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Self-employment as a moderator between work and life satisfaction

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Self-employment as a moderator between work and life satisfaction

SE as a
moderator

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El autoempleo como moderador entre la satisfacción con el trabajo y la vida

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Abstract

Purpose – The correlation between work and life satisfaction varies substantially across studies, suggesting that the strength of the relationship may depend on the studied population and its circumstances. The purpose of this paper is to assess the strength of the relationship in the context of Chile and the moderator effect of self-employment (SE), whether a worker is self-employed or on a salary.

Design/methodology/approach – Based on the idea that work plays a more central role in the life of a self-employed person than in that of a salaried worker, the authors hypothesized that the strength of the relationship between work and life satisfaction will be stronger for the former. The measures used in this study were part of a large questionnaire administered to investigate several characteristics of the Chilean population. The authors used multiple regression analysis to test the moderator effect of SE on the strength of the relationship between work satisfaction and life satisfaction.

Findings – The results from a national sample of 658 Chilean workers indicate that the relationship between work satisfaction and life satisfaction is positive. Furthermore, the relationship is stronger for self-employed workers than for salaried workers. The authors also found a small negative direct effect of SE on life satisfaction, which suggests that the self-employed might be, on average, less satisfied with their lives than their salaried counterparts.



Originality/value – The sample used in the current study was not only substantially larger in size but also more representative of the current workforce because it included both genders. Consequently, the results are more robust and generalizable.

Keywords Life satisfaction, Work satisfaction, Job satisfaction, Self-employment, “CLADEA-2014”

Paper type Research paper

Objetivo – La correlación entre trabajo y satisfacción con la vida varía considerablemente entre estudios, lo cual sugiere que la fortaleza de la relación puede depender de la población estudiada y sus circunstancias. Dado lo anterior, evaluamos la fuerza de la relación en el contexto de Chile y el efecto moderador del trabajo por cuenta propia – si un empleado trabaja por cuenta propia o es asalariado.

Diseño/metodología/enfoque – Basándonos en la premisa de que el trabajo juega un rol más importante en la vida de un trabajador por cuenta propia que en la de un trabajador asalariado, se evalúa la hipótesis de que la relación entre el trabajo y la satisfacción con la vida será más fuerte para el primero. Las medidas utilizadas en este trabajo fueron parte de un estudio mayor destinado a investigar distintas características de la población chilena. Se utilizó análisis de regresión múltiple para probar el efecto moderador del trabajo por cuenta propia en la fuerza de la relación entre la satisfacción laboral y satisfacción con la vida.

Conclusiones – Los resultados obtenidos a partir de una muestra nacional de 658 trabajadores chilenos indican que la relación entre la satisfacción laboral y la satisfacción con la vida es positiva. Además, esta relación es más fuerte para trabajadores autónomos que para trabajadores asalariados. De igual manera, también se determinó un leve efecto negativo directo del trabajo por cuenta propia en la satisfacción con la vida, lo cual sugiere que los trabajadores por cuenta propia podrían estar, en promedio, menos satisfechos con sus vidas que sus homólogos asalariados.

Originalidad/valor – La muestra utilizada en este estudio no sólo es sustancialmente grande en tamaño, sino que es también altamente representativa de la fuerza laboral actual porque incluye ambos géneros. En consecuencia, los resultados son más robustos y generalizables.

Palabras clave Satisfacción con la vida, Satisfacción con el trabajo, Satisfacción laboral, Auto-empleo, “CLADEA-2014”

Introduction

Work takes a larger share of time than any other activity aside from sleeping. Many people do not only earn their sustenance from work, but also obtain pleasure from it (e.g. Csikszentmihalyi, 1975, 1997; Dane, 2011). Some people even enjoy work activities more than leisure or home life (e.g. Juster, 1985). Very often, work provides structure for the day, positive social relationships, a means of achieving respect, a source of challenge, and a sense of identity and meaning. Clearly, work is a central aspect of life in terms of the sheer amount of time and energy devoted to it by most adults. Accordingly, it is not rare for work satisfaction to be an essential dimension of life satisfaction. However, how much these two constructs are related still remains unclear, given the large variation in the strength of the relationship across studies. In this paper, we suggest that this large variation in correlations across studies might not be a product of statistical artifacts and that the relationship could be moderated by a third variables (Hunter and Schmidt, 2004), for example, representing different groups of workers and distinct contexts. In particular, we investigate the moderation effect of self-employment (SE), whether a worker is self-employed or salaried.

This study was inspired by the work of Thompson *et al.* (1992), who investigated the moderation effects of SE. Based on Locke's (1976) claim that the more an individual has at stake in one domain, the more leveraged that person's feelings should be regarding that domain, Thompson *et al.* (1992) argued that self-employed workers are physically, emotionally, and financially more invested in their jobs than salaried workers. When testing their hypothesis, these authors found that the relationship between work satisfaction and life satisfaction (hereafter WS-LS) was significantly stronger for the

self-employed than for salaried workers. Yet, their sample consisted of only 115 organizationally employed and 62 self-employed individuals, all of whom were men. The present study re-examines the moderation effects of SE on the strength of the WS-LS relationship, using a sample of 658 Chilean workers, a quarter of whom were self-employed, and the rest, on a salary. The sample used in the current study was not only substantially larger in size but also more representative of the current workforce because it included both genders. Consequently, the results will be more robust and generalizable.

Conceptual background

The WS-LS relationship has a substantial research tradition in industrial and occupational psychology (for reviews, see Erdogan *et al.*, 2012; Rain *et al.*, 1991). Bottom-up theories of life satisfaction understand life satisfaction as a function of satisfaction in multiple life domains such as health, family, and work (Hart, 1999; Heidemeier and Göritz, 2013; Loewe *et al.*, 2014; Rojas, 2006). Within each life domain, a person's level of satisfaction results from discrepancies between current conditions and multiple standards, including other people, past conditions, aspirations, and goals (Michalos, 1985). A discrepancy that involves an upward comparison (i.e. where the comparison standard is higher) results in decreased satisfaction, whereas a downward comparison results in increased satisfaction. In the case of the work domain, there is evidence that work satisfaction mediates the effects of work experiences – such as the work-non-work conflict (Rice *et al.*, 1992) and role stressors (Carlson and Kacmar, 2000) – on life satisfaction.

Some authors have suggested that a person's dispositions may influence both work and life satisfaction, establishing a spurious relationship between the two that inflates the correlation (Dormann and Zapf, 2001; Judge *et al.*, 1997). For example, Judge *et al.* (1997) claimed that dispositions such as self-esteem, locus of control, and neuroticism, affect the perception of objective conditions and the norms used to appraise them, which in turn influence work and life satisfaction judgments. Although some studies have provided empirical support for this dispositional perspective (e.g. Heller *et al.*, 2002; Judge *et al.*, 1998; Rode, 2004), the meta-analytic study by Heller *et al.* (2004) concluded that, rather than confounding the WS-LS relationship, the effects of personality on life satisfaction were mediated by work satisfaction. Erdogan *et al.* (2012, p. 1041) stated in their recent review of the literature that “treating personality as a distal predictor in models of life satisfaction may be more consistent with theory as opposed to treating it as a control variable that needs to be partialled out.”

Meta-analyses corroborate that work satisfaction is positively, but modestly, correlated with overall life satisfaction (Bowling *et al.*, 2010; Rice *et al.*, 1980; Tait *et al.*, 1989). For example, Bowling *et al.*'s (2010) meta-analysis estimated an average weighted correlation of 0.40 between life satisfaction and global work satisfaction, which was reduced to 0.36 when a composite of work satisfaction was considered. Similarly, Rice *et al.*'s (1980) results showed a correlation of 0.31, while Tait *et al.* (1989) found a correlation of 0.44 after correcting for attenuation. Underlying these average correlations, the coefficients reported in specific articles contained in these meta-analyses show that the strength of the WS-LS relationship varies considerably across studies. Correlations range from a low value of 0.16 (e.g. Susskind *et al.*, 2000) to values close to 0.7 (e.g. Cunningham and De La Rosa, 2008; Van de Vliert and Janssen, 2002).

Building on Schwartz's (1992) theory of values, Oishi *et al.*'s (1999) value-as-moderator model predicts that the strength of the relationship between life domain satisfactions – such as satisfaction with health, friendship, or work – and overall life

satisfaction depends on the individual's value orientation. In particular, the higher value a person gives a particular life domain, the stronger the association between that domain satisfaction and overall life satisfaction. Similarly, the disaggregation hypothesis (Rice *et al.*, 1980; Steiner and Truxillo, 1989) proposes that job involvement – the perceived value of work in one's life and self-concept – moderates the WS-LS relationship. According to this hypothesis, the relationship should be stronger for individuals who value work more in their lives. Other similar variables that have been proposed as moderators of the WS-LS relationship are, for instance, occupation type, occupational prestige, and job importance (Bamundo and Kopelman, 1980; Rice *et al.*, 1985; Wiener *et al.*, 1992).

SE

Economists have long studied the self-employed and compared them to salaried workers. One of the reasons for such interest in the self-employed is that this sub-population of workers consistently shows higher work satisfaction scores than salaried workers, irrespective of income gained, or hours worked (e.g. Benz and Frey, 2008; Blanchflower, 2004; Bradley and Roberts, 2004; Fuchs-Schündeln, 2009; Millán *et al.*, 2013). It is usually argued that SE provides “procedural utility” on top of the ‘outcome utility’ derived from income and leisure. That is, workers not only value the outcomes (i.e. income and leisure) but also the conditions and processes leading to them (Benz, 2007; Frey *et al.*, 2004). Although the average income of the self-employed is often well below that of comparable employed individuals (Hamilton, 2000; Moskovitz and Vissing-Jørgensen, 2002) and they enjoy less free time (Hyytinen and Ruuskanen, 2007), self-employed workers derive procedural utility because SE gives them greater freedom in terms of autonomy and self-determination. SE does not only provides more freedom but also other non-pecuniary benefits that make the self-employed, on average, more satisfied with their work than their salaried counterparts.

SE jobs usually have more enriching requirements and provide more flexibility and opportunities to utilize one's own skills. The self-employed also have more control over the effort expended at work (Hundley, 2001). However, the advantages of SE do not come without sacrifice. In comparison with salaried employment, any benefits that may be accrued by the self-employed are gained at the cost of increased risk because their pay-offs are largely determined by their efforts and skill. The self-employed perceive their jobs as being more stressful and mentally draining because they work longer hours and have more responsibility in terms of their jobs, incomes, and, in many cases, employees (Kaufmann, 1999). These characteristics of SE may mean that work becomes more central in the life of the self-employed; in many instances, work and its demands even dominate the lives of the self-employed (Hamermesh, 1990). We hypothesize that this increased centrality of work may strengthen the WS-LS relationship. Based on these explanations and the above research findings, we hypothesized the following:

- H1. The relationship between work satisfaction and life satisfaction will be positive.
- H2. The relationship between work satisfaction and life satisfaction will be moderated by SE. In particular, the relationship will be stronger for self-employed than for salaried workers.

Method

Sample and procedure

The measures used in this study were part of a large questionnaire administered to investigate several characteristics of the Chilean population. Using the Chilean census,

1,500 people were sampled to represent the total population of Chile with a 5 percent sampling error. Although all regions were represented in the sample, the Greater Santiago region was overweighted. Approximately 30 percent of the cities, towns, and districts were selected proportionally, while blocks, housing, and individuals were selected at random. A team of professional canvassers went door-to-door to personally administer the survey questionnaire to the sampled participants. This procedure yielded an interim sample of 791 workers, which was reduced to an effective size of 658 individuals after a listwise process deleted cases with missing values. Missing values were distributed at random across cases without following any pattern (Olinsky *et al.*, 2003). The age of the participants ranged from 18 to 74 years, and the average age was 39 years ($SD = 12.5$); 64.1 percent were men and 35.9 percent were women; some 74.9 percent of the participants were salaried workers, while 25.1 percent were self-employed workers. Table I provides sample proportions on education level, marital status, and age groups.

Instruments

The Satisfaction With Life Scale (SWLS) was used to assess life satisfaction (Diener *et al.*, 1985). This scale has shown good psychometric properties (for reviews, see Pavot and Diener, 2008; Vassar, 2008) and has been extensively applied and validated in many cultures and with different socio-demographic groups (Durak *et al.*, 2010; Gadermann *et al.*, 2011; Oishi, 2006). The participants indicated their responses in a five-point Likert scale labeled from 1 “completely disagree” to 5 “completely agree.” We estimated internal consistency reliability using Cronbach’s α , which showed a value of 0.77, above the usually accepted cut-off value of 0.70 for non-basic research (Nunnally, 1978). However, several authors have reported significantly lower loading for the last two items of SWLS (Pavot and Diener, 2008). These loading differences represent a violation of the assumptions required by the τ -equivalent measurement model (Raykov, 1997a), on which coefficient α is based. This violation may lead to either an underestimation or an overestimation of reliability (Raykov, 2001). In our study, exploratory factor analysis also revealed that the loadings of items 1, 2, and 3 were similar in magnitude, approximately 0.70 in value, but the loadings of items 4 and 5 were significantly lower, at 0.59 and 0.50, respectively. Exercising caution, we re-estimated reliability using Heise and Bohrnstedt’s (1970) ω , which is an alternative estimate of reliability based on more relaxed assumptions (Raykov, 1997b). The new reliability value did not differ much from Cronbach’s α , estimating a new value of 0.78. The confirmatory factor analysis (CFA) showed good fit indices ($\chi^2 = 15.7$; $df = 5$; $\chi^2/df = 3.14$; RMSEA = 0.05; SRMR = 0.02; CFI = 0.98; NFI = 0.98).

Age		Marital status		Education	
Less than 25	12.8%	Married	38.8%	No education	2.4%
From 25 to 34	26.9%	Single	38.4%	Primary	18.9%
From 35 to 44	26.0%	Living together	10.9%	Secondary	54.0%
From 45 to 54	21.9%	Separated	8.9%	University	24.7%
From 55 to 65	10.9%	Divorced	2.2%		
More than 65	1.5%	Widow/er	0.8%		

Note: $n = 658$

Source: Own work

Table I.
Sample characteristics

Work satisfaction was assessed using a 22-item subscale of the Occupational Stress Indicator (OSI) (Cooper *et al.*, 1988). This scale evaluates satisfaction with work facets such as career development opportunities, job stability, and the supervisor's leadership style. Responses were given in a six-point Likert type scale labeled from 1 "completely satisfied" to 6 "completely unsatisfied"; the scores were subsequently recoded so that the higher scores indicated higher degree of work satisfaction. CFA showed acceptable fit indices ($\chi^2 = 972$; $df = 209$; $\chi^2/df = 4.65$; RMSEA = 0.07; SRMR = 0.05; CFI = 0.96; NFI = 0.95). Cronbach's α was 0.95 for this measure.

To determine whether the participants were self-employed or salaried – the variable referred to here as SE – participants checked "salaried" or "self-employed" among multiple options such as retired, unemployed, student, etc. SE was coded with 1 and salaried with 0.

Results

The means, standard deviations, maximum and minimum values, and correlations of the variables are presented in Table II. The correlation between work satisfaction and life satisfaction ($r = 0.30$) was of the same magnitude found in previous research (Bowling *et al.*, 2010). This result supported *H1*. An independent sample *t*-test analysis revealed that there were no significant differences in the life satisfaction of self-employed and salaried workers ($t = 0.71$, $df = 656$, $p = 0.48$). For the sake of external validity, we also conducted a *t*-test comparing the work satisfaction of self-employed and salaried workers. In our sample, the former showed significantly higher scores ($t = -4.5$, $df = 656$, $p < 0.001$), a result that was consistent with the results of previous research (e.g. Benz and Frey, 2008; Blanchflower, 2004; Bradley and Roberts, 2004; Millán *et al.*, 2013; Fuchs-Schündeln, 2009).

We used multiple regression analysis to test the moderator effect of SE on the strength of the relationship between work satisfaction and life satisfaction. Life satisfaction was regressed on work satisfaction, SE (the moderator dummy variable), and an interaction term: the cross-product of work satisfaction and SE. When regressors are entered in a sequential order, a moderator effect is indicated by an increase in R^2 – beyond the R^2 of the main effects – from the addition of the interaction term. Therefore, we first tested the additive model, including the direct effects, followed by the multiplicative model also including the interaction effect. The results of both model tests are shown in Table III.

In the case of the additive model, a significant overall $F(36.01; p < 0.05)$ was obtained and R^2 was 9.6 percent. A significant standardized coefficient for work satisfaction of 0.32 confirmed a positive main effect of work satisfaction on life satisfaction. The results of this regression analysis also showed a negative effect – of near zero value – of SE on life satisfaction (-0.08), indicating that, on average, the self-employed

Variable	Mean	Min.	Max.	SD	1	2	3	4
1 Life satisfaction	3.35	1.60	5.00	0.67	1			
2 Work satisfaction	4.33	1.55	6.00	0.73	0.30	1		
3 Self-employment	0.25	0	1	0.43	-0.02	0.17	1	
4 WS \times self-employment	1.14	0	6.00	2.00	0.01	0.25	0.98	1

Note: $n = 658$

Source: Own work

Table II.
Means, standard deviations, and correlations among variables

Table III.
Results of regression
analyses predicting
LS^a

Variable	Additive				Multiplicative			
	β	SE	t	VIF	β	SE	t	VIF
Work satisfaction (WS)	0.32*	0.03	8.45	1.03	0.26*	0.04	6.10	1.32
Self-employment	-0.08*	0.06	-2.19	1.03	-0.78*	0.37	-3.27	42.42
WS \times self-employment					0.72*	0.08	2.96	43.89
Total R^2	0.096				0.107			
ΔR^2					0.011			
F	36.01*				27.23*			
ΔF					-3.56			

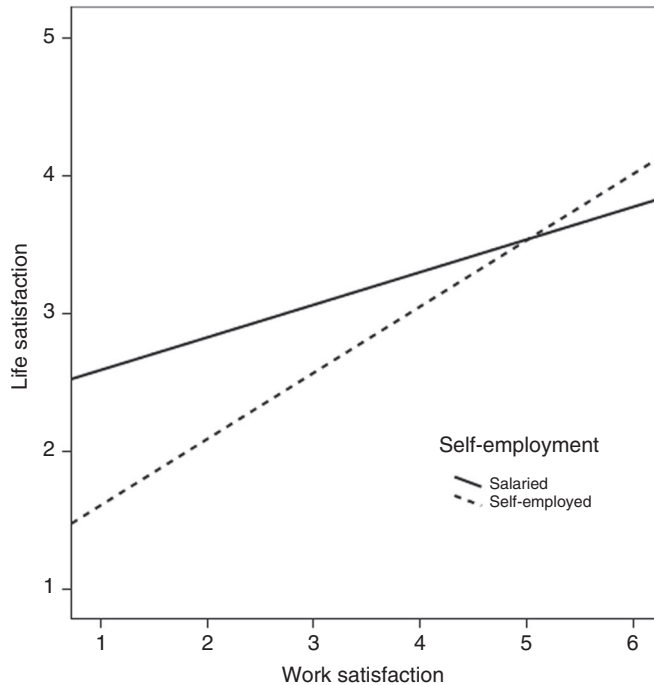
Notes: $n = 658$. ^aStandardized regression coefficients are shown. *Significance at $p < 0.05$

Source: Own work

were slightly more satisfied with their lives than salaried workers. Although this difference in average life satisfaction between self-employed and salaried workers may appear to be inconsistent with the results of the t -test conducted previously, we must take into account that the t -test is equivalent to a simple regression model. In our case, the t -test residual variance included all the variation that was not explained by the variation of SE, while in the additive regression model, the variability accounting for WS was subtracted from that of residual variance. In other words, the partial correlation coefficient of SE was greater when WS was included in the regression equation, and the standard error for significance testing was smaller. As a consequence, the power to detect a significant effect of SE is greater in the regression relative to the t -test.

Subsequently, we tested the multiplicative model. With the inclusion of the interaction term (WS \times SE) in the regression analysis, the standardized coefficients of work satisfaction (0.26), SE (-0.78), and the interaction term (0.72) were all statistically significant. Multicollinearity inflated the standard errors of SE and the interaction term coefficients to a level that no longer allowed for the interpretation of the estimation of the coefficients. In particular, VIF reached 1.3 for work satisfaction, 42.4 for SE, and 43.8 for the interaction term. R^2 – which is not affected by multicollinearity – increased from 9.6 percent in the additive model to 10.7 percent ($t = 2.96$, $df = 657$, $p < 0.05$) in the multiplicative model. Despite this small increment in R^2 , the statistical significance of the interaction term indicated that a moderator effect existed. To facilitate the interpretation of this moderation effect, Figure 1 represents the linear equations derived for both studied groups, self-employed and salaried. The higher slope of the self-employed line indicates that the relationship between work satisfaction and life satisfaction was stronger for this group of workers. For low and medium levels of work satisfaction, the average life satisfaction of the self-employed was smaller than that of salaried workers. The stronger effect of work satisfaction on life satisfaction for the self-employed made the latter more satisfied with their lives at high levels of work satisfaction. These results supported $H2$ that SE moderates the relationship between work satisfaction and life satisfaction with the result that the relationship was stronger for self-employed than for salaried workers.

In this study, we assumed that the use of self-report measures was especially appropriate for assessing work satisfaction and life satisfaction, given the self-reflective nature of these two constructs. Although there is some evidence that common-method variance may generally not be as serious a problem as many researchers have assumed (Batista-Foguet *et al.*, 2014; Spector, 2006), and it is minimized in large multipurpose



Source: Own work

Figure 1.
Moderator effect of
self-employment

surveys like this survey (Chang *et al.*, 2010), it is possible that our findings were influenced by common-method variance. CFA was conducted to test common-method variance. The proposed Harman's single-factor model was estimated (Podsakoff and Organ, 1986; Podsakoff *et al.*, 2003). The model produced the following fit statistics: $\chi^2 = 1,945$; $df =$; $\chi^2/df = 6$; RMSEA = 0.09; SRMR = 0.08; CFI = 0.94; NFI = 0.93; that indicated a poor fitting measurement model (MacKenzie *et al.*, 2011). Therefore, any possible method effects in the data were likely to be minimal.

Discussion

As predicted, work satisfaction was positively related to life satisfaction in this study. The correlation between both constructs was within the range shown in previous meta-analytic studies. According to our hypothesis, we found that the association was stronger for self-employed than for salaried workers, a result that was consistent with the work of Thompson *et al.* (1992). We attributed the moderation effects of SE to the higher centrality of the work domain in self-employed people's lives.

Our method also revealed an unexpected direct effect of SE on life satisfaction. In particular, the self-employed were less satisfied with their lives than salaried workers, on average. Although this effect was statistically significant, its size was close to zero. This unexpected finding is especially interesting because it contrasts with the results of some recent research that investigated the relationship between SE and life satisfaction. Andersson (2008) found a strong positive correlation between SE and life satisfaction. Blanchflower (2004) found that only some subgroups of self-employed workers were more satisfied than salaried workers. For example, Alesina *et al.*'s (2004)

findings suggested that the positive effect of SE was limited to wealthy countries. Binder and Coad (2013) found that individuals who moved from regular employment into SE – opportunity entrepreneurs – experienced an increase in life satisfaction. However, individuals moving from unemployment to SE – necessity entrepreneurs – were not more satisfied than their counterparts when moving from unemployment to regular employment. In sum, the small negative effect of SE on life satisfaction in this study could be explained by the national scope of our study. In our sample, the poorer rural areas of Chile were also represented. In these areas, SE might be driven by necessity, rather than opportunity.

Industrial and occupational psychology research has consistently shown that work satisfaction only explains a small part of life satisfaction variance. In fact, when satisfaction with other non-work facets of life, personality dimensions, and living conditions are controlled, the percentage of variance in life satisfaction uniquely attributed to work satisfaction, often falls to 5 percent or lower (Andrews and Withey, 1976; Hart, 1999; Near *et al.*, 1984). Therefore, the moderation effect of SE on the WS-LS relationship shown in this study may be of higher relevance than is indicated by the small increase in R^2 , when the interaction term was incorporated. Identifying the moderators of the WS-LS relationship is important because the regression coefficient in a main effects model, estimates the effect of WS on LS across multiple levels of the moderator. This average main effect can misdirect our conclusions regarding the relationship between both constructs, as is the case when suppressor effects exist. In contrast, in a model including a multiplicative term, the regression effects reflect the conditional relationships of WS at each level of LS, and the interaction reveals slope differences as one moves from one value of LS to another. Accordingly, we call for the examination of other potential moderators of the WS-LS relationship, which may enhance our understanding of the different situations and populations to which the distinct theoretical models could apply. For example, further research may want to examine the level of education as a moderator of the WS-LS relationship. Empirical evidence suggests that higher educational attainments reduce work satisfaction (Clark, 1997; Ferrer-i-Carbonell, 2005), while the effect of education on life satisfaction is vague (Ferrante, 2009). This pattern of relationships between education, WS, and LS is similar to that observed between SE, WS and LS. Indeed, it could be argued that work may be more central in the lives of people who have invested more in education. If that is the case, education could be a relevant moderator of the WS-LS relationship. The speculation of this relationship may be of interest for future research.

Two limitations of this study are worth noting. First, some authors have suggested that the relationship between work satisfaction and life satisfaction could be spurious. For example, using structural equation modeling, Rode (2004) found that work satisfaction did not explain any of the variance of life satisfaction; instead, both constructs were related to a single measure of self-core evaluations: basic conclusions that people hold regarding themselves and their capabilities. Personality traits such as self-esteem, locus of control, generalized self-efficacy, and neuroticism are all dispositional indicators of core self-evaluations. Some of these traits might also be associated to SE career choices. For example, meta-analysis studies provided some evidence of a positive relationship between entrepreneurial behavior and personality traits such as need for achievement, generalized self-efficacy, need for autonomy, and proactive personality (Zhao and Seibert, 2006). Rauch and Frese (2007) meta-analysis found entrepreneurs scored higher on Conscientiousness and Openness to Experience, and lower on Neuroticism and Agreeableness. No difference was found for Extraversion. However,

being self-employed does not necessarily imply being an entrepreneur; in fact, the self-employed are quite a heterogeneous population in many aspects (Santarelli and Vivarelli, 2007; Van den Heuvel and Wooden, 1997), for instance, in their motivations to pursue SE (Feldman and Bolino, 2000; Fuchs-Schündeln, 2009). Second, the cross-sectional nature did not enable investigation of the causal direction of the WS-LS relationship. Implicit in the bottom-up approach adopted in this study is the direction of the relationship from work satisfaction to life satisfaction. Although most of the studies assume the same direction of causality (Erdogan *et al.*, 2012), some authors adopting a top-down, or dispositional approach have suggested that the relationship could be the other way around. This approach suggests that the influence of life satisfaction on work satisfaction represents a dispositional effect (Judge and Hulin, 1993; Staw and Ross, 1985); that is, the positive affect associated with higher life satisfaction leads people who are more satisfied with their lives to interpret work conditions and events more positively, resulting, in turn, in higher work satisfaction. Some studies have even suggested that the WS-LS relationship might be reciprocal (e.g. Judge *et al.*, 1994; Judge and Hulin, 1993; Judge and Watanabe, 1993).

References

- Alesina, A., Di Tella, R. and MacCulloch, R. (2004), "Inequality and happiness: are Europeans and Americans different?", *Journal of Public Economics*, Vol. 88 Nos 9-10, pp. 2009-2042.
- Andersson, P. (2008), "Happiness and health: well-being among the self-employed", *Journal of Socio-Economics*, Vol. 37 No. 1, pp. 13-236.
- Andrews, F.M. and Withey, S.B. (1976), *Social Indicators of Well-Being: Americans' Perceptions of Life Quality*, Plenum Press, New York, NY.
- Bamundo, P.J. and Kopelman, R.E. (1980), "The moderating effects of occupation on the relationship between job satisfaction and life satisfaction", *Journal of Vocational Behavior*, Vol. 17 No. 1, pp. 106-123.
- Batista-Foguet, J.M., Revilla, M., Saris, W., Boyatzis, R. and Serlavós, R. (2014), "Reassessing the effect of survey characteristics on common method variance in emotional and social intelligence competencies assessment", *Structural Equation Models*, Vol. 21 No. 4, pp. 596-607.
- Benz, M. (2007), "The relevance of procedural utility for economics", in Frey, B.S. and Stutzer, A. (Eds), *Economics and Psychology: A Promising New Cross-Disciplinary Field*, MIT Press, Cambridge, MA, pp. 199-228.
- Benz, M. and Frey, B.S. (2008), "Being independent is a great thing: subjective evaluations of self-employment and hierarchy", *Economica*, Vol. 75 No. 298, pp. 362-383.
- Binder, M. and Coad, A. (2013), "Life satisfaction and self-employment: a matching approach", *Small Business Economics*, Vol. 40 No. 4, pp. 1009-1033.
- Blanchflower, D.G. (2004), "Self-employment: more may not be better", *Swedish Economic Policy Review*, Vol. 11 No. 2, pp. 15-73.
- Bowling, N.A., Eschleman, K.J. and Wang, Q. (2010), "A meta-analytic examination of the relationship between job satisfaction and subjective well-being", *Journal of Occupational and Organizational Psychology*, Vol. 83 No. 4, pp. 915-934.
- Bradley, D.E. and Roberts, J.A. (2004), "Self-employment and job satisfaction: investigating the role of self-efficacy, depression, and seniority", *Journal of Small Business Management*, Vol. 42 No. 1, pp. 37-58.
- Carlson, D.S. and Kacmar, K.M. (2000), "Work-family conflict in the organization: do life role values make a difference?", *Journal of Management*, Vol. 26 No. 5, pp. 1031-1054.

- Chang, S.J., van Witteloostuijn, A. and Eden, L. (2010), "From the editors: common method variance in international business research", *Journal of International Business Studies*, Vol. 41 No. 2, pp. 178-184.
- Clark, A. (1997), "Job satisfaction and gender: why are women so happy at work?", *Labour Economics*, Vol. 4 No. 4, pp. 341-372.
- Cooper, C.L., Sloan, S.J. and Williams, S. (1988), *The Occupational Stress Indicator*, NFER Nelson, Windsor.
- Csikszentmihalyi, M. (1975), *Beyond Boredom and Anxiety*, Jossey-Bass Publishers, San Francisco, CA.
- Csikszentmihalyi, M. (1997), *Finding Flow*, Basic Books, New York, NY.
- Cunningham, C.J.L. and De La Rosa, G.M. (2008), "The interactive effects of proactive personality and work family interference on well-being", *Journal of Occupational Health Psychology*, Vol. 13 No. 3, pp. 271-282.
- Dane, E. (2011), "Paying attention to mindfulness and its effects on task performance in the workplace", *Journal of Management*, Vol. 37 No. 4, pp. 997-1018.
- Diener, E., Emmons, R.A., Larsen, R.J. and Griffin, S. (1985), "The satisfaction with life scale", *Journal of Personality Assessment*, Vol. 49 No. 1, pp. 71-75.
- Dormann, C. and Zapf, D. (2001), "Job satisfaction: a meta-analysis of stabilities", *Journal of Organizational Behavior*, Vol. 22 No. 5, pp. 483-504.
- Durak, M., Senol-Durak, E. and Gencoz, T. (2010), "Psychometric properties of the satisfaction with life scale among Turkish university students, correctional, officers, and elderly adults", *Social Indicators Research*, Vol. 99 No. 3, pp. 413-429.
- Erdogan, B., Bauer, T.N., Truxillo, D.M. and Mansfield, L.R. (2012), "Whistle while you work: a review of the life satisfaction literature", *Journal of Management*, Vol. 38 No. 4, pp. 1038-1083.
- Feldman, D.C. and Bolino, M.C. (2000), "Career patterns of the self-employed: career motivations and career outcomes", *Journal of Small Business Management*, Vol. 38 No. 3, pp. 53-67.
- Ferrante, F. (2009), "Education, aspirations and life satisfaction", *Kiklos*, Vol. 62 No. 4, pp. 542-562.
- Ferrer-i-Carbonell, A. (2005), "Income and well-being: an empirical analysis of the comparison income effect", *Journal of Public Economics*, Vol. 89, pp. 997-1019.
- Frey, B., Benz, M. and Stutzer, A. (2004), "Introducing procedural utility: not only what, but also how matters", *Journal of Institutional and Theoretical Economics*, Vol. 160, pp. 377-401.
- Fuchs-Schündeln, N. (2009), "On preferences for being self-employed", *Journal of Economic Behavior & Organization*, Vol. 71 No. 2, pp. 162-171.
- Gadermann, A.M., Guhn, M. and Zumbo, B.D. (2011), "Investigating the substantive aspect of construct validity for the satisfaction with life scale adapted for children: a focus on cognitive processes", *Social Indicators Research*, Vol. 100 No. 1, pp. 37-60.
- Hamermesh, D.S. (1990), "Shirking or productive schmoozing: wages and the allocation of time at work", *Industrial and Labor Relations Review*, Vol. 43 No. 3, pp. 121-133.
- Hamilton, B.H. (2000), "Does entrepreneurship pay? An empirical analysis of the returns to self-employment", *Journal of Political Economy*, Vol. 108 No. 3, pp. 604-630.
- Hart, P.M. (1999), "Predicting employee life satisfaction: a coherent model of personality, work, and nonwork experiences, and domain satisfactions", *Journal of Applied Psychology*, Vol. 84 No. 4, pp. 564-584.

- Heidemeier, H. and Göritz, A.S. (2013), "Individual differences in how work and nonwork life domains contribute to life satisfaction: using factor mixture modeling for classification", *Journal of Happiness Studies*, Vol. 14 No. 6, pp. 1765-1788.
- Heise, D.R. and Bohrnstedt, G.W. (1970), "Validity, invalidity and reliability", in Borgatta, E.F. and Bohrnstedt, G.W. (Eds), *Sociological Methodology*, Jossey-Bass, San Francisco, CA, pp. 104-129.
- Heller, D., Judge, T.A. and Watson, D. (2002), "The confounding role of personality and trait affectivity in the relationship between job and life satisfaction", *Journal of Organizational Behavior*, Vol. 23 No. 7, pp. 815-835.
- Heller, D., Watson, D. and Ilies, R. (2004), "The role of person versus situation in life satisfaction: a critical examination", *Psychological Bulletin*, Vol. 130 No. 4, pp. 574-600.
- Hundley, G. (2001), "Why and when are the self-employed more satisfied with their work?", *Industrial Relations*, Vol. 40 No. 2, pp. 293-316.
- Hunter, J.E. and Schmidt, F.L. (2004), *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*, Sage, Thousand Oaks, CA.
- Hyytinen, A. and Ruuskanen, O. (2007), "Time use of the selfemployed", *Kyklos*, Vol. 60 No. 1, pp. 105-122.
- Judge, T.A. and Hulin, C.L. (1993), "Job satisfaction as a reflection of disposition: a multiple source causal analysis", *Organizational Behavior and Human Decision Processes*, Vol. 56 No. 3, pp. 388-421.
- Judge, T.A. and Watanabe, S. (1993), "Another look at the job satisfaction-life satisfaction relationship", *Journal of Applied Psychology*, Vol. 78 No. 6, pp. 939-948.
- Judge, T.A., Boudreau, J.W. and Bretz, R.D. (1994), "Job and life attitudes of male executives", *Journal of Applied Psychology*, Vol. 79 No. 5, pp. 767-782.
- Judge, T.A., Locke, E.A. and Durham, C.C. (1997), "The dispositional causes of job satisfaction: a core evaluations approach", *Research in Organizational Behavior*, Vol. 19, pp. 151-188.
- Judge, T.A., Locke, E.A., Durham, C.C. and Kluger, A.N. (1998), "Dispositional effects on job and life satisfaction: the role of core evaluations", *Journal of Applied Psychology*, Vol. 83 No. 1, pp. 17-34.
- Juster, F.T. (1985), "Preferences for work and leisure", in Juster, F.T. and Stafford, F.P. (Eds), *Time, Goods, and Well-Being*, Institute for Social Research, Ann Arbor, MI, pp. 333-352.
- Kaufmann, P.J. (1999), "Franchising and the choice of self-employment", *Journal of Business Venturing*, Vol. 14 No. 4, pp. 345-362.
- Locke, E.A. (1976), "The nature and causes of job satisfaction", in Dunnette, M.D. (Ed.), *Handbook of Industrial and Organizational Psychology*, Rand-McNally, Chicago, IL, pp. 1297-1394.
- Loewe, N., Bagherzadeh, M., Araya-Castillo, L., Thieme, C. and Batista-Foguet, J.M. (2014), "Life domain satisfactions as predictors of overall life satisfaction among workers: evidence from Chile", *Social Indicators Research*, Vol. 118 No. 1, pp. 71-86.
- MacKenzie, S.B., Podsakoff, P.M. and Podsakoff, N.P. (2011), "Construct measurement and validation procedures in MIS and behavioral research: integrating new and existing techniques", *MIS Quarterly*, Vol. 35 No. 2, pp. 293-334.
- Michalos, A.C. (1985), "Multiple discrepancies theory (MDT)", *Social Indicators Research*, Vol. 16 No. 4, pp. 347-413.
- Millán, J.M., Hessels J., Thurik, R. and Aguado, R. (2013), "Determinants of job satisfaction: a European comparison of self-employed and paid employees", *Small Business Economics*, Vol. 40 No. 3, pp. 651-670.

- Moskovitz, T.J. and Vissing-Jørgensen, A. (2002), "The returns of entrepreneurial investment: a private equity premium puzzle?", *American Economic Review*, Vol. 92 No. 4, pp. 745-778.
- Near, J.P., Smith, C.A., Rice, R.W. and Hunt, R.G. (1984), "A comparison of work and nonwork predictors of life satisfaction", *Academy of Management Journal*, Vol. 27 No. 1, pp. 184-190.
- Nunnally, J.C. (1978), *Psychometric Theory*, 2nd ed., McGraw-Hill, New York, NY.
- Oishi, S. (2006), "The concept of life satisfaction across cultures: an IRT analysis", *Journal of Research in Personality*, Vol. 40 No. 4, pp. 411-423.
- Oishi, S., Diener, E., Suh, E. and Lucas, R.E. (1999), "Value as a moderator in subjective well-being", *Journal of Personality*, Vol. 67 No. 1, pp. 157-184.
- Olinsky, A., Chen, S. and Harlow, L. (2003), "The comparative efficacy of imputations methods for missing data in structural equation modeling", *European Journal of Operational Research*, Vol. 151 No. 1, pp. 53-79.
- Pavot, W. and Diener, E. (2008), "The satisfaction with life scale and the emerging construct of life satisfaction", *Journal of Positive Psychology*, Vol. 3 No. 2, pp. 137-152.
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-reports of organizational research: problems and prospects", *Journal of Management*, Vol. 12 No. 4, pp. 531-544.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method bias in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Rain, J.S., Lane, I.M. and Steiner, D.D. (1991), "A current look at the job satisfaction/life satisfaction relationship: review and future considerations", *Human Relations*, Vol. 44 No. 3, pp. 287-307.
- Rauch, A. and Frese, M. (2007), "Let's put the person back into entrepreneurship research: a meta-analysis on the relationship between business owners' personality traits, business creation, and success", *European Journal of Work and Organization Psychology*, Vol. 16 No. 4, pp. 353-385.
- Raykov, T. (1997a), "Estimation of composite reliability for congeneric measures", *Applied Psychological Measurement*, Vol. 21 No. 2, pp. 173-184.
- Raykov, T. (1997b), "Scale reliability, Cronbach's coefficient alpha, and violations of essential tau-equivalence with fixed congeneric components", *Multivariate Behavioral Research*, Vol. 32 No. 4, pp. 329-353.
- Raykov, T. (2001), "Bias of Cronbach's coefficient alpha for fixed congeneric measures with correlated errors", *Applied Psychological Measurement*, Vol. 25 No. 1, pp. 69-76.
- Rice, R.W., Frone, M.R. and McFarlin, D.B. (1992), "Work-nonwork conflict and the perceived quality of life", *Journal of Organizational Behavior*, Vol. 13 No. 2, pp. 155-168.
- Rice, R.W., Near, J.P. and Hunt, R.G. (1980), "The job satisfaction-life satisfaction relationship: a review of empirical research", *Basic and Applied Social Psychology*, Vol. 1 No. 1, pp. 37-64.
- Rice, R.W., McFarlin, D.B., Hunt, R.G. and Near, J.P. (1985), "Job importance as a moderator of the relationship between job satisfaction and life satisfaction", *Basic and Applied Social Psychology*, Vol. 6 No. 4, pp. 297-316.
- Rode, J.C. (2004), "Job satisfaction and life satisfaction revisited: a longitudinal test of an integrated model", *Human Relations*, Vol. 57 No. 9, pp. 1205-1230.
- Rojas, M. (2006), "Life satisfaction and satisfaction in domains of life: is it a simple relationship?", *Journal of Happiness Studies*, Vol. 7 No. 4, pp. 467-497.
- Santarelli, E. and Vivarelli, M. (2007), "Entrepreneurship and the process of firm's entry, survival and growth", *Industrial and Corporate Change*, Vol. 16 No. 3, pp. 455-488.

- Schwartz, S.H. (1992), "Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries", in Zanna, M. (Ed.), *Advances in Experimental Social Psychology*, Vol. 25, Academic Press, Orlando, FL, pp. 1-65.
- Spector, P.E. (2006), "Method variance in organizational research", *Organizational Research Methods*, Vol. 9 No. 2, pp. 221-232.
- Staw, B.M. and Ross, J. (1985), "Stability in the midst of change: a dispositional approach to job attitudes", *Journal of Applied Psychology*, Vol. 70 No. 3, pp. 469-480.
- Steiner, D.D. and Truxillo, D.M. (1989), "An improved test of the disaggregation hypothesis of job and life satisfaction", *Journal of Occupational Psychology*, Vol. 62 No. 1, pp. 33-39.
- Susskind, A.M., Borchgrevink, C.P., Kacmar, K.M. and Brymer, R.A. (2000), "Customer service employee's behavioral intentions and attitudes: an examination of construct validity and a path model", *International Journal of Hospitality Management*, Vol. 19 No. 1, pp. 53-77.
- Tait, M., Padgett, M.Y. and Baldwin, T.T. (1989), "Job and life satisfaction: a reevaluation of the strength of the relationship and gender effects as a function of the date of the study", *Journal of Applied Psychology*, Vol. 74 No. 3, pp. 502-507.
- Thompson, C.A., Kopelman, R.E. and Schriesheim, C.A. (1992), "Putting all one's eggs in the same basket: a comparison of commitment and satisfaction among self-and organizationally employed men", *Journal of Applied Psychology*, Vol. 77 No. 5, pp. 738-743.
- Van den Heuvel, A. and Wooden, M. (1997), "Self-employed contractors and job satisfaction", *Journal of Small Business Management*, Vol. 35 No. 3, pp. 11-19.
- Van de Vliert, E. and Janssen, O. (2002), "Better than performance motives as roots of satisfaction across more and less developed countries", *Journal of Cross-Cultural Psychology*, Vol. 33 No. 4, pp. 380-397.
- Vassar, M. (2008), "A note on the score reliability for the satisfaction with life scale: an RG study", *Social Indicators Research*, Vol. 86 No. 1, pp. 47-57.
- Wiener, Y., Muczyk, J.P. and Martin, H.J. (1992), "Self-esteem and job involvement as moderators of the relationship between work satisfaction and well-being", *Journal of Social Behavior and Personality*, Vol. 7 No. 4, pp. 539-554.
- Zhao, H. and Seibert, S.E. (2006), "The big five personality dimensions and entrepreneurial status: a meta-analytical review", *Journal of Applied Psychology*, Vol. 91 No. 2, pp. 259-271.

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