

The relationship between job insecurity and well-being among Peruvian workers

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The present study's aims are twofold: to introduce job insecurity research in Peru, and to investigate the relationship between job insecurity and a broad range of well-being indicators, including optimal and impaired, and general and work-related well-being. We hypothesise that job insecurity (1) relates negatively to work-related optimal well-being (i.e., job satisfaction, career satisfaction and work engagement) and positively to work-related impaired well-being (i.e., burnout), and (2) negatively to general optimal well-being (i.e., life satisfaction) and positively to general impaired well-being (i.e., psychological distress). In 2008, we administered questionnaires to employees from eight organizations based in Metropolitan Lima, yielding a convenience sample of 651 respondents. We used hierarchical regression analyses and controlled for organizations, age, gender, job-related (e.g., occupational position) and family-related (e.g., financial contribution to the household) variables. Results supported our hypotheses. We conclude that job insecurity shows a strong association with impaired well-being. A particular strength of this study is that it is situated in Lima, Peru, and in a context of economic growth. It also contributes to understand the association of job insecurity with work-related well-being by including rarely studied variables such as career satisfaction, work engagement and burnout.

Keywords: job insecurity, job satisfaction, work engagement, burnout, career satisfaction, life satisfaction.

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Introduction

During the last decades, the nature of work has been affected by the measures that companies took in order to adapt to increased global competition, rapid technological development and fast evolution towards a service-centred industry (Sverke et al., 2004). More specifically, organizations underwent personnel reductions and increased the number of subcontracted workers (Sverke et al., 2004). These new work conditions were accompanied by rising feelings of insecurity among workers (De Cuyper, Bernhard-Oettel, Berntson, De Witte, & Alarco, 2008); a situation that spurred researchers' interest in job insecurity (Sverke, Hellgren, & Näswall, 2002). Job insecurity is defined as the employee's perceived probability and fear of losing the current job (De Witte, 1999; Sverke et al., 2004). Job insecurity is assumed to have negative consequences for individual's well-being. Even though much work has been done in the area of job insecurity research, we see two important gaps.

First, although flexibility is a global phenomenon, thus far, job insecurity research has been mostly developed in Europe and the US, whereas it remains understudied in other contexts (Alarco, 2010; Martínez, De Cuyper, & De Witte, 2010). For instance, in Latin-America, job insecurity research is still in an initial state with a few studies carried out in Mexico (Juárez García, 2007, 2004), Brazil (Fisher et al., 2005) and Argentina (Leibovich, 2006). In Peru, job insecurity has only been debated at a policy level, focussing on the lack of job protection and security for the future which characterizes precarious employment and underemployment (Alarco, 2010).

In response, our first aim is to introduce job insecurity research in the Peruvian context. In doing so, we intend to extend job insecurity research to a non-European or US context, since studies from other continents are very scarce; a finding that can be generalized to Occupational Health Psychology research in general (Kang, Staniford, Dollard, & Kompier, 2008). Furthermore, at the time of the study, Peru experienced a cycle of economic growth, which allows to study job insecurity in a prosperous

environment of continuous growth and increased demand for qualified workers (Ministerio de Trabajo y Promoción del Empleo - MTPE, 2008).

Second, job insecurity researchers have probed the relationship between job insecurity and well-being. In this respect, most scholars have focused on either work-related or general well-being (for an overview see Sverke et al., 2002; De Witte, 1999, 2005). Furthermore, some well-being outcomes have attracted most of the attention such as job satisfaction as a prototypical example of work-related well-being or physical and mental health for general well-being (Sverke et al., 2002), whereas other outcomes have received little attention.

In light of this, our second aim is to investigate the relationship between job insecurity and a large selection of well-being indicators. We define well-being broadly in terms of work-related and general well-being and we include some well-being variables which have been rarely examined in the job insecurity field (i.e., work engagement, burnout and career satisfaction).

Work-related and general well-being

In line with Warr (1994), this study frames well-being in two main dimensions: the context and the individual's functioning level (see Figure 1).

		Context	
		Work-related well-being	General well-being
Functioning level	+	Work-related optimal well-being Job satisfaction Career satisfaction Work engagement	General optimal well-being Life satisfaction
	-	Work-related impaired well-being Burnout	General impaired well-being Psychological distress

Figure 1. Work-related and General Well-being outcomes

In the first dimension (i.e., context), context-specific well-being corresponds to well-being at work, while the context-free category relates to employees' general well-being. This distinction is critical, since the needs covered by a job may transcend the work environment. A job contributes to build an individual's sense of self (Erikson, 1959), and personal worth, and it extends social contacts beyond the family circle (Jahoda, 1982). Note however, that we do not see these categories as mutually independent, rather to the contrary: we acknowledge the many studies that have demonstrated a spill-over from work to non-work domains and vice versa (e.g., Eby, Casper, Lockwood, Bordaux, & Brinley, 2005). The second dimension (i.e., functioning level) differentiates optimal from impaired well-being. The combination of these dimensions leads to four categories: work-related optimal well-being (i.e., job satisfaction, career satisfaction and work engagement), work-related impaired well-being (i.e., burnout), general optimal well-being (i.e., life satisfaction) and general impaired well-being (i.e., psychological distress).

Work-related optimal well-being implies the presence of pleasant feelings and enthusiasm towards the job or the career. Job satisfaction is by far the most frequently used

indicator of this category in Occupational Health Psychology in general and in job insecurity research in particular. Job satisfaction is defined as the degree to which employees are satisfied with their jobs in general (Spector, 1997). By way of contrast, work engagement is less studied in the job insecurity domain. Work engagement is described as "a positive work-related state of fulfilment" (Schaufeli, Bakker, & Salanova, 2006, p. 701). In this study, work engagement is seen in terms of its core dimensions, namely vigour and dedication (Schaufeli & Bakker, 2004). Vigour refers to experiencing high energy levels, willingness to invest effort and persistence in the face of difficulties at work (Schaufeli et al., 2006). Dedication is characterized by strong involvement in one's job and deriving a sense of purpose, pride and enthusiasm from the job (Schaufeli et al., 2006). Finally, work-related optimal well-being also includes career satisfaction, that is, the degree to which an employee is content with specific aspects of his or her career such as achievements, wage progress and skills development (Greenhaus, Parasuraman, & Wormley, 1990). To our knowledge, the present study is one of the first to include career satisfaction in the job insecurity research domain.

Work-related impaired well-being involves the presence of unpleasant feelings towards the job or the career. This category includes burnout, a variable rarely studied in the job insecurity domain. Burnout refers to a state of mental weariness characterized typically by high levels of exhaustion and cynicism, and low levels of professional efficacy (Schaufeli & Bakker, 2004). In this study, we concentrate on the two most important dimensions of burnout: exhaustion and cynicism (Salanova, Schaufeli, Llorens, Peiró, & Grau, 2000). Exhaustion is defined as extreme tiredness or energy drain experienced by the employee due to his or her job (Salanova et al., 2000). Cynicism relates to a distant and indifferent attitude towards one's job (Salanova et al., 2000).

General optimal well-being implies the presence of pleasant feelings and enthusiasm towards life in general. It includes life satisfaction which has been widely studied in Occupational Health Psychology. Life satisfaction refers to the degree to which an individual is satisfied with different aspects of his or her life (Diener, Emmons, Larsen, & Griffin, 1985).

General impaired well-being involves the presence of unpleasant feelings and depression towards life in general. It comprises psychological distress as one of the most frequently used well-being variables in Occupational Health Psychology. Psychological distress is a general negative evaluation of oneself accompanied by non-psychiatric mental health complaints such as worries, headaches and the experience of tension or fatigue (Goldberg, 1978, 1992).

Job insecurity and well-being

Job insecurity is often described as a work stressor with detrimental consequences for employees' well-being (De Witte, 1999). This relationship might be explained, among others, by theories which focus on: (1) occupational identity and psychological needs, (2) unpredictability and lack of control and (3) social exchange.

Occupational identity and psychological needs. Having a job might play a vital role in shaping an

individual's occupational identity and in covering his or her psychological needs. Moreover, the importance of having a job might transcend the work environment. Hence, job insecurity might be detrimental for both work-related and general well-being because it hinders the development of an occupational identity, and it may frustrate psychological needs. This can be understood along Erikson's Psychological Development Theory and Jahoda's Latent Deprivation Model.

Based upon the Psychosocial Development Theory (Erikson, 1959), Sverke and colleagues (2004) stated that the resolution of the "identity vs. role confusion" conflict might take place in the work domain and thus, would also result in an "occupational identity" (i.e., in general terms identifying oneself as employed or as unemployed, and more specifically, with a particular occupation). Sverke and colleagues (2004) furthermore suggested that the successful resolution of this conflict is accompanied by a pleasant feeling. Thus, it could be argued that these individuals will more likely experience well-being. Job insecurity, however, might hinder such a successful conflict resolution by contributing to role confusion. After all, job insecurity is in between being employed and unemployed (De Witte, 1999). Consequently, it might be expected that job insecurity will be negatively associated with work-related well-being (i.e., job satisfaction, career satisfaction and work engagement) and positively to work-related impaired well-being (i.e., burnout).

In a similar vein, in the Latent Deprivation Theory (Jahoda, 1982) it is stated that work does not only satisfy manifest needs (e.g., salary) but also latent needs such as time structure or social contacts outside of the family. Work fulfils a relevant role in an individual's life. Thus, the perceived possibility and fear of losing the job (i.e., job insecurity) might endanger an individual's need for fulfilment, and this may result in frustration (De Witte, 1999). Hence, job insecure individuals might be more likely to experience general impaired well-being (i.e., psychological distress) and less likely to experience general optimal well-being (i.e., life satisfaction).

Unpredictability and lack of control. In stress theories, perceived unpredictability and lack of control (Furda & Meijman, 1992) are key elements to understand the nature of job insecurity and its detrimental impact on well-being (e.g., De Witte, 2005; Sverke et al., 2004). The main argument is that job insecurity implies uncertainty regarding the future of the present job: the worker does not know how to act upon this situation. Subsequently, this plays against his or her attempts of regaining control. Job insecurity is accompanied by feelings of uncontrollability, also because it is a situation that the employee did not choose for (Sverke et al., 2002; De Witte 1999). The lack of control experienced by a job insecure employee might trigger feelings of unrest and displeasure. Some theories which contributed to understand this in more detail are the Appraisal Theory (Lazarus & Folkman, 1984) and Warr's Vitamin Model (1994).

In Appraisal Theory (Lazarus & Folkman, 1984), stress is described as the outcome of two evaluation processes. During the primary process, the individual attributes significance to the situation, evaluating whether it could become harmful or not. An employee who gives a negative meaning to an eventual job loss will be most likely to experience job insecurity. During the secondary process,

the individual appraises the extent to which he or she will be able to deal with the situation. If the individual perceives that he or she is not able to cope with the potential job loss, then he or she will most likely experience stress. Moreover, the span of the uncertainty period will also affect the individual's effectiveness in generating coping strategies. That is, the longer the uncertainty, the more detrimental the effects on well-being. For instance, the costs of a prolonged exposure to stress might also be associated with burnout and psychosomatic complaints (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

In Warr's Vitamin Model (1994), nine environmental features are defined. In general terms, these features need to be present to enhance an employee's well-being. Of particular relevance in the context of the study are 'environmental clarity' and 'opportunity for control'. 'Environmental clarity' refers to the degree of clarity and predictability "about future developments or appropriate role behaviours" (Warr, Butcher, Robertson, & Callinan, 2004, p. 299). 'Opportunity for control' is the extent to which the situation offers possibilities to decide which activities to perform. Job insecurity may involve the lack of these two environmental features: it implies an unpredictable situation in which it is unclear if the employee will or will not lose the job and it is associated with helplessness and lack of control (De Witte, 1999, 2005). It follows then, that job insecurity is likely to cause impaired well-being because the employee does not have a clear view on the future of the job nor on how to act (i.e., absence of 'environmental clarity') and feels powerless to change what he or she is going through (i.e., lack of 'opportunity for control'). An employee could even regain both environmental features after actually losing the job, which does not occur while job insecurity persists. Indeed, this reasoning finds support in earlier studies indicating that job insecurity is more detrimental for well-being than the certainty of dismissal (Dekker & Schaufeli, 1995). Furthermore, Vander Elst, De Cuyper and De Witte (2011) provide empirical evidence that job insecurity might be stressful or have detrimental consequences on an individual's job satisfaction and psychological well-being because it decreases an individual's perceived control.

Social exchange. In the framework of social exchange, one assumes that the frequent interplay between a worker and his or her organization develops into a relationship with explicit and implicit agreements. This relationship is based not only upon an obvious economic exchange (e.g., salary) but also involves social exchanges (e.g., job security). A successful and satisfying relationship is considered as such only if there is a perceived positive balance between its costs and benefits. Some theories which help us to explain this more clearly are the Effort-Reward Imbalance Model (Siegrist, 1996) and the Psychological Contract (Rousseau, 1995).

The Effort-Reward Imbalance Model (Siegrist, 1996) is built upon the premise that employees are willing to put effort in their job activities as long as they perceive an even reward in return. Some important rewards in this model are: salary, self-esteem and secure employment (Sverke et al., 2004). This last reward is particularly interesting for this study. Job insecurity would imply a failed reciprocity regarding secure employment. This imbalance may be perceived by the worker as a loss of control hindering his

or her sense of self-regulation, mastery and self-esteem. Thus, this worker might be prone to experience negative emotions such as fear or rage (Sverke et al., 2004). As a result, an association between job insecurity and impaired well-being may be expected.

The Psychological Contract is defined as the set of beliefs that workers hold regarding their employment relationship (Rousseau, 1995). It is based on perceived promises which express themselves in the form of expectations and obligations. In addition to “a fair day's work for a fair day's pay” (Rousseau, Sitkin, Burt, & Camarer, 1998, p. 399), most workers expect to receive training opportunities, career development and job security. Consequently, job insecurity may be perceived as a major breach of contract by the individual (De Cuyper & De Witte, 2007, 2006). Contract violations (i.e., perceived failure to fulfil a promise) such as job insecurity may generate intense negative attitudinal and emotional responses like anger, frustration and betrayal (Robinson & Morrison, 2000; Morrison & Robinson, 1997), thus, it is likely that these feelings may lead to poor well-being.

Empirical evidence. Research has consistently established a relationship between job insecurity and poor well-being (for reviews see De Witte, 2005, 1999; Sverke et al., 2002; Probst, 2008). Most importantly, longitudinal research shows that this relationship can be interpreted in a causal way: job insecurity is likely to cause poor well-being rather than the other way around (Hellgren & Sverke, 2003). Empirical evidence demonstrates that job insecurity relates to poor job satisfaction (Ashford, Lee, & Bobko, 1989; Rosenblatt, Talmud, & Ruvio, 1999), burnout (Dekker & Schaufeli, 1995), impaired psychological well-being (Hellgren, Sverke, & Isaksson, 1999; Silla, De Cuyper, Gracia, Peiró, & De Witte, 2008) and poor life satisfaction (Lim, 1997; Silla et al., 2008). With some exceptions like De Cuyper and De Witte (2005), there are not so many studies that probed the negative relationship between job insecurity and work engagement. Additionally, findings also show a negative relation with psychosomatic complaints (e.g., Landsbergis, 1988).

In conclusion, based upon the presented frameworks and earlier empirical evidence we advance the following hypotheses:

Hypothesis 1: Job insecurity relates negatively to work-related optimal well-being (i.e., job satisfaction, career satisfaction and work engagement) and positively to work-related impaired well-being (i.e., burnout).

Hypothesis 2: Job insecurity relates negatively to general optimal well-being (i.e., life satisfaction) and positively to general impaired well-being (i.e., psychological distress).

Method

Data collection and respondents

From March until June 2008, eight organizations based in Metropolitan Lima agreed to participate in a survey on the quality of working life, yielding a total sample of 651 employees with a response rate of 78%. Questionnaires were distributed by organizational representatives to all employees. These questionnaires were accompanied by a

letter explaining the study's aims. In this letter, we stressed that the study was part of a project by a third party, assuring the anonymity and confidentiality of the process, voluntary participation and including an e-mail address for questions or comments. Participants completed the questionnaires at their homes and they had to personally place them inside a sealed box. The employees were informed of the date when the researcher came to pick up the sealed box and that the researcher was the only person authorized to open it. In exchange for their collaboration, organizations received a report summarizing their results.

Table 1. *Sample Characteristics (N=651).*

Gender	%		Woman	23.0
			Man	77.0
Age	M (SD)			35 (9.6)
		Organization	%	Type
Private - big or medium	92.9			
Private - small	2.8			
	%	Sector	Public	4.3
			Private - services	51.7
			Private - manufacturing	44.0
Work environment	%	Education	Lower	31.0
			Higher	69.0
	%	Occupation	Blue collar	44.1
			White collar Management	36.7 19.1
	%	Contract	Permanent	51.0
			Temporary	49.0
M (SD)	Working hours		50.7 (11.5)	
		M (SD)	Tenure	
%	Additional job			Yes
			No	94.8
Family environment	%	Family status	Spouse or partner	59.9
			Single	40.1
	%	Financial	Sole or main earner	66.1
Contributory earner			33.9	
%	Dependents	Yes	90.9	
		No	9.1	

The sample included more men (77.0%) than women (23%) and the mean age was 35 years old (SD = 9.6), the youngest being 19 years old and the oldest 69. Most respondents were employed in the private sector (95.7%), worked in a big or medium organization (92.9%) and in the services industry (51.7%), and had a permanent (open-ended; as opposed to temporary/fixed-term contracts) contract (51.0%). More blue-collar workers (44.1%) participated than white-collar employees (36.7%) or managers (19.1%). The mean tenure was 5.3 years (SD = 6.3), the lowest being 2 months and the highest 46 years. The participants reported working an average of 50.7 hours per week (SD = 11.5).

Only a minority reported having an additional job in another organization (5.2%), mostly a job in the evening or at weekends to earn extra money. Respondents with another job were instructed to fill out the questions with

reference to the job in the organization that distributed the questionnaires. Most respondents continued education beyond high school level (69.0%). Most participants lived with their partners or spouses (59.9%), were the sole or main contributors to the household income (66.1%) and one or more people depended on their salaries (90.9%). Table 1 summarizes the sample's characteristics.

Our sample was similar to the working population of Metropolitan Lima in that it included a higher proportion of men than women, most participants were between 22 and 44 years old, most worked in the services sector and for more than 40 hours a week. However, the sample differed from the population in that it mainly consisted of employees from big and medium private organizations and includes less participants with lower education.

Measures

Most of our measures were validated Spanish instruments previously used in the Psychological Contracting across Employment Situations Project (Psycones) (Rigotti et al., 2003). When the original instruments were available only in English, we translated them into Spanish. Afterwards, a Spanish speaking person from Lima who was also fluent in English, volunteered to translate these scales back into English (back-translation). We compared both the original and the back-translated versions and we made some modifications in order to safeguard the semantic and syntactic equivalence of the instruments. In view of assuring that the wording was appropriate for the Peruvian context, we then distributed the questionnaire to 11 employees of a unit in a communication organization in Lima. We asked them to fill out the questionnaires and to write down their comments and suggestions regarding the language.

Principal Component Analyses (varimax rotation) supported the expected dimensional structure for our scales showing satisfactory validity. The coefficient alpha reliabilities for all our scales were satisfactory, ranging from .75 to .91 (Nunnally and Bernstein, 1994). Information about means, standard deviations and correlations between scales is reported in Table 2.

Job insecurity was assessed using a five-item scale, based on the Job Insecurity Scale of De Witte (2000), further validated by Vander Elst, De Witte and De Cuyper (in press). Sample items are "I feel insecure about the future of my job" and "I am afraid I will get fired". Respondents had to indicate their agreement on a scale from 1 (strongly disagree) to 5 (strongly agree). Principal component analysis supported a single-factor structure. Reliability equalled .73.

Work-related optimal well-being. Job satisfaction was measured using the validated Spanish version of the Job Satisfaction Scale (Price, 1997). The scale included four items (e.g., "I find enjoyment in my job") with responses varying from 1 (strongly disagree) to 5 (strongly agree). Reliability equalled .75. Career satisfaction was measured with five items (Greenhaus et al., 1990). Participants were asked "How satisfied are you with...?". A sample item was "The wage progress of my career". Responses were given in a scale from 1 (strongly disagree) to 5 (strongly agree). The scale showed a satisfactory alpha of .89. Work engagement was measured using an 11-item scale. Ten items corresponded to the dimensions vigour (e.g., "at my job, I feel strong and vigorous") and dedication (e.g., "I

find the work that I do full of meaning and purpose") of the validated Spanish version of the Utrecht Work Engagement Scale (Schaufeli & Bakker, 2003; Salanova et al., 2000). We included the additional item "At my job, I am very resilient, mentally" from the vigour dimension of the Employee Version of the Work Engagement Scale (Schaufeli, Martinez, Marques Pinto, Salanova, & Bakker, 2002). Respondents indicated their agreement in a scale from 0 (never) to 6 (always - every day). Our work engagement scale presented a very satisfactory alpha of .91. In line with previous findings by Sonnentag (2003), the items for vigour and dedication loaded on one factor.

Work-related impaired well-being. We used the exhaustion and cynicism sub-scales of the validated Spanish version of the Maslach Burnout Inventory – General Survey (MBI-GS) (Salanova et al., 2000). Each sub-scale consisted of five items such as "I feel emotionally drained by my job" (exhaustion) and "I have become less interested in my work since I began this job" (cynicism). Respondents indicated their agreement on a 7-point frequency rating scale ranging from 0 (never) to 6 (always - every day). Our exhaustion scale presented an alpha of .88 and the alpha for cynicism was of .90. Our analyses supported the two dimensions.

General impaired well-being. Psychological distress was measured using the 12-item validated Spanish version of the General Health Questionnaire (GHQ-12) (Lobo & Muñoz, 1996). A sample item was "Have you recently felt constantly under strain?". For six items responses varied from 1 (much less than usual) to 4 (more than usual), for the other half responses varied from 1 (not at all) to 4 (much more than usual). Following previous research involving GHQ-12, the final scores were recoded on a scale between 0 and 36, with high values representing high levels of distress (e.g., Cassidy & Wright, 2008). The psychometric properties of the GHQ-12 are sufficiently good to justify the use of a single scale score in occupational settings (Banks et al., 1980). Our single-factor psychological distress scale presented an alpha of .81.

General optimal well-being. Life satisfaction was measured using the validated Spanish version of the Life Satisfaction Scale (Isaksson et al., 2003). It included six items such as "How satisfied do you currently feel about your leisure time?". Responses varied from 1 (very dissatisfied) to and 7 (very satisfied). Reliability equalled .84.

Control variables. To rule out alternative explanations, we ran a conservative test in which we controlled for a number of variables at different levels.

At the level of the job, we controlled for occupational position using two dummy variables with white collar workers as the reference group (i.e., 'blue collar workers': 0 = white collar workers and managers; 1 = blue collar workers, and 'managers': 0 = blue collar workers and white collar workers; 1 = managers), type of contract (0 = temporary worker; 1 = permanent worker), without other job (0 = yes; 1 = no) and weekly working hours (average hours per week). Studies have highlighted the potential important role of occupational status in the experience of job insecurity (for a review, see De Witte, 1999).

Job insecurity and well-being in Peru

Table 2. Means, Standard Deviations and Correlations between Scales (Reliabilities are included between brackets; N=651).

	Range	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Job insecurity	1 - 5	2.36	.81	(.81)																		
2. Man ¹				.08*																		
3. Age		35.02	9.62	-.20**	.03																	
4. Management ²				-.22**	-.02	.21**																
5. Blue-collar ³				.23**	.40**	-.21**	-.43**															
6. Permanent ⁴				-.18**	-.05	.30**	.06	-.04														
7. Tenure		5.29	6.31	-.16**	-.09*	.55**	.07	-.10*	.45**													
8. Without other job ⁵				-.03	-.03	-.08*	-.05	.00	.08*	.02												
9. Weekly working hours		50.72	11.47	.07	.16**	-.05	-.08	.27**	.12**	-.08	.05											
10. Married or cohabiting ⁶				.00	.28**	.35**	-.04	.12**	.17**	.18**	-.06	.16**										
11. Contributory earner ⁷				.01	-.26**	-.31**	.02	-.21**	-.19**	-.20**	.04	-.15**	-.42**									
12. Dependents		2.68	1.47	-.00	.14**	.23**	-.03	.12**	.13**	.12**	-.04	.04	.33**	-.32**								
13. Psychological distress		9.35	4.67	.32**	.03	-.17**	-.09*	.17**	-.13**	-.06	.00	.13**	-.01	-.01	.03	(.81)						
14. Life satisfaction	1 - 7	5.28	.99	-.15**	.00	.05	-.03	-.03	.02	.00	.02	-.11**	.08	.01	-.03	-.49**	(.84)					
15. Job satisfaction	1 - 5	4.05	.67	-.25**	-.05	.22**	.10*	-.08*	.13**	.11**	.03	-.04	.11**	-.12**	.07	-.49**	.41**	(.75)				
16. Career satisfaction	1 - 5	3.71	.67	-.16**	-.05	.20**	.16**	-.20**	.07	.05	.01	-.11**	.11**	-.05	.03	-.29**	.38**	.38**	(.89)			
17. Work engagement	0 - 6	5.00	.83	-.13**	.01	.21**	.04	-.05	.09*	.10*	.09*	-.01	.12**	-.14**	.16**	-.38**	.38**	.55**	.28**	(.91)		
18. Burnout-cynicism	0 - 6	.81	1.16	.34**	.08*	-.19**	-.11**	.15**	-.12**	-.09*	-.02	.09*	.03	.02	-.02	.45**	-.24**	-.53**	-.18**	-.39**	(.90)	
19. Burnout-exhaustion	0 - 6	2.15	1.26	.28**	.08*	-.13**	-.09*	.17**	-.03	-.01	-.05	.16**	.04	-.03	.04	.49**	-.36**	-.42**	-.16**	-.30**	.52**	(.88)

* p<.05; ** p<.01. ¹Gender (0 = woman; 1 = man); ²Managers (0 = blue collar workers and white collar workers; 1 = managers); ³Blue collar workers (0 = white collar workers and managers; 1 = blue collar workers); ⁴Type of contract (0 = temporary worker; 1 = permanent worker); ⁵Additional job (0 = yes; 1 = no); ⁶Family status (0 = single; 1 = married or cohabiting); ⁷Financial contribution to the household (0 = sole or main earner - more than 50%; 1 = contributory earner - 50% or less).

Table 3. Summary of Hierarchical Regression Analysis: Job Insecurity's Consequences on Well-being.

	Job satisfaction (N = 557)	Career satisfaction (N = 551)	Work engagement (N = 558)	Exhaustion (N = 558)	Cynicism (N = 558)	Psychological distress (N = 540)	Life satisfaction (N=560)
Organisation A ¹	-.12		.07	-.19*		-.11	-.16
Organisation B	-.16		.12	-.23		-.05	-.19
Organisation C	-.01		.08	.02		-.15	-.06
Organisation D	-.11		.20	-.20		-.04	-.17
Organisation E	-.15		.09	-.21*		.13	-.08
Organisation F	-.05		.17**	-.16**		.06	-.19**
Organisation G	.03		.20*	-.03		-.12	.00
Age	.08		.10*	.11*		-.07	.02
Man ²	-.06		.00	.01		-.04	-.01
Management ³	.08		.07	.04		-.01	-.04
Blue-collar ⁴	.08		-.12*	.06		-.04	.02
Permanent ⁵	.00		.03	-.05		.02	-.02
Without other job ⁶	.05		.06	.09*		-.06	.02
Working hours/w	-.01		-.05	.01		.11*	-.09*
Married or cohabiting ⁷	.09		.11*	.07		-.03	.14**
Contributory earner ⁸	-.06		-.02	-.05		-.03	.03
Dependents	.01		-.03	.09*		-.05	-.08
Job insecurity	-.20***		-.09*	-.11**		.25***	-.18***
R ² _{adj}	.10		.11	.11		.15	.07
R ²	.13		.14	.14		.18	.10
ΔR ²	.03***		.01*	.01**		.06***	.03***

Furthermore, contract type as well as other types of flexibility such as reduced or increased working hours have been established as important covariates in job insecurity research (De Cuyper & De Witte, 2006, 2007). Finally, having more than one job has not often been investigated in job insecurity research. However, it is plausible to assume that there might be differences in job insecurity and related consequences between employees with versus without an additional job, even though it is perhaps unclear how such differences may look like. We did not control for tenure because of its high correlation with age ($r = .55, p \leq .01$).

At the level of the family, we controlled for family status (0 = single; 1 = married or cohabiting), financial contribution to the household (0 = sole or main earner; 1 = contributory earner) and number of dependents. Indeed, family issues may well affect experiences of job insecurity and well-being (Eby et al., 2005).

Analyses

Hierarchical regression analyses were applied separately for each of the well-being variables. In the first step, organizations were controlled for. In the second step, age and gender were controlled for. As regards to the third step, we controlled for job-related variables (i.e., occupational position, type of contract, additional job) and variables related to the family (i.e., family status, financial contribution to the household and number of dependents). This order was chosen to allow a detailed inspection of the variance explained by the organization, the individual, and the interaction between the individual and both the job and the family. Finally, in the fourth step, job insecurity was introduced. Analyses were performed using listwise deletion. As a result and due to the large number of variables included in the analyses, the sample size was reduced varying from 540 (i.e., psychological distress) to 558 (i.e., work engagement, exhaustion and cynicism) workers.

Results

As shown in Table 3, job insecurity added in explaining variance in all work-related well-being measures: specifically, job insecurity was negatively related to work-related optimal well-being (i.e., job satisfaction, career satisfaction and work engagement) and positively related to work-related impaired well-being (i.e., exhaustion and cynicism), in keeping with Hypothesis 1. Job insecurity had a fairly strong association with job satisfaction ($\beta = -.20, p \leq .001$), exhaustion ($\beta = .25, p \leq .001$) and cynicism ($\beta = .26, p \leq .001$), explaining an extra 3%, 5% and 6% of the variance, respectively. Furthermore, none of the control variables were significantly related to job satisfaction or cynicism. In the case of exhaustion, only working hours added significantly to the explained variance. As predicted, job insecurity had a significant negative association with career satisfaction ($\beta = -.09, p \leq .05$) and work engagement ($\beta = -.11, p \leq .01$). The variance that could be explained by job insecurity was 1% for both outcomes. The following control variables added significantly to the explained variance in career satisfaction: organizations F and G as compared to all other organizations, age, blue collar workers as compared to all other occupational levels and married or cohabiting

as compared to single workers. As for work engagement, the control variables which added significantly to the explained variance were organizations A, E and F as compared to all other organizations, age, without another job and number of dependents.

Furthermore, job insecurity added in explaining variance in general well-being: specifically, job insecurity was positively related to general impaired well-being (i.e., psychological distress) and negatively related to general optimal well-being (i.e., life satisfaction), in line with Hypothesis 2. Job insecurity was a fairly strong predictor of psychological distress ($\beta = .29, p \leq .001$): job insecurity explained an extra 7% of the variance, on top of the variance explained by the control variables. None of the control variables were significantly related to psychological distress. As predicted, job insecurity had a significant negative association with life satisfaction ($\beta = -.18, p \leq .001$): job insecurity explained an extra 3% of the variance. Organization F as compared to all other organizations, weekly working hours and married or cohabiting as compared to single workers also contributed to the explained variance.

Discussion

Conclusions

Results supported our hypotheses. As concerns work-related well-being, job insecurity related negatively to job satisfaction, career satisfaction and work engagement, and positively to exhaustion and cynicism (H1). Regarding general well-being, job insecurity related negatively to life satisfaction and positively to psychological distress (H2). Thus, even after using a fairly conservative test with many control variables, job insecurity related to poor work-related and general well-being.

We accomplished the two aims of our study. Our first aim was to introduce job insecurity in the context of Peru. Our study shows that, just like in the European and US context, job insecurity is detrimental for employees' well-being. These results show that job insecurity is an issue, also in growing economies, though the reasons for why job insecurity is an issue may be different. The main challenges European countries face relate to downsizing as a consequence of the financial crisis, rising unemployment rates, and increased numbers of temporary workers (European Commission, 2009). The labour market of Metropolitan Lima is quite different. The core challenges here are not unemployment (INEI, 2008) but underemployment. That is to say, European workers may fear job loss because of a failing economy (which probably evokes quantitative job insecurity), whereas Peruvian workers may fear job loss because it seems difficult to get a 'good' job (which could additionally evoke qualitative job insecurity), with adequate pay, acceptable working hours or skill utilisation.

Our second aim was to investigate job insecurity and a broad range of well-being indicators. As regards to the context dimension of well-being (see Figure 1), our findings showed that the relationship between job insecurity and work-related and general well-being was equally strong. Concerning the individual's functioning level (see Figure 1), results suggested that with the exception of job satisfaction, job insecurity had a stronger

association with impaired well-being (i.e., exhaustion, cynicism and psychological distress) than with optimal well-being (i.e., career satisfaction, work engagement and life satisfaction). In this respect, job satisfaction calls for particular attention. Researchers often investigate job satisfaction in terms of a potential strain, i.e., in terms of job dissatisfaction (De Witte, Verhofstadt, & Omey, 2007): unlike work engagement, job satisfaction reflects contentment, not optimal functioning, and may therefore not be a good fit with the category optimal well-being.

For practitioners, these results are important for a number of reasons. First, they show that job insecurity is an issue also when the economy is rising. In such economies, other factors (e.g., underemployment) may lead workers to feel insecure. Second, our results highlight the strong need to prevent feelings of job insecurity among workers, or, when such prevention is impossible, to coach workers on how to deal with job insecurity (De Witte, 2005). Prevention of job insecurity is conditional upon excellent organizational communication and possibilities for participation in decision-making (Vander Elst, Baillien, De Cuyper, & De Witte, 2010). Helping workers to deal with job insecurity might require investments in employability (Silla et al, 2009), or in other ways to boost control (Vander Elst et al., 2011).

Limitations and strengths

As in all studies, readers should be wary of some limitations in interpreting our results. Firstly, the use of a cross-sectional design limits causal conclusions. Nevertheless, in our view the cross-sectional design did not downplay the relevance of our results because they are in line with theory and earlier longitudinal research. Research has consistently established the relation between job insecurity and impaired well-being (for reviews, see De Witte, 1999, 2005; Sverke et al., 2002). Findings in longitudinal research support that this relationship can be interpreted in a causal way (Hellgren & Sverke, 2003).

We opted for a convenience sampling targeting mainly employees from big and medium organizations pertaining to different industries of Metropolitan Lima. Thus, our results should be interpreted with caution as they might reflect the particular nature of our sample: they may not be generalized to other samples or contexts, such as micro enterprises. The use of a convenience sample however allowed us to achieve heterogeneity by including organizations from different industries and also by being open to the participation of some employees from small and public organizations. Furthermore, we took some measures to counteract the shortcomings of using a convenience sample and to increase the validity of our findings: we aimed for a large sample and we controlled for the organisations in our analyses. Further studies in the broader Peruvian (or even Latin American) labour market are however needed in order to confirm our findings.

Self-reported data may have inflated the associations, due to the variance common to this method (Crampton & Wagner, 1994) or personality factors such as positive or negative affectivity (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003): negative affectivity or other individual differences may lead to both job insecurity and decreased well-being, without job insecurity and well-being being related other than through negative affectivity. Moreover, self-reported measures depend on recall or might be biased

by social desirability. However, we believe that self-reports are crucial in this study, given that job insecurity and well-being are subjective in nature. According to some authors the problems with self-reported data might be overstated (Crampton & Wagner 1994). Nevertheless, to safeguard the validity and reliability of our measures we applied the suggestions of Podsakoff and colleagues (2003) to reduce this threat (e.g., anonymity was guaranteed and respondents were instructed there were no right or wrong answers).

Despite these limitations we are confident on our study's strengths. First, it had a very high response rate (78%) in comparison to other studies. Second, it allowed comparing the strength of the relationship of job insecurity with work-related and general well-being. Third, it allowed studying the relation between job insecurity and optimal and impaired well-being. Fourth, it included some well-being outcomes which have been rarely examined in the job insecurity field (e.g., work engagement) and introduced career satisfaction to this domain. Fifth, our measures had a satisfactory validity and reliability, ranging from .70 to .93 (Nunnally & Bernstein, 1994). Finally, our project might be regarded as an important (initial) step between the European job insecurity research towards (one of the countries belonging to) the Latin-American context.

Future avenues

We see three main avenues for future research. First, it is important to have longitudinal studies that include a broad array of well-being measures so as to test causality. Second, another route for future research could be to work with representative samples as it would allow for the generalization of results to the population. Third, we believe that one of the most important contributions of the present study is that we have introduced job insecurity in the Peruvian context. Thus, we obviously promote the continuance of this research line in this context and in Latin America in general. One way to do so is to set up research avenues which might be particularly attractive for Latin-American researchers and policy makers so as to bridge science and practice. For example, future research might want to focus on specific groups that are characteristic of the Peruvian labour context such as micro-entrepreneurs and workers in the informal sector.

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