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Psychological effects of (non)employment: A cross-national comparison of the United States and Japan

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The involuntary loss of employment has been shown to deteriorate subjective well-being. Adopting a cross-cultural perspective on Jahoda's (1982) deprivation model this study examines several latent and manifest benefits of work that were expected to mediate the effects of employment status on well-being. It was hypothesized that in more collectivistic societies the decline in subjective well-being would be a consequence of a diminished sense of collective purpose for the non-employed, whereas in individualistic societies the crucial factors would be a loss of social status and financial benefits. The findings from two representative national surveys conducted in the United States ($N = 1,093$) and Japan ($N = 647$) provided partial support for these hypotheses. Cultural differences moderated the effects of employment status on the benefits of work. As a consequence, different processes mediated the decline in well-being for the non-employed in the two countries. These results are embedded within the wider discourse on culture and its effect on unemployment.

Key words: Employment status, cultural differences, Jahoda, well-being, benefits of work.

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INTRODUCTION

In the wake of the global financial crisis and economic downturn, millions of people in industrialized societies have lost their jobs and income. According to the European Commission in February 2015 approximately 10% of the labor force in the European Union states were unemployed (with variations of up to 23% in Spain), as compared to about 6% in the United States, and roughly 4% in Japan (Eurostat, 2015). The actual percentage of people willing to work but unable to get proper employment is likely to be even higher, as official unemployment statistics do not include unregistered unemployed, or individuals out of the labor force. Besides its economic and societal costs, unemployment has most serious effects on the individuals concerned. Numerous studies highlighted that unemployed people report more physical health problems, less life satisfaction, and an increase in depressive symptoms (see McKee-Ryan, Song, Wanberg & Kinicki, 2005; Paul & Moser, 2009; for recent meta-analytic reviews). Moreover, also people out of the labor force (e.g., homemakers, students, or retirees) typically report less psychological well-being than employed people (e.g., Paul & Moser, 2009; Paul, Geithner & Moser, 2009; Selenko, Batinic & Paul, 2011).

The negative effects of non-employment (i.e., being unemployed or out of the labor force) have been attributed to several factors beyond a mere loss of monetary income, such as the deprivation of psychosocial need-fulfilling functions (Jahoda, 1982) or a loss of “vitamins” (Warr, 2007). These views attributed the better well-being of employed people to the fact that employment does not only provide financial but also several psychosocial benefits that are universally important for

individuals' well-being (cf. Tay & Diener, 2011). Empirical support for these theoretical models on employment is well-established – at least in Western societies such as Germany or the United States (e.g., Creed & Muller, 2006; Selenko, Batinic & Paul, 2011; Warr, 2008). However, little is known about macro-level factors that might affect an individual's employment experience. Therefore, this study examines national effects on (non)employment's consequences across the United States and Japan. More specifically, the question is addressed whether nations with a different cultural setting – particularly concerning individualism-collectivism – also differ with regard to the need-fulfilling benefits people get through employment or lose in the case of non-employment (see also Veenhoven & Ehrhardt, 1995).

A LATENT FUNCTIONS PERSPECTIVE ON EMPLOYMENT

The latent deprivation model (Jahoda, 1982) postulates that employment offers so called latent functions over and above providing a financial income (i.e., manifest benefit): it enables people to contribute to a higher collective purpose, it widens individuals' social networks beyond the private family, it provides status and societal recognition, in addition to structuring the day and activating them. These latent functions of work are supposed to satisfy universal human needs and are therefore central for people's well-being. Thus, according to the latent deprivation model non-employment deprives people of important latent benefits which, in turn, leads to impaired well-being. This assumption complements the agency restriction perspective (Fryer, 1986), which postulates that negative consequences of unemployment can be explained by the loss of the manifest function (i.e., loss of financial income).

The latent deprivation model has gained considerable empirical support in recent years (see Muller & Waters, 2012 for an overview). Studies conducted in a variety of Western countries show that employed individuals report more access to the latent and manifest benefits of work than unemployed or people out of the labor force. This explains (part of) their comparably better well-being (cf. Creed & Muller, 2006; Paul & Batinic, 2010). Moreover, it has been shown that access to the latent benefits partially explains why work is considered meaningful and central to people's lives (e.g., Hassall, Muller & Hassall, 2005; Stiglbauer & Batinic, 2012). More importantly, the importance of the latent functions of work for well-being has been confirmed cross-sectionally (e.g., Creed & Macintyre, 2001) as well as longitudinally (Hoare & Machin, 2009; Selenko *et al.*, 2011). In sum, these results indicate that a considerable part of the differences in the psychological well-being of non-employed as compared with employed people can be explained by the deprivation of the benefits of work.

Hypothesis 1. The benefits of work mediate the effect of employment status on well-being.

The benefits of work are believed to satisfy *universal human needs* and should, therefore, be important for people's well-being in all cultures. This assumption is supported by a recent study (Tay & Diener, 2011) demonstrating that psychosocial need-fulfillment was universally important for well-being across eight regions comprising 123 nations. The other claim, that the benefits of work to be *universal elements of employment* in industrialized societies (Jahoda, 1982), however, has never been tested before. Evidence supporting the latent deprivation model has been found in Australia, Austria, Germany, and Great Britain (Muller & Waters, 2012). In these (largely) individualistic societies (Hofstede, Hofstede & Minkov, 2010), individual employment might be a suitable way to achieve the latent benefits and through them satisfy human needs. However, it is unknown whether these findings can be generalized to other, less individualistic societies as well. So far, there are no cross-cultural studies comparing the deprivation model across societies with different cultural norms. An examination of its cross-cultural generalizability seems highly warranted since effects of employment status on well-being have been shown to vary considerably between countries (e.g., Eichhorn, 2013; Paul & Moser, 2009). Thus, under different cultural norms the ability of employment to satisfy human needs might not be the same.

CULTURAL INFLUENCES ON THE LATENT AND MANIFEST FUNCTIONS OF WORK

Culture can be understood as shared patterns of meanings, practices, and ways of perceiving events within a society (Markus & Kitayama, 2010). Thus, the social and cultural environment influences the way people process information (Oyserman, Coon & Kemmelmeier, 2002; Oyserman & Lee, 2008), and as such people's expectations about what a job should provide (Hui, 1990) as well as the kind of meaning they attach to work (e.g., Hofstede *et al.*, 2010; MOW International Research Team, 1987; Rosso, Dekas & Wrzesniewsky 2010). Similarly, Schwartz (1999) argued that the prevalent cultural values determine the goals

people aim to achieve at or through work, with some goals being more compatible with the prevalent cultural values of a given society and therefore being more strongly pursued than others. Hence, it might be speculated that across diverse cultures the social institution of work is not equally relevant for providing all types of benefits and, hence, satisfy human needs. Rather, in some cultures work might be more important to get access to some of these benefits than in others. Moreover, according to rational choice theory the value of important aspects increases in a context of loss (Tversky & Kahneman, 1986). This implies that in the context of employment loss the value of the latent and manifest functions will generally increase. This effect, however, will be even stronger if employment is regarded as the primary pathway to a certain latent function in a specific culture.

Particularly, individualistic and collectivistic societies put different emphasis on different values (England & Misumi, 1986; Gahan & Abeysekera, 2009) which might also apply to the benefits associated with work. Individualistic societies as found in Australia, Western Europe, or North America focus on the individual self and value individual autonomy, self-actualization, and personal success (Oyserman *et al.*, 2002; Triandis, 1995), whereas in collectivistic societies as, for example, located in East Asia individuals tend to view themselves as members of a group rather than as separate individual identities (Triandis, 1995), focusing on interdependence and the integrity, norms, and goals of the in-group. Differences in values have also been associated with differences in information processing. For example, social comparison processes have been found to play a different role and take a different shape in individualistic and collectivistic societies (e.g., Sweeney, McFarlin & Inderrieden, 1991). Whereas in the latter similarity with others is a part of a person's self-definition, in the former the contrast with others can serve the purpose of self-evaluation (Markus & Kitayama, 1991; Oyserman & Lee, 2008). Differences in values and self-definitions can also lead to different work behaviors. According to regulatory focus perspective (Higgins, 1997), aspirations towards the ideal self and concentrating on personal success has been associated with a promotion focus, whereas aspirations towards the ought-self (for example, bringing oneself in line with a group) have been associated with a prevention focus. Accordingly, people in individualistic societies might predominantly hold a promotion focus, whereas in collectivistic societies would rather adopt a prevention focus (Lalwani, Shrum & Chiu, 2009; Lee, Aaker & Gardner, 2000; Ouschan, Boldero, Kashima, Wakimoto & Kashima, 2007). Given these global differences in value orientation, information processing, and goal striving, it is plausible to also expect differences between individualistic and collectivistic societies in the importance of work for providing the following benefits: social status, collective purpose, and financial benefits.

Social status

The assumption that employment is important for providing individual social status and identity (Jahoda, 1982) fits perfectly within the values of individualistic cultures because of the individual-centric perspective of this latent benefit. In individualistic societies, employment is one of the primary

indicators of a person's position in society; the question "what do you do" is often one of the first people ask. Thus, employment grants individual social status by giving people the opportunity to stand out and position themselves in relation to other members of these societies (Gorodnichenko & Roland, 2012). In contrast, people in collectivistic societies tend to emphasize embeddedness and relationships with others; here collective rather than individual achievement is stressed. This implies that different sources that go beyond an individual's employment situation (e.g., being a respected member of the community) can grant social status and identity. Thus, employment might be especially important for providing people social status within societies characterized by individualistic values. Consequently, in highly individualistic societies people will suffer from a greater loss of social status when they do not have a job than people in less individualistic societies; simply because employed individuals might be valued more strongly in individualistic societies.

Hypothesis 2. Social status mediates the effect of employment status on well-being more strongly in highly individualistic societies than in less individualistic societies.

Collective purpose

In contrast, experiencing employment as a chance to contribute to a higher collective purpose reflects a more holistic or group-based perspective which is typical for collectivistic cultures (Markus & Kitayama, 1991). It is likely that in those societies collective purpose is a more valuable benefit of employment than in individualistic societies. Put differently, contributing to a collective purpose of a well-regarded group would be of higher value in more collectivistic societies than in less collectivistic ones (Oyserman, 2002). If employment is then lost, the loss of collective purpose might be particularly bad, given that it was valued highly. Consequently, non-employed people in collectivistic societies will be feeling more deprived of collective purpose than in less collectivistic societies.

Hypothesis 3. Collective purpose mediates the effect of employment status on well-being more strongly in less individualistic societies than in highly individualistic societies.

Financial benefits

Furthermore, although the objective financial situation related to individuals' employment status might be similar in nations with similar unemployment protection systems, the subjective perception of that financial situation might differ (e.g., Gasiorowska, 2014): Subjective evaluations do not always match the objective situation. Perceptions regarding a person's financial situation are expected to be more affected by the experience of employment in highly individualistic societies. Individualistic societies value individual goals and individual-centered incentive systems (e.g., Earley & Gibson, 1998; Hofstede *et al.*, 2010). People in these societies tend to attribute success and failure primarily to themselves (Diener, Diener & Diener, 2009). Since financial compensations are routinely used to reward

achievements at work, income is frequently seen as a primary indicator of individual success in individualistic societies. The loss of something as important might, hence, weigh more in individualistic societies than in collectivistic ones. In addition, in individualistic societies persons evaluate their financial situation mainly through a process of social comparisons (Sweeney *et al.*, 1991). In this regard, non-employed people in individualistic societies might be more inclined to use their own past income in comparison to others to evaluate their perceived financial situation (Oyserman & Lee, 2008; Sweeney *et al.*, 1991). This might lead to greater discrepancies than in collectivistic societies where people might rather regard their embeddedness in a social context, for example their household, their family or community, to derive at an evaluation of their financial situation. Non-employment related income deficits would therefore play a greater role for perceived unhappiness in individualistic societies than in societies that align with a more group-based perspective.

Hypothesis 4. Financial benefits mediate the effect of employment status on well-being more strongly in highly individualistic societies than in less individualistic societies.

In sum, non-employment is expected to be negatively related to well-being through a deprivation of the latent and manifest functions of work. Although this general effect is believed to hold across different cultural backgrounds, it is suggested that the specific shape of deprivation will vary across cultures; hence, non-employment does not lead to an equal loss of these benefits in all societies. In more technical terms, the indirect effects of employment status on well-being through the benefits of work are expected to be moderated by culture (see Fig. 1 for an illustration).

PRESENT STUDY

The hypotheses were examined in a cross-national study including respondents from the United States and Japan. These two nations have been shown to differ with regard to the cultural dimension of individualism-collectivism, with the United States and Japan usually being treated as representatives of an individualistic and a collectivistic culture, respectively (Hofstede *et al.*, 2010). Besides being examples of societies that differ on the individualism-collectivism dimension, the United States and Japan are rather similar regarding their socioeconomic characteristics (both ranking among the very highly developed countries regarding to

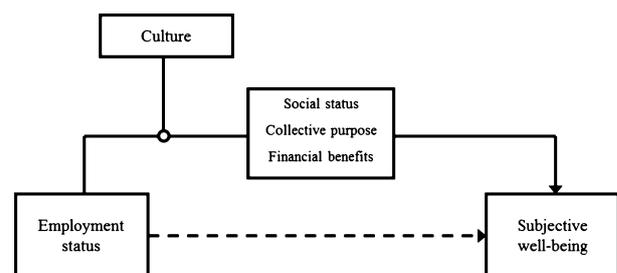


Fig. 1. Moderated mediation model for the effects of employment on well-being; the dashed line indicates the mediated effect and the circle marks the moderation.

the Human Development Index; UNDP, 2014), unemployment rate (at the time of data collection, 2008), and unemployment protection systems; which are “user pays” system, as they are funded by the individual employee rather than by the government. Thus, it is unlikely that the hypothesized *cultural* influences on the effects of employment status would be confounded by socioeconomic characteristics, unemployment rate, or protection systems.

The hypotheses were tested drawing upon two large data-sets representative to US and Japanese adults that compared people having a paid job to non-employed individuals including unemployed people and people out of the labor force. Moreover, well-being was operationalized in line with Warr’s (2007) conceptualization of happiness comprising of two major aspects: *hedonic* well-being (e.g., Diener, Suh, Lucas & Smith, 1999) is characterized by the experience of pleasure and takes on a more affective (positive and negative affect) or a cognitive emphasis (life satisfaction). In contrast, *eudaimonic* well-being has a more motivational focus, like Seligman’s (2002) concept of authentic happiness, and is linked to self-validation and self-worth. Psychological effects of employment status have usually been studied with regard to the hedonic aspect of well-being (cf. Warr, 2007). By including hedonic and eudaimonic well-being as psychological outcomes the study strives to provide a more complete understanding of the effects of employment than available so far.

METHOD

Participants

The study sampled participants from two different cultures. The first sample includes participants from the second wave of the National Survey of Midlife Development in the United States (MIDUS II; Ryff, Almeida, Ayanian *et al.*, 2012), which was originally initiated to study psychosocial factors promoting well-being. The present study includes a representative sample of middle- and older-aged US adults that provided informed consent for participation. Participants older than 60 years were excluded from the analyses. This was done to avoid confounding employment status and age, as older participants would be more likely retired. The final sample includes 1,093 (54% women) individuals between 30 and 60 years in age ($M = 48.42$, $SD = 7.44$). About 41% had an educational level equivalent to a bachelor’s degree.

The second sample comprises participants from a companion survey to MIDUS II that was conducted in Japan (MIDJA; Ryff, Kitayama, Karasawa, Markus, Kawakami & Coe, 2011) on a representative sample of Japanese adults. This sample included 647 (51% women) individuals aged between 30 and 60 years ($M = 45.55$, $SD = 9.13$). About a third (38%) had an educational level equivalent to a bachelor’s degree. In both samples participants received self-administered questionnaires that were returned after completion.

Measures

Employment status. Participants’ employment status was identified by a single dichotomous item “Do you currently have a paid job?” that was coded 1 for individuals currently having paid work and –1 otherwise. In the US sample about 19% and in the Japanese sample about 15% of the participants were classified as being without paid employment.

Individual social status. Social status was measured with the ladder technique (Adler, Boyce, Chesney *et al.*, 1994). Participants were asked to

indicate their standing in their community relative to other people in the community with which they most identified on a ladder with ten steps where 1 indicates people at the bottom having the lowest standing in the community and 10 referring to people at the top having the highest standing. Previous research demonstrated good convergent validities of this item with objective criteria of individual social status and also construct validity with regard to several psychological and physiological health indicators (e.g., Adler, Epel, Castellazzo & Ickovics, 2000; Operario, Adler & Williams, 2004).

Collective purpose. Collective purpose was measured with a short version of the Loyola Generativity scale (McAdams & de St. Aubin, 1992; see Keyes & Ryff, 1998, for the short version) which included the following six items: (1) “Others would say that you have made unique contributions to society”; (2) “You have important skills you can pass along to others”; (3) “Many people come to you for advice”; (4) “You feel that other people need you”; (5) “You have had a good influence on the lives of many people”; and (6) “You like to teach things to people”. Responses could range from 1 (*a lot*) to 4 (*not at all*). Generativity describes a person’s commitment to contribute to the improvement of society (McAdams & de St. Aubin, 1992). Although originally not intended to assess collective purpose, this scale still captures Jahoda’s (1982) benefit “collective purpose” to a large degree. Collective purpose can be understood as the opportunity to work together with other people in achieving a higher collective goal. It is the opposite of feeling “on the scrapheap, useless or not needed by anybody” (Jahoda, 1982, p. 24). The six items described above undeniably reflect an element of being useful to and being acknowledged by other people. Furthermore, the generativity scale also resembles other, validated measures of the latent benefits: For example, items 1, 4 and 5 of the generativity scale are similar to Evans and Banks’ (1992) assessment of collective purpose (“At this time of my life, I feel I’m making a positive contribution to society at large”, “I am doing things that need doing by someone”, “Nothing I am involved in has much value for many other people”). Similar resemblances with other measurements of collective purpose (e.g., Muller, Creed, Waters & Machin, 2005) can be found. In this regard, the short scale of generativity can be understood as tapping into Jahoda’s latent function collective purpose. All items were recoded for higher scores to reflect higher collective purpose. The scale resulted in satisfactory coefficient alpha reliabilities in the US sample ($\alpha = 0.85$) and also the Japanese sample ($\alpha = 0.88$).

Financial benefits. Participants were asked to rate their current financial situation on an item using a response scales from 0 (*the worst possible financial situation*) to 10 (*the best possible financial situation*).

Well-being. Well-being is a multifaceted construct that encompasses different components (cf. Gallagher, Lopez & Preacher, 2009; Lucas & Diener, 2008; Warr, 2007). Therefore, four different indicators of well-being were included to capture the full breadth of the construct: cognitive well-being, affective well-being including its positive and negative facet, and eudaimonic well-being. First, the *cognitive aspect of hedonic well-being* was measured with a single item, “How would you rate your life overall these days?” on a response scale from 0 (*the worst possible life overall*) to 10 (*the best possible life overall*). Single well-being items typically have satisfactory reliabilities – for example, Lucas and Donnellan (2012) derived a mean test-retest reliability of a single life satisfaction item across four large representative samples of 0.72 – and validities that are comparable to the validities of respective multi-item scales (Pavot & Diener, 1993; Sandvik, Diener & Seidlitz, 1993).

Second, the *affective aspect of hedonic well-being*, was measured with 12 items referring to the experience of positive (e.g., “cheerful”) and negative affect (e.g., “nervous”) during the last 30 days on five-point response scales from 0 (*all of the time*) to 4 (*none of the time*). The items were recoded for high scores to reflect high levels of affect. These items were selected from an array of established affect instruments and have been validated in a pretest to form reliable scales (see Mroczek & Kolarz, 1998 for more details). Because positive and negative affect have differential roots and consequences (Lucas & Diener, 2008), the two facets

of hedonic affective well-being are examined separately. The *positive and negative affect scales* were correlated at $r = -0.55$, $p < 0.001$ (see Table 1) and resulted in good coefficient alpha reliabilities of 0.92/0.87 in the US sample, and 0.93/0.87 in the Japanese sample.

Finally, *eudaimonic well-being* – a motivational approach to well-being that is supposed to supplement the cognitive and affective concept of hedonic well-being (Gallagher *et al.*, 2009; Warr, 2007) – was measured with the eighteen-item version of the Psychological Well-Being Scale (Ryff, 1989). The scale covers six aspects of eudaimonic well-being: (1) a sense of self-determination (e.g., “I have confidence in my opinions, even if they are contrary to the general consensus.”); (2) the ability to manage one’s life (e.g., “In general, I feel I am in charge of the situation in which I live.”); (3) the potential for individual development (e.g., “For me, life has been a continuous process of learning, changing, and growth.”); (4) the belief that one’s life is meaningful (e.g., “I live life one day at a time and don’t really think about the future”; reverse scored); (5) the availability of a satisfying social network (e.g., “I have not experienced many warm and trusting relationships with others.”; reverse scored); and (6) the positive evaluation of oneself (e.g., “When I look at the story of my life, I am pleased with how things have turned out.”). Participants indicated how strongly they agreed with each statement on response scales that ranged from 1 (*strongly agree*) to 7 (*strongly disagree*). All items were recoded such that high scores reflect high levels of eudaimonic well-being. The scale resulted in satisfactory coefficient alpha reliabilities of 0.86 in the US sample and 0.79 in the Japanese sample, respectively.

Covariates. Several variables that have been shown to be robust predictors of subjective well-being were included as control variables in the analyses. Sex (−1 = male and 1 = female), marital status (−1 = single and 1 = married), educational level (−1 = lower than Bachelor’s degree and 1 = Bachelor’s degree or higher), and children (−1 = no children and 1 = children) were measured as dichotomous indicator. Age was measured in years and religiosity was operationalized with one item (“How religious are you?”) on a scale from 1 (*not at all*) to 4 (*very*).

Statistical analyses

The hypotheses were analyzed by latent moderation analysis in Mplus 7 (Muthén & Muthén, 1998–2012) with a robust maximum likelihood estimator. In contrast to moderation analysis with manifest variables, latent variable modeling has the advantage of explicitly incorporating measurement error in the analyses and, thus, deriving more precise parameter estimates. To create more parsimonious measurement models, the latent constructs were operationalized using item parcels (cf. Little, Cunningham, Shahar & Widaman, 2002). For positive and negative affect, eudaimonic well-being, and collective purpose three parcels were created each following the item-to-construct balance technique advocated by Little *et al.* (2002). The remaining variables (cognitive well-being, social status, and financial benefits) represented single item measurements and, thus, were modeled as manifest variables. In accordance with conventional criteria (Mathieu & Taylor, 2006; Schermelleh-Engel, Moosbrugger & Müller, 2003), the fit of the latent variable models was evaluated based on the root mean square error of approximation (RMSEA) and the comparative fit index (CFI). Models with a $CFI \leq 0.90$ or a $RMSEA \geq 0.10$ are considered “bad”, those with $0.90 > CFI < 0.95$ and $0.05 > RMSEA < 0.10$ as “acceptable” and $CFI \geq 0.95$ and $RMSEA \leq 0.05$ as “good” fitting.

RESULTS

Descriptive statistics, bivariate correlations, and coefficient alpha reliabilities between all measures are presented in Table 1. As expected, individuals currently being in paid work experienced significantly better well-being than individuals out of the labor force.

Table 1. Means, standard deviations, and correlations between measures

	1.	2.	3.	4.	5.	6.	7.	8.	M	SD	α
Japan											
1. Cognitive well-being		0.59*	-0.50*	0.56*	0.38*	0.27*	0.50*	0.16*	6.12	2.14	0.93
2. Positive affect	0.61*		-0.61*	0.58*	0.32*	0.24*	0.35*	0.17*	3.21	0.75	0.87
3. Negative affect	-0.46*	-0.46*		-0.51*	-0.32*	-0.13*	-0.36*	-0.26*	1.75	0.67	0.87
4. Eudaimonic well-being	0.45*	0.44*	-0.34*	0.45*	0.45*	0.43*	0.40*	-0.14*	4.70	0.58	0.79
5. Social status	0.23*	0.15*	-0.26*	0.39*	0.45*	0.42*	0.25*	0.15*	5.98	2.20	0.88
6. Collective purpose	0.25*	0.20*	-0.08*	0.52*	0.46*	0.13*	0.13*	0.06	2.01	0.64	0.85
7. Financial benefits	0.59*	0.34*	-0.33*	0.30*	0.29*	0.18*	0.19*	0.19*	5.22	2.37	0.85
8. Employment status ^a	0.04	-0.02	-0.04	0.07	-0.01	0.13*	0.01	0.01	0.85	0.36	0.85
United States											
1. Cognitive well-being		0.59*	-0.50*	0.56*	0.38*	0.27*	0.50*	0.16*	7.65	1.61	0.92
2. Positive affect	0.61*		-0.61*	0.58*	0.32*	0.24*	0.35*	0.17*	3.30	0.73	0.87
3. Negative affect	-0.46*	-0.46*		-0.51*	-0.32*	-0.13*	-0.36*	-0.26*	1.59	0.63	0.86
4. Eudaimonic well-being	0.45*	0.44*	-0.34*	0.45*	0.45*	0.43*	0.40*	-0.14*	5.48	0.86	0.86
5. Social status	0.23*	0.15*	-0.26*	0.39*	0.45*	0.42*	0.25*	0.15*	6.32	1.90	0.85
6. Collective purpose	0.25*	0.20*	-0.08*	0.52*	0.46*	0.13*	0.13*	0.06	2.85	0.64	0.85
7. Financial benefits	0.59*	0.34*	-0.33*	0.30*	0.29*	0.18*	0.19*	0.19*	6.14	2.22	0.85
8. Employment status ^a	0.04	-0.02	-0.04	0.07	-0.01	0.13*	0.01	0.01	0.81	0.39	0.85

Notes: $N_{JP} = 647$, $N_{US} = 1,093$. α = Coefficient alpha reliability. Correlations for Japan are below the diagonal and correlations for the United States are above the diagonal. ^a Coding: 0 = non-employed, 1 = employed. * $p < 0.05$.

Table 2. Coefficient estimates of latent mediation analyses

Dependent:	Mediators							
	Social status		Collective purpose				Financial benefits	
	<i>B</i> (<i>SE</i>)	β						
Employment status ^a	0.17 (0.07)*	0.06	0.06 (0.02)*	0.06	0.35 (0.08)*			0.11
<i>R</i> ²	0.09		0.20		0.12			
Dependent:	Outcomes							
	Cognitive well-being		Positive affect		Negative affect		Eudaimonic well-being	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	β (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
Employment status ^a	0.07 (0.05)	0.03	0.10 (0.03)*	0.09	-0.11 (0.02)*	-0.13	0.03 (0.03)	0.03
Social status	0.04 (0.03)	0.04	0.05 (0.01)*	0.12	-0.06 (0.01)*	-0.18	0.05 (0.01)*	0.11
Collective purpose	0.66 (0.08)*	0.23	0.13 (0.04)*	0.11	0.01 (0.03)	0.01	0.65 (0.04)*	0.52
Financial benefits	0.39 (0.02)*	0.46	0.10 (0.01)*	0.29	-0.08 (0.01)*	-0.29	0.09 (0.01)*	0.23
<i>R</i> ²	0.47		0.20		0.21		0.53	

Notes: *N* = 1,740; *B* = Unstandardized path coefficient (with standard error in parenthesis); β = Standardized path coefficient. Covariates: sex, age, educational level, marital status, children, and religiosity. ^a Coding: -1 = non-employed, 1 = employed. **p* < 0.05 (based upon bias-corrected bootstrap confidence intervals with 500 replications).

Cross-cultural measurement invariance

Before testing the hypotheses, the measurement structure of the four latent constructs was examined: positive and negative affect, eudaimonic well-being, and collective purpose. Cross-cultural comparisons require factorial measurement invariance of latent factors (Church, 2010). Thus, for each latent construct a multi-group confirmatory factor model was specified that constrained the factor loadings across the two groups. Positive affect yielded a satisfactory measurement model, $\chi^2(2) = 3.27$, *p* = 0.20, CFI = 1.00, TLI = 1.00, RMSEA = 0.03. Because a latent factor with three unconstrained indicators is just identified, the fit of the constrained model indicates the loss of fit due to the factor constraints. Thus, for positive affect constraining the factor loadings across groups did not result in a loss of fit, *p* = 0.20. Respective models for negative affect, $\chi^2(2) = 5.30$, *p* = 0.07, CFI = 1.00, TLI = 1.00, RMSEA = 0.04, eudaimonic well-being, $\chi^2(2) = 5.12$, *p* = 0.08, CFI = 1.00, TLI = 0.99, RMSEA = 0.04, and collective purpose, $\chi^2(2) = 0.11$, *p* = 0.95, CFI = 1.00, TLI = 1.00, RMSEA = 0.00, also supported comparable measurement models in the two samples.

Mediation analyses

Hypothesis 1 proposed that social status, collective purpose, and financial benefits would mediate the effect of employment status on well-being (see Fig. 1). In the first step the implied indirect effect of employment status was examined without incorporating potential cultural differences. The respective mediation model included seven regressions in total: (1) the three mediators (social status, collective purpose, and financial benefits) were regressed on the independent variable (employment status); and (2) the four outcomes (cognitive well-being, positive and negative affect, and eudaimonic well-being) were regressed on the mediators and the independent variable (see Table 2). All effects were estimated simultaneously within a single structural equation model. Because

the model included four indicators of psychological well-being, the residuals of these outcomes were allowed to correlate freely. Moreover, following recommendations by Preacher and Hayes (2008) correlations between the residuals of the three mediators were also specified. These analyses included sex, age, educational level, marital status, children, and religiosity as covariates.

The estimates of the path coefficients for this mediation model are summarized in Table 2. In line with the hypothesis of mediation, employment status had significant, *p* < 0.05, effects on the three mediators and, in turn, these mediators significantly predicted the four outcomes. Only two of the latter path coefficients failed to reach significance: social status had no significant effect, *p* > 0.05, on cognitive well-being, and collective purpose did not significantly relate to negative affect. Moreover, the indirect effects of employment status on well-being were estimated using bias-corrected bootstrap confidence intervals (MacKinnon, Lockwood & Williams, 2004). The estimates of these indirect effects (see Table 3) confirmed the previous results. Employment status had significant indirect effects via social status, collective purpose, and financial benefits on well-being. Overall, these results confirm previous theoretical (Jahoda, 1982; Warr, 2008) and empirical accounts (Paul & Batinic, 2010;

Table 3. Indirect effects for employment status on subjective well-being

	Social status	Collective purpose	Financial benefits
Cognitive well-being	0.007	0.037*	0.134*
Positive affect	0.008*	0.007*	0.034*
Negative affect	-0.010*	0.000	-0.027*
Eudaimonic well-being	0.008*	0.036*	0.030*

Notes: *N* = 1,714. Unstandardized path coefficients are reported. Covariates: sex, age, educational level, marital status, children, and religiosity. **p* < 0.05 (based upon bias-corrected bootstrap confidence intervals with 500 replications).

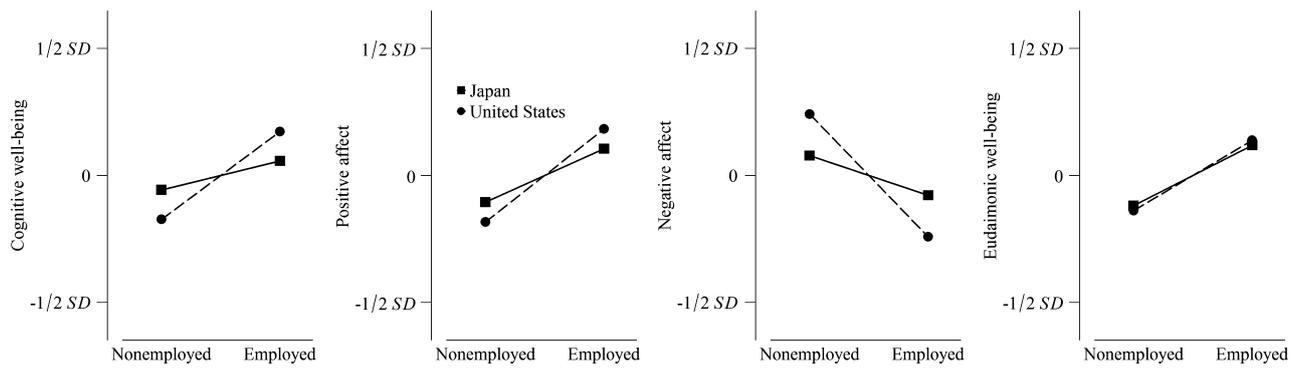


Fig. 2. Interaction plots for the effects of employment status and country on subjective well-being.

Selenko *et al.*, 2011) from Western societies that psychological processes mediate the effects of employment status on well-being beyond financial factors.

Moderation analyses

Before examining the hypothesized moderated mediation model we tested differential effects of employment status on subjective well-being. Thus, the four well-being indicators were regressed on employment status, country, and the respective interaction. For cognitive and affective well-being these analyses identified significantly, $p < 0.05$, stronger effects of employment status in the United States than in Japan; for eudaimonic well-being the respective moderation effect was not significant, $p = 0.08$ (see Fig. 2). However, in both countries people in paid work reported significantly lower positive affect, $\beta = 0.18$, $p < 0.001$ for the United States and $\beta = 0.11$, $p = 0.01$, for Japan and higher negative affect, $\beta = -0.24$, $p < 0.001$ for the United States and $\beta = -0.08$, $p = 0.07$. In contrast, cognitive well-being was only affected in the United States, $\beta = 0.17$, $p < 0.001$, but not in Japan, $\beta = 0.06$, $p = 0.13$. Thus, paid work is important in both societies.

Moderated mediation analyses

The central assumption of this study was that the mediation effects identified in the previous section would be moderated by the cultural background (see Fig. 1). The hypothesized moderated mediation model was analyzed within the path analytical framework by Edwards and Lambert (2007) which integrates moderated regression analyses into path analytic tests of mediation. For tests of moderated mediation this approach is superior to the causal step approach (Baron & Kenny, 1986; see also Muller, Judd & Yzerbyt, 2005) because it more clearly delineates the moderated and mediated aspects of the relationships among variables. Following Edwards and Lambert (2007) the differences in direct effects of employment status on the three mediators (social status, collective purpose, and financial benefits) and the differences in the respective indirect effects on the four indicators of well-being were calculated for the two countries. These analyses included sex, age, educational level, marital status, children, and religiosity as covariates. Again, bias-corrected bootstrap confidence intervals were used to determine the significance of these effects. These estimates are presented in Table 4.

In line with Hypotheses 2 and 3, employment status had different effects on the three mediators. In the US sample employment status had significant, $p < 0.05$, effects on social status and financial benefits, whereas the respective effects were not significant, $p > 0.05$, in the Japanese sample. The differences in these effects across countries were significant, $\Delta B = -0.44$, $p < 0.05$ for social status (see left panel in Fig. 3) and $\Delta B = -0.44$, $p < 0.05$ for financial benefits (see right panel in Fig. 3). In contrast, for collective purpose only a marginally stronger effect was identified in the Japanese than in the US sample, $\Delta B = 0.15$, $p < 0.10$ (Hypothesis 4; see middle panel in Fig. 3).

The respective indirect effect of employment status via social status and financial benefits on the four measures of well-being confirmed that culture is an important moderator of this main effect. For all four indicators of well-being the indirect effects of employment status via social status and financial benefits were significant in the US sample, whereas they did not become significant in the Japanese sample. Moreover, the differences in indirect effects between the two countries were significant at $p < 0.05$. Thus, in line with Hypotheses 2 and 3 the mediation effects of social status and financial benefits were significantly moderated by culture: individual social status and financial benefits mediated the effects of employment status on well-being in the highly individualistic US-American sample but not in the less individualistic Japanese sample.

Hypothesis 4 regarding collective purpose could not be clearly confirmed. Descriptive analysis consistently revealed larger indirect effects of employment status via collective purpose on well-being in the Japanese as compared with the US sample. However, the respective differences did not become significant, $p > 0.05$ (see Table 4). Thus, these results do not allow for the conclusion that collective purpose mediates the effects of employment status on psychological well-being more strongly in Japanese culture than in US culture; rather, collective purpose seems to be a relevant mediator in both societies.

DISCUSSION

Paid work represents a central resource for well-being as it grants access to several latent and manifests psychological functions that are believed to satisfy universally important human needs across cultures (Jahoda, 1982). Consequently, the negative effects of non-employment can be attributed to a deprivation of these

Table 4. Analyses of simple effects for moderated mediation model

Mediators:	Social status	Collective purpose	Financial benefits
Direct effects of employment status on mediators (a-paths)			
Japan	-0.12	0.11*	0.06
United States	0.32*	0.05*	0.51*
Difference	-0.44*	0.15 ⁺	-0.44*
Indirect effects of employment status via mediators on subjective well-being (a * b-paths)			
Cognitive well-being			
Japan	-0.01	0.05*	0.02
United States	0.02*	0.02*	0.19*
Difference	-0.03*	0.03	-0.16*
Positive affect			
Japan	0.00	0.03*	0.01
United States	0.01*	0.01*	0.05*
Difference	-0.02*	0.01	-0.05*
Negative effect			
Japan	0.01	0.00	-0.01
United States	-0.02*	0.00	-0.04*
Difference	0.03*	0.00	0.03*
Eudaimonic well-being			
Japan	-0.01	0.06*	0.01
United States	0.02*	0.03*	0.04*
Difference	-0.03*	0.03	-0.03*

Notes: $N = 1,714$. Unstandardized path coefficients are reported. Covariates: sex, age, educational level, marital status, children, and religiosity. * $p < 0.05$, ⁺ $p < 0.10$ (based upon bias-corrected bootstrap confidence intervals with 500 replications).

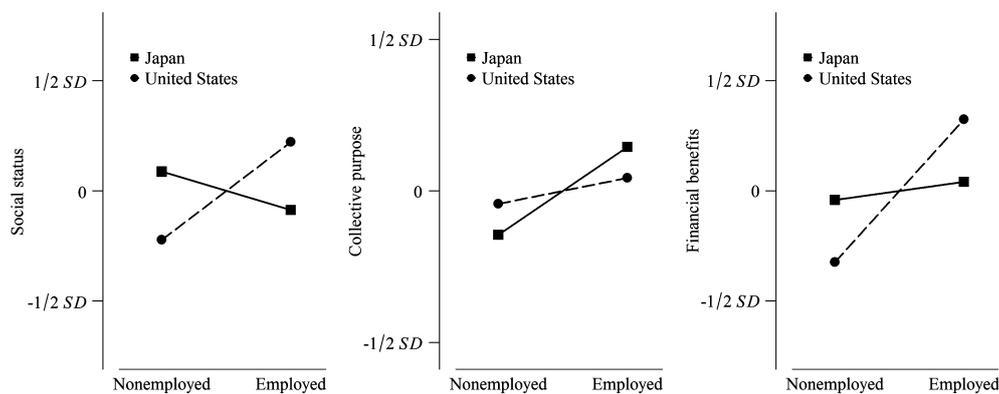


Fig. 3. Interaction plots for the effects of employment status and country on individual social status, collective purpose, and financial benefits.

benefits. The presented study provided a new perspective on the latent deprivation model and demonstrated that despite the universal importance of the benefits for well-being (e.g., Tay & Diener, 2011), the specific deprivation by non-employment depended on the cultural background. Data from two representative surveys conducted in the United States and Japan led to three central conclusions. First, the basic premises of the deprivation model were corroborated in both countries. Mediation analyses clearly demonstrated the effects of employment status on well-being through the benefits of work, thus, supporting Hypothesis 1. Moreover, effects of employment status on well-being were slightly stronger in the more individualistic US sample than in the Japanese sample (cf. Paul & Moser, 2009). These results indicate that paid work is important in both countries. However, the effect is stronger in the United States than in Japan.

Second, in line with Hypotheses 2 and 4 social status and financial benefits mediated the effects of employment status on

well-being more strongly in the highly individualistic US sample than in the less individualistic Japanese sample. Third, Hypothesis 3, expecting different mediation effects of collective purpose, was not sustained. Collective purpose mediated the effects of employment status comparably in the United States and Japan. Overall, these results highlight that the experience of (non) employment is shaped by different psychological mechanisms depending on the prevalent cultural norms.

Furthermore, in comparison to Japanese, US individuals reported more access to the benefits of work in general. The pattern of this difference is not unexpected, and might reflect a general tendency by individualistic cultures to self-enhancement, and an associated over reporting of financial well-being, collective purpose and status, or a collectivistic modesty bias, and consequential under reporting (Markus & Kitayama, 1991; Oyserman & Lee, 2008). Also mean scores and inter-correlations of the four well-being indicators differed between the US and

Japanese sample. This, however, is in line with previous findings: well-being was higher in the more individualistic US-American sample (cf. Diener *et al.*, 2009), and the correlation between positive and negative affect was less negative in the Japanese sample (cf. Diener *et al.*, 1999, 2009; Schimmack, Oishi & Diener, 2002).

Implications for the latent deprivation model

Previous research on the deprivation of latent benefits as explanans for unemployment's consequences suffered from a rather narrow cultural perspective. The studies leading Jahoda (1982) to formulate her model as well as most studies empirically supporting the deprivation model (cf. Muller & Waters, 2012) were conducted in individualistic societies such as Australia, Germany, or Great Britain. However, the premises of the model were assumed to be universally applicable to all societies. Being the first study actually testing this conjecture, the basic assumptions of the latent deprivation model were generally supported in two culturally heterogeneous contexts. In the United States and Japan the deterioration of well-being for non-employed people was mediated by access to the benefits of work, thus, confirming the universality of the deprivation model as proposed by Jahoda (1982). Hence, the general mechanism of deprivation seems to be an important factor explaining differences in well-being between the employed and non-employed, irrespective of their cultural background.

In contrast, the specific pattern of deprivation was culture-bound. Despite the general mechanism of latent deprivation being cross-culturally valid, cultural effects determined which benefits were more or less important for the explanation of the effects of employment status. For example, in the more individualistic US society people without work felt more deprived of their individual social status than those in the less individualistic Japanese society. These results fall in line with previous cross-cultural findings showing that individualistic cultures value self-actualization, personal benefits, and success more than less individualistic societies (e.g., Oyserman *et al.*, 2002). Similarly, non-employed Americans felt financially more deprived than non-employed Japanese, which might be attributed to different values associated with income but also different ways of determining financial well-being. In individualistic societies income might be more closely linked to success at work, making a loss of employment having a stronger impact on financial well-being (Diener *et al.*, 2009). Also, in those societies financial well-being might be derived from social comparisons, whereas in less individualistic societies it would depend on the embeddedness in a social context.

Interestingly, significant cultural differences regarding the deprivation of collective purpose could not be confirmed. In both samples non-employed people felt similarly deprived of their collective purpose. There are two possible implications for this finding: first, it might support Jahoda's (1982) original proposition that a sense of collective purpose would be of central importance in all industrialized societies, irrespective of their cultural background. Or second, it might support the argument that individualism and collectivism are two separate dimensions and not simply opposite ends of a bipolar continuum (e.g.,

Oyserman *et al.*, 2002; Rhee, Uleman & Lee, 1996). In the second case, the non-significant differences between the US and Japanese sample regarding the mediation through collective purpose may simply mirror their non-significant differences regarding the cultural dimension of collectivism (Oyserman *et al.*, 2002). Thus, the question whether culture will moderate the deprivation of collective purpose needs to be addressed within samples that do not only differ in individualism, but also in the dimension of collectivism (e.g., China, Israel, or Taiwan).

Concluding, the cultural variations seem to indicate that employment is of varying importance as a source of the benefits of work. In some cultures, certain benefits are more closely associated with work than in other cultures, where the same benefits might be accessed through alternative sources. In sum, the study confirmed the cross-cultural validity of the basic premises of the latent deprivation model, but also drew a more refined picture by showing that the deprivation of specific benefits depended on the cultural background.

Limitations

The first and foremost limitation concerns the use of countries as sole indicator of culture (Schaffer & Riordan, 2003). Although the results largely confirmed the hypothesized differences in mediation effects pointing to the validity of the operationalization it is yet too early to rule out alternative explanations. A test of the examined hypotheses in other individualistic and especially collectivistic societies that also includes explicit measures of the individualism and collectivism would help confirming the identified effects. A second limitation concerns the cross-sectional nature of the present study. This implies that the causal assumptions underlying the moderated mediation in this study could not be tested. In other words, the causality of effects could also be reversed: detrimental well-being could have led people to report less access to the latent and manifest benefits of work or even increased the likelihood for non-employment. Nevertheless, without denying the possibility of selection effects, there is evidence from several longitudinal studies that confirm the direction of the proposed relationships (e.g., Hoare & Machin, 2009; Selenko *et al.*, 2011).

Moreover, it should be noted that effects of employment status and the moderating effects of culture were not overly large. However, this is not necessarily a limitation and might rather result from the operationalization of these variables. Particularly, the group of non-employed people was rather heterogeneous comprising unemployed people as well as people who were out of the labor force. Individuals out of the labor force, although reporting less access to the benefits of work and well-being than employed individuals, usually have more access to the benefits of work and better well-being than unemployed individuals do (e.g., Paul & Moser, 2009; Selenko *et al.*, 2011). Thus, although previous research confirmed the latent deprivation model for the heterogeneous group out of the labor force, people actively seeking work, that is, those striving for reemployment, might be stronger affected than others. Future studies would therefore benefit from more fine grained analyses for different subgroups of people without paid work (e.g., unemployed, retired, or homemakers), which is likely to reveal stronger effects.

Finally, the present study did not directly assess the three basic benefits of work with validated instruments (cf. Muller & Waters, 2012) but used related instruments reflecting the basic concept of these benefits according to Jahoda (1982). Some measures even used single items to operationalize the respective constructs. Although the validity of these instruments has been previously demonstrated (for the social status item see, for example, Adler *et al.*, 2000 and Operario *et al.*, 2004) single items typically do not allow for the modeling of measurement error. Therefore, future studies are encouraged to replicate these results with established multi-item instruments such as the Access to Categories of Experience scale (Evans & Banks, 1992) or the Latent and Manifest Benefit scale (Muller *et al.*, 2005). There might also be merit in testing the discriminant validity of the generativity short scale with other measures of collective purpose.

Conclusion

The present study confirms the universality of the deprivation model (Jahoda, 1982) behind the well-being-related effects of employment status. However, despite the cross-cultural validity of this general mechanism the results also demonstrate significant cultural variations in the relevance of employment for specific benefits of work. This highlights the importance of using etic approaches (i.e., comparative analyses among more than one culture) when testing theories on (non)employment experiences.

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