-being are correlated (Watermann 1993) it can be expected that frustration of life goals will also impair hedonic well-being, i.e., life satisfaction and positive/negative affect.

2.2 Life Goals and Unemployment

Two recent meta-analyses have demonstrated that unemployment is associated with reduced hedonic well-being and that this effect is of medium size (McKee-Ryan et al.

2005; Paul and Moser 2009). In contrast, researchers have shown considerably less interest in eudaimonic well-being as a possible correlate of unemployment (for an exception, see Vastamäki et al. 2009). Life goals, which pertain to core aspects of eudaimonic well-being such as—*purpose in life* and *personal growth* (Ryff 1989) have apparently not yet been directly studied by scholars concerned with the consequences of unemployment and job loss.

2.3 Unemployment as an Obstacle for the Attainment of Life Goals

Two theoretical models from the field of psychological unemployment research are relevant for the question of whether unemployment influences life goals: Fryer's (1986, 1997) agency restriction model and Paul and Moser's (2006) incongruence model.

Fryer (1986, 1997) assumes humans to be “agents actively striving for purposeful self-determination, attempting to make sense of, initiate, influence, and cope with events in line with personal values, goals, and expectations of the future” (1997, p. 12). According to the agency restriction model, unemployment severely restricts and frustrates agency as well as undermines planning and purposeful action because it is usually associated with poverty and future insecurity. Thus, the general human “desire for self-directedness” (1986, p. 16) is frustrated by unemployment, resulting in distress and low well-being.

Supporting the model, several studies from different countries have shown that financial deprivation and future insecurity can explain unemployed people's distress symptoms to a large degree (e.g. Paul and Batinic 2010; Creed and Klisch 2005). However, to the best of our knowledge no studies concerned with this model have directly scrutinized life goals. From the perspective of the agency restriction model, it is likely that unemployment affects the realization of life goals and that this mediates negative effects of unemployed on people's hedonic well-being.

The incongruence model (Paul and Moser 2006) assumes that a lack of congruence between a person's level of employment-related values and goals and his or her current employment situation is a distinguishing feature of unemployment. Thus, despite common stereotypes arguing the opposite, the model assumes that unemployed persons have a strong preference for work, which does not fit to their current situation of joblessness. The model also states that this lack of congruence between goals and goal attainment is psychologically pathogenic.

These assumptions were endorsed by meta-analyses demonstrating that unemployed persons are characterized by levels of employment commitment very similar to employed persons. Furthermore, high levels of employment commitment—while associated with positive outcomes among employed persons—lead to symptoms of distress and reduced hedonic well-being among unemployed persons, as predicted by the incongruence model (Paul and Moser 2006). In a recent study employment commitment predicted mental health of unemployed persons even when personality was controlled, lending further support to the model (Creed et al. 2009).

From the perspective of the incongruence model, unemployment is expected to lead to a frustration of a specific subset of life goals, i.e., those life goals that are typically associated with employment in contemporary societies, such as achievement. The model also predicts that the *importance* an individual ascribed to his or her life goals is not affected by job loss.

2.4 Hypotheses

In line with the agency restriction model we assumed that unemployed persons typically experience difficulties in reaching their life goals and report less current attainment of life

goals than employed people. This assumption is not restricted to a specific type of life goals.

H1: Unemployed persons experience less current realization of life goals than employed persons.

The incongruence model predicts that unemployed people are specifically characterized by a thwarting of their employment- and career-related life goals, while goals from other life domains should be less affected. At least partly matching this distinction, agency goals are commonly differentiated from communion goals within the field of life goal research (Bakan 1966; Pöhlman 2001). Agency life goals involve dealing efficiently with one's social and material environment, while communion life goals are concerned with establishing and maintaining satisfying relationships with other people. Since agency life goals are usually reached via career success in contemporary societies, we assumed, based on the incongruence model, that it is primarily this kind of life goals that is thwarted by unemployment.

H2: The negative effect of unemployment on current realization of life goals is stronger for agency goals than for communion goals.

Both, agency restriction theory as well as the incongruence model assume that the frustration of goal-directed behavior plays a role in the creation of unemployment-related distress. While agency theory assumes this for all kinds of life goals, the incongruence model is more specific and predicts that primarily the thwarting of employment-related goals transmits the negative effects of unemployment on mental health and well-being. Focusing on the class of life goals where both theoretical models converge, we expected that current realization of agency life goals mediates the negative effects of unemployment on hedonic well-being.

H3: Realization of agency life goals mediates the effect of unemployment on subjective well-being.

3 Method

3.1 Participants

Unemployed people were approached in eight different employment agencies and training institutions for unemployed people in southern Germany and were asked to participate in the study. Employed persons were recruited in 16 different corporations and public offices from various industry/administration sectors. Only full-time employed people were asked for participation. This resulted in a total of 256 participants in the sample, of whom 121 were unemployed and 135 were employed.

About half of the participants (47.7 %) were women. The mean age was 35.9 years, ranging from 18 to 63 years ($SD = 11.09$). Furthermore, 47.3 % of the participants had children. There were no significant differences between employed and unemployed participants with regard to the percentage of women, percentage of parents, or the mean age. However, significantly more employed persons (82.1 %) than unemployed persons (68.3 %) were married or cohabiting ($p < .05$). Employed persons also had significantly higher level of formal education (e.g. school, university) than unemployed persons [years in formal education: 14.54 ($SD 3.77$) vs. 11.12 ($SD 3.06$), $p < .001$]. On average, the

unemployed participants had been without a job for 12.5 months, with a minimum of less than 1 month and a maximum of 180 months ($SD = 25.9$ months).

3.2 Measures

3.2.1 Life Goals

Life goals were measured with the GOALS scales developed by Pöhlmann and Brunstein (1997) based on earlier work by Novacek and Lazarus (1990) and Wicker et al. (1984). This instrument includes three scales measuring agency goals and three scales measuring communion goals. The scales measuring agency goals were *power* (sample items: “To be able to influence others”; “To have a high social status”), *achievement* (sample items: “To improve my abilities”; “To become continuously better”), and *variety* (sample items: “To live an exciting life”; “To have adventures”). The scales measuring communion goals were *intimacy* (sample items: “To have a deep relationship”; “To get love and affection”), *affiliation* (sample items: “To have a lot of social contact”; “To do many things together with other people”), and *altruism* (sample items: “To act unselfishly”; “To help other people who are in distress”). Each scale included four items. Participants were asked to rate two attributes of each goal: (a) how important it is for them to achieve this goal in their life; and (b) how successful they currently are with the realization of this goal. The answers are coded on a five-point-scale ranging from (a) 1 = not important to 5 = very important; (b) 1 = barely successful to 5 = very successful. For both attributes (importance and current realization) orthogonal six-factor solutions and satisfactory reliabilities have been reported for several independent samples (Pöhlman2001; Pöhlmann and Brunstein 1997). The internal consistencies for the present sample ranged between $\alpha = .73$ and $\alpha = .86$ for importance ratings, and between $\alpha = .84$ and $\alpha = .89$ for ratings of current realization of life goals. Thus, reliability was acceptable for all scales pertaining to life goals.

3.2.2 Hedonic Well-Being

Hedonic well-being was measured with three scales for life satisfaction, positive affect, and negative affect.

Life satisfaction was measured with the German version of Diener’s Satisfaction with Life Scale (Diener et al. 1985; Schumacher et al. 2003). This scale, frequently used in well-being research, measures global life satisfaction with five items (sample item: “I am satisfied with life”). Responses are made on a 7-point Likert-scale, ranging from 1 = strongly disagree to 7 = strongly agree. The internal consistency for the present sample was $\alpha = .92$.

Positive and Negative Affect were measured with the German version of the Positive and Negative Affect Schedule (Krohne et al. 1996; Watson and Clark 1988). This instrument consists of two scales, one for positive affectivity and one for negative affectivity. Each scale includes ten adjectives (e.g. “inspired” and “proud” for positive affect and “scared” and “hostile” for negative affect). The respondents were asked to indicate whether the adjectives described how they felt during the last days, using a Likert scale format from 1 = not at all to 5 = extremely. The internal consistency of the positive affect scale was $\alpha = .93$ while the internal consistency of the negative affect scale was $\alpha = .89$ for the present sample.

3.3 Statistical Methods

In order to test the mediation hypotheses, multivariate bootstrapping was performed (Preacher and Hayes 2008). Bootstrapping is a nonparametric method based on a resampling procedure that generates an empirical approximation of the sampling distribution of a relevant statistic from the available data. This method makes it possible to determine the overall effect of all mediators and the individual effect of each single mediator while controlling for the other mediators. More specifically, in a mediator analysis based on bootstrapping, the sampling distributions of the indirect effects are empirically generated by repeatedly taking samples (with replacement) from the full data set and calculating the indirect effects in the resamples. This way, point estimates and 95 and 99 % confidence intervals are estimated for the indirect effects. The method is particularly recommended for comparatively small sample sizes. No assumption about the shape of the multivariate distribution of the data is necessary for this method. In the present study, all mediator effect models were controlled for age, education, and existence of a lasting relationship. Following a suggestion by Becker (2005) we did not use control variables that were not significantly correlated to the dependent variables (for example gender, nationality).

4 Results

In agreement with the results of many other studies unemployed people reported a worse subjective well-being than employed people in the present sample. This result was significant ($p < .001$) for all three sub-constructs of subjective well-being and the effect was of large size for life satisfaction ($d = 1.42$) and of medium-to-large size for positive affect ($d = .64$) and negative affect ($d = -.52$).

4.1 Unemployment and Life Goals

Unemployed individuals reported significantly less current realization of life goals than employed individuals (see Table 1). This was true for all six life goal dimensions studied here. The largest effect sizes were found for power ($d = .86$) and achievement goals ($d = .71$) which were particularly difficult for unemployed people to attain. Thus, hypotheses H1 was endorsed by the data.

On average, employed persons attained considerably more agency goals than unemployed persons. The effect was of large size for this type of life goals ($d = .83$). While on average employed people had also attained significantly more communion goals than unemployed people, the effect was clearly weaker ($d = .39$) for this type of goals. A test comparing the two effect sizes was significant ($p < .001$), endorsing hypothesis H2. Thus, unemployment had a particularly strong effect on goals that are usually reached via career success in modern societies. However, goals focusing on relationships and their development were also significantly affected by unemployment in the sample studied here, demonstrating that the negative effect of unemployment on life goals is a broad one and not limited to a specific kind of goals.

For *importance* of life goals, the differences between unemployed and employed participants were small or very small and mostly not significant (see Table 1). However, two unexpected significant group differences emerged: Unemployed persons reported a significantly lower importance of intimacy goals and a significantly lower importance of

Table 1 Life goals among unemployed and employed persons

	Current realization of life goals			Importance of life goals			
	Unemployed (n = 119–121)	Employed (n = 135)	$\frac{T \text{ test}}{t}$	Unemployed (n = 121)	Employed (n = 135)	$\frac{T \text{ test}}{T}$	$\frac{d}{p}$
Power	1.89 (.78)	2.63 (.93)	6.858	2.94 (.82)	2.98 (.84)	.393	.694
Achievement	2.85 (1.04)	3.53 (.85)	5.631	3.93 (.85)	4.13 (.69)	2.016	.045
Variability	2.33 (1.11)	2.77 (1.00)	3.314	3.12 (1.03)	3.26 (.95)	1.184	.238
Altruism	2.90 (.82)	3.13 (.86)	2.022	3.61 (.82)	3.56 (.77)	-.478	.633
Intimacy	3.68 (1.08)	4.01 (.91)	2.648	4.20 (.83)	4.46 (.63)	2.753	.006
Affiliation	3.00 (1.04)	3.33 (1.01)	2.591	3.53 (.87)	3.52 (.88)	-.076	.939
Agency (average)	2.34 (.81)	2.98 (.74)	6.350	3.33 (.70)	3.46 (.64)	1.522	.129
Communion (average)	3.19 (.83)	3.49 (.71)	3.090	3.78 (.71)	3.85 (.60)	.815	.416

Standard deviations in parentheses

Table 2 Correlations of life goal variables with subjective well-being and demographics

Variable	Mean	SD	1	2	3	4	5	6	7
1. Age	35.87	11.20	-						
2. Education in years	12.93	3.85	.03	-					
3. Steady relationship	.76	.43	.09	.10	-				
4. Unemployment	.47	.50	-.11	-.44**	-.16*	-			
5. Life satisfaction	4.14	1.62	.20**	.27**	.22**	-.58**	(.92)		
6. Positive Affect	3.04	.82	.08	.11	.13*	-.31**	.43**	(.93)	
7. Negative Affect	2.00	.81	-.17**	-.17**	-.04	.25**	-.40**	-.34**	(.89)
8. Current realization of power	2.28	.94	-.03	.14*	.24**	-.40**	.47**	.46**	-.22**
9. Current realization of variability	3.21	1.00	-.11	.17**	.06	-.34**	.42**	.43**	-.32**
10. Current realization of altruism	2.57	1.07	-.22**	.11	.10	-.20**	.36**	.42**	-.17**
11. Current realization of intimacy	3.02	.90	.12	-.04	.25**	-.13*	.22**	.33**	-.09
12. Current realization of affiliation	3.85	1.00	-.05	.06	.57**	-.17**	.32**	.38**	-.17**
19. Importance of power	3.18	1.04	-.16**	-.01	.12*	-.16**	.24**	.33**	-.14*
20. Importance of achievement	2.96	.83	-.14*	.05	-.04	-.03	-.02	.20**	.02
21. Importance of variability	4.04	.77	-.15*	.12	.01	-.13*	-.04	.25**	-.01
22. Importance of altruism	3.19	.99	-.46**	.06	-.15*	-.07	-.03	.15*	.05
23. Importance of intimacy	3.58	.79	.09	-.09	.12	.03	-.06	.18**	.07
24. Importance of affiliation	4.34	.74	.00	.12	.24**	-.17**	.13*	.28**	-.04
	3.53	.87	-.09	-.09	-.00	.01	-.08	.12	.00

N = 254–256; * *p* < .05; ** *p* < .01

Table 3 Multiple mediation analyses for current realization of life goals

Independent variable (IV)	Dependent variable (DV)	Mediating variable (M)	Effect of IV on M (a)	Effect of M on DV (b)	Direct effect (c')	Indirect effect (a × b)	Total effect (c)
Unem-employment	Life satisfaction	Current realization of...			-1.30**	-.44**	-1.74**
		Power	-.75**	.22		-.16*	
		Achievement	-.67**	.25*		-.16*	
		Variability	-.45**	.32**		-.15**	
		Altruism	-.24*	-.17		.04	
		Intimacy	-.24*	.30**		-.07*	
Unem-employment	Positive Affect	Affiliation	-.44**	-.14		.06	
		Current realization of...			-.20	-.29**	-.49**
		Power	-.75**	.13		-.09**	
		Achievement	-.68**	.11		-.07	
		Variability	-.46**	.18**		-.08**	
		Altruism	-.24*	.01		.00	
Unem-employment	Negative Affect	Intimacy	-.24*	.25**		-.06*	
		Affiliation	-.45**	-.05		.02	
		Current realization of...			.16	.18**	.34**
		Power	-.75**	.00		.00	
		Achievement	-.68**	-.24**		.16**	
		Variability	-.46**	-.05		.02	
Unem-employment	Intimacy	Altruism	-.24*	.14*		-.03	
		Intimacy	-.24*	-.11		.03	
		Affiliation	-.45**	.00		.00	
		Current realization of...					

N = 250–251; 5,000 bootstraps; * $p \leq .05$; ** $p \leq .01$. All models were controlled for age, duration of formal education, and existence of a steady relationship

Table 4 Multiple mediator analyses for importance of life goals

Independent variable (IV)	Dependent variable (DV)	Mediating variable (M)	Effect of IV on M (a)	Effect of M on DV (b)	Direct effect (c')	Indirect effect (a × b)	Total effect (c)
Unem-employment	Life satisfaction	Importance of...			-1.74**	-.02	-1.75**
		Power	-.03	.04		-.00	
		Achievement	-.16	-.22		.04	
		Variability	-.27*	.13		-.04	
		Altruism	.02	-.05		.00	
		Intimacy	-.19	.18		-.03	
Unem-employment	Positive affect	Affiliation	-.09	-.23		.02	
		Importance of...			-.42**	-.08	-.50**
		Power	-.03	.08		.00	
		Achievement	-.17	.16*		-.03	
		Variability	-.27*	.09		-.03	
		Altruism	.02	.01		.00	
Unem-employment	Negative affect	Intimacy	-.19	.18*		-.03	
		Affiliation	-.09	-.09		.01	
		Importance of...			.32**	.01	.33**
		Power	-.03	.01		.00	
		Achievement	-.17	-.05		.01	
		Variability	-.27*	.02		.00	
Unem-employment	Negative affect	Altruism	.02	.13		.00	
		Intimacy	-.19	.00		.00	
		Affiliation	-.09	-.07		.01	

N = 252-253; 5,000 bootstraps; * p ≤ .05, ** p ≤ .01. All models were controlled for age, vocational education, and existence of a steady relationship

achievement goals in comparison to employed persons. Both effect sizes were small ($d = .34$ and $d = .25$).

4.2 Correlations Between Life Goals and Hedonic Well-Being

Correlations between life goals and other variables are shown in Table 2. For all life goals, the level of current realization was significantly correlated to life satisfaction and positive and negative affect. The more a life goal was realized, the better an individual felt. For life satisfaction and positive affect, most effects were of medium-to-large size. For negative affect, most effects were of small or medium size. Only one correlation (realization of altruism goals and negative affect) was not significant.

For all life goals except affiliation, importance ratings were positively and significantly associated with positive affect. People who reported these life goals to be important for themselves felt better than people who did not see these goals as important. However, most of these effects were weak. For life satisfaction only the correlation with importance of intimacy goals was significant, while all other correlations were close to zero. None of the correlations with negative affect was significant. In summary, importance of life goals influenced hedonic well-being to a much smaller degree than realization of life goals did.

4.3 Mediation Analyses

Multiple mediation analyses showed that the reduced realization of agency life goals consistently mediated the negative effects of unemployment on hedonic well being (see Table 3). Significant mediating effects on life satisfaction were identified for reduced realization of power, achievement, and variability goals. Significant mediating effects on positive affect were found for reduced realization of power goals and variability goals. A significant mediating effect on negative affect was found for achievement goals. In sum, unemployment impaired hedonic well-being via the reduction of the current realization of agency life goals, as expected in Hypothesis H3. Furthermore, there was also a mediating effect for reduced realization of intimacy. Unemployed people were less successful in reaching their intimacy goals in comparison to employed people, which reduced their life satisfaction as well as their positive affect.

As expected, *importance* of life goals did not mediate the negative effect of unemployment on hedonic well-being (see Table 4). For life satisfaction as well as for positive and negative affect, the total indirect effect was very weak and not significant, and all indirect effects for specific life goals were also very weak and not significant.

A word of caution is necessary with regard to the mediation analyses. We hypothesized that unemployment reduced attainment of life goals which in turn impaired subjective well-being. However, a different mediational process is also possible. Low subjective well-being could have influenced participants' ratings of the degree to which they have realized their life goals. Bad mood, for example, might lead people to rate their success in their strivings in a more pessimistic way. Therefore, we conducted tests of alternative mediational models as recommended by Hayes (2013). These models had causal pathways from unemployment to subjective well-being and from subjective well-being to goal attainment. Several of these alternative mediator models were significant (detailed results are available from the first author), precluding any causal interpretation of the mediation results reported here.

5 Discussion

5.1 Summary of Results

The present study demonstrated that, in agreement with Fryer's agency restriction model, unemployed people generally report lower levels of life goal realization than employed people do. Endorsing the incongruence model, this effect is particularly strong for agency goals such as power, achievement, and variability. In contrast to this, there were only weak associations between unemployment and importance ratings of life goals. In other words, unemployment does not change what people want to achieve in their lifetime, but it inhibits the success of these strivings. Since purposeful activity and striving for the attainment of self-selected goals are core elements of eudaimonic well-being, these findings show that this kind of well-being is also affected by unemployment, similar to the better studied hedonic well-being.

The multiple mediation analyses showed that life goals also play an important role in the psychological process that leads to reductions of life satisfaction and positive affect and to increases of negative affect among unemployed people. The thwarting of agency life goals was particularly relevant in mediating the negative effects of unemployment. Interestingly, reduced realization of intimacy goals among unemployed people also had a mediating effect, a finding that is consistent with research results showing that unemployment is associated with reduced marital satisfaction (Vinokur et al. 1996) and increased rates of divorce (Ström 2003).

5.2 Implications

A politically important implication of the present study is the disconfirmation of the stereotypical assumption that unemployment might lead to a loss of work values and might render unemployed people motivationally unsuitable for the labor market. Contradicting this, we found only small differences between employed and unemployed persons with regard to the importance they ascribed to life goals. These results are consistent with Paul and Moser's (2006) findings that employment commitment is relatively stable and only weakly influenced by job loss. In other words: Unemployed people do not change their value system, they do not adapt their goals to their new, jobless life situation, although this could possibly be a successful coping strategy, easing their emotional burden. Instead, they stick to their positive evaluation of employment and to their established life goals even if this means that they have to suffer more than would be necessary.

A practical consequence of the findings reported here could be to counsel unemployed persons to reevaluate their life goals, particularly when the respective individual belongs to a group of persons with a high risk of permanent exclusion from the labor market, such as older persons with health problems. Unemployed people focusing on communion goals are less severely restricted in their ability to realize their goals than unemployed people focusing on agency goals. They also experience less severe impairments of life satisfaction and affectivity. Thus, putting more emphasis on communion and less on agency goals could be helpful advice for people who will probably have serious difficulties finding a new job.

5.3 Limitations

A mediator analyses with cross-sectional data can help to clarify the pattern of associations in a specific set of variables, for example by demonstrating that the indirect connection between unemployment and life satisfaction via communion goals becomes weak and (mostly) insignificant once the influence of agency goals is controlled. It cannot facilitate any causal conclusions, though, because cross-sectional data do not provide information about the temporal ordering of the effects leading to the observed correlational pattern (Maxwell et al. 2011).

Nevertheless, until longitudinal studies on the effect of unemployment on life goals are published, we believe that it is possible to retain the assumption of a causal pathway from unemployment through realization of life goals to subjective well-being that has been proposed here. One reason is that this assumption is based on theories on unemployment distress that have been empirically supported in several independent studies, including longitudinal studies (Paul and Moser 2006). Another reason is that there exist longitudinal studies showing that the process of disengaging from unattainable personal goals leads to impaired subjective well-being (e.g. Brandstätter et al. 2013; Brunstein 1993). And if unattainability of life goals leads to reduced subjective well-being among persons with acquired brain injury (Kuenemund et al. 2013), it is reasonable to assume that a similar process could take place among people who have lost their jobs, because this is also a life situation where a major event (job loss) impedes an individual's goals strivings. Furthermore, we are not aware of any longitudinal studies supporting a causal path from subjective well-being to the attainment of life goals. In summary, the majority of existing longitudinal evidence is consistent with the causal process proposed here. Nevertheless, longitudinal studies with unemployed participants endorsing the model are necessary before any firm conclusions about causality can be drawn.

Another limitation of the present study might be seen in the use of nomothetic measures of life goals. A nomothetic assessment implies that participants are not asked to report their personally most relevant life goals but are asked to rate a given list a preconceived goals. Thus, some relevant goals were probably not tapped by our assessment because they are highly idiosyncratic and important only to few people, but they could be very important to these few people. As a consequence, the mediator effects identified here are probably an underestimation of the real mediating effects of life goals in the context of unemployment and well-being. Further studies using measures of life goals that include idiographic elements (e.g. Emmons 1986) are needed.

Some readers might perceive the use of self-report measures as an additional weakness of the present study. They might suspect that the correlations between realization of life goals and subjective well-being could be inflated due to common method bias. However, the weak association between life goal importance ratings and subjective well-being do not endorse this assumption. If common method bias were a problem in the sample studied here it would also have inflated these correlations. Furthermore, it is difficult to imagine how such personal things as life goals and life satisfaction should be measured if not by self-report. Another important point is that partialling out neuroticism, the most frequently recommended procedure to treat common method bias in stress research, is not applicable in the context of the present study. The reason is that long term unemployment is known to cause chronic distress and that typical measures of neuroticism would probably conflate dispositional negative affectivity with this chronic negative effects of unemployment in a sample such as the one studied here. The result would be an unintended removal of substantive variance and an underestimation of the true effects (Spector et al. 2000).

Finally, the large number of significance tests should also be mentioned. The multiple mediation tests involved six life goal domains as mediators and three indicators of hedonic well-being as dependent variables, tested separately for importance ratings and realizations ratings of life goals. One could argue that an adjustment for multiple testing is needed here. However, whether such adjustments are generally necessary has been questioned (Rothman 1990). One argument against conventional adjustment procedures such as the ones proposed by Bonferroni (Perneger 1998) or Holm (Holm 1979) is their tendency to be overly conservative, strongly increasing the likelihood of type 2 errors. It is also unclear whether these procedures are appropriate for tests that are not independent of each other (Bender and Lange 2001), as is the case in a multiple mediation where the outcome of one test is influenced by the outcome of the simultaneously conducted other tests. We therefore abstained from conducting such a correction. Nevertheless, 36 mediator tests for specific life goals domains have been conducted at an alpha level of $p > .05$. Had they been independent from each other, this would imply that about two positive results could have emerged simply by chance. It is therefore probably wise to look with a certain degree of caution at the weaker mediation effects reported here. Particularly the small mediator effects for realization of intimacy, which also have a weaker theoretical foundation than the effects for agency goals, are clearly in need of replication.

6 Conclusion

Numerous studies have demonstrated that unemployment burdens people with a wide range of symptoms of distress and low hedonic well-being (McKee-Ryan et al. 2005; Paul and Moser 2009). The study reported here presented evidence endorsing the assumption that unemployment is also an obstacle for the attainment of the goals people have set themselves for their lives, evidence suggesting that unemployment hinders people to realize their true potential and to become who they really are. This is an interesting finding in itself. In addition, it helps to answer the question of *why* unemployment impairs hedonic well-being, one of the most contentious questions of psychological unemployment research (Paul et al. in press).

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