

Consequences of Job Insecurity and the Moderator Role of Occupational Group

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In recent decades, transformations in organizations and the labour market have produced an increase in employee job insecurity. In response to this situation, workers present different negative reactions. However, the intensity of these reactions varies across studies that have investigated the outcomes of job insecurity. One possible explanation for this inconsistency may lie in the influence of other factors, such as the occupational group (Sverke et al., 2002). The aim of this study is to provide additional evidence about the relationship between job insecurity and its outcomes (i.e., life satisfaction, job satisfaction, perceived performance and organizational commitment), and examine the moderator role of occupational group in this relationship. The sample was composed of 321 employees from different Spanish organizations. The results showed that job insecurity was directly and negatively related to life satisfaction, job satisfaction and organizational commitment, and they suggest that occupational group moderated relations between job insecurity and three studied outcomes. In the case of life satisfaction and perceived performance, this relationship was stronger among blue collar workers. The relationship between job insecurity and job satisfaction was stronger in white collar workers. The implications and limitations of this study are discussed.

Keywords: job insecurity, occupational group, life satisfaction, job satisfaction, organizational commitment.

Las transformaciones en el mercado laboral y las organizaciones de las últimas décadas han conllevado un aumento de la inseguridad laboral de los trabajadores. En respuesta a esta inseguridad, los trabajadores presentan distintas reacciones negativas. Sin embargo, la intensidad de estas reacciones varía en los estudios que se han centrado en examinar estos efectos asociados. Una posible explicación de esta variabilidad se basa en la influencia de otros factores, como por ejemplo el grupo ocupacional (Sverke y col., 2002). El objetivo del presente trabajo es proporcionar evidencia adicional a la relación entre la inseguridad laboral y sus efectos asociados (ej: satisfacción con la vida, satisfacción laboral, desempeño percibido y compromiso organizacional), así como examinar el papel modulador del grupo ocupacional en esta relación. La muestra de este estudio estuvo compuesta por 321 trabajadores de diversas organizaciones españolas. Los resultados mostraron que la inseguridad laboral se relacionaba directa y negativamente con la satisfacción con la vida, la satisfacción laboral y el compromiso organizacional. Los resultados sugirieron que el grupo ocupacional modulaba la relación entre inseguridad laboral y tres de los efectos asociados estudiados. En el caso de la satisfacción con la vida, y el desempeño percibido esta relación era más intensa en el grupo de empleados de cuello azul. La relación entre inseguridad laboral y satisfacción laboral resultó más fuerte en el caso de los empleados de cuello blanco. Se discuten las implicaciones y limitaciones de este estudio.

Palabras clave: inseguridad laboral, grupo ocupacional, satisfacción con la vida, satisfacción laboral, compromiso organizacional.

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In recent decades, the world economy and the labour market have been characterized by a series of rapid and dramatic transformations which have threatened employees' stability and introduced uncertainty into their work lives. The economies of a large number of countries have been shown to be cyclical, fluctuating over the years. Since 1973 the world economy has experienced numerous crises, given that recessions have occurred with certain frequency (e.g., oil tanker accidents in 1973 and 1979, the financial crisis of 1982, the stock market "crash" of 1987, the 1991 recession, and the crisis in 2008). These economic fluctuations have coincided with a series of changes which include the rapid development and implementation of new technologies and the internationalization and globalization of the economic processes (Buckley & Ghauri, 1993; Ianni, 1998). Moreover, in the case of Spain, in addition to these changes, the job protection policy has been progressively modified since the 1970s (e.g.: Ley 8/1980; Ley 32/1984; Real Decreto 1989/1984; Ley 63/1997; Real Decreto Ley 5/2001; Ley 35/2010), and generally consists of low pay and low unemployment benefits, and the facilitation of temporary contracts and contract termination processes.

In this dynamic context, organizations' competitiveness and survival have been threatened. They have had to adopt a series of measures in order to become more competitive and achieve reductions in costs (Cascio, 1998). Some of the most common measures have been the restructuring and downsizing of the work force and the use of temporary contracts (e.g.: temporary and part-time). Consequently, millions of jobs have disappeared, and the rate of temporality has increased. This situation is especially serious in the case of Spain compared to the rest of the European countries, as the rate of unemployment and temporariness has been much higher than the European rate during the past few decades. For example, in 2009 the unemployment rate in Spain was 18%, while in Europe it was 8.9%, and the rate of temporary contracts was 25.4%, compared to the European rate of 13.5%.

All of these circumstances have contributed to the development of a more turbulent and less predictable working life, which has meant that concern about the possibility of losing one's job, understood as job insecurity, has become one of the most common phenomena characterizing the working life of employees (Cheng & Chan, 2008; Hartley, Jacobson, Klandermans, & Van Vuuren, 1991).

In response to the perception of job insecurity, employees react in very different ways that affect their attitudes and behaviours on the job, and even their health. For this reason, a large number of studies have set out to analyze this association between job insecurity and employees' reactions (e.g.: Burke, 1997; Chirumbolo & Hellgren, 2003; Davy, Kinicki, & Scheck, 1997). However, the meta-analyses performed by Cheng and Chan (2008) and Sverke, Hellgren, and Näswall (2002) showed that the strength of the relations between job insecurity and its consequences varied across the different studies. To explain this lack of consistency,

various authors (Cheng & Chan, 2008; Greenhalgh & Rosenblatt, 1984; Sverke, Hellgren, & Näswall, 2002) have suggested that other factors may be influencing the relation between job insecurity and its outcomes. In this regard, the empirical research has pointed to diverse individual and situational variables that seem to be influencing this relationship and mitigating the negative influence of job insecurity in employees. These results are congruent with the stress theory by Lazarus and Folkman (1984), which highlights the role of individual and environmental resources in the way individuals cope with stressors. Some examples of these mitigating variables are social support (Lim, 1996), organizational justice (Sora, Caballer, Peiró, Silla, & Gracia, 2010), personality characteristics (Näswall, Sverke, & Hellgren, 2005) and job dependence (Sora, Caballer, & Peiró, 2010). Specifically, among the situational factors, Sverke et al. (2002) suggest occupational group. However, in contrast to the aforementioned intervening variables, theoretical and empirical research has yielded contradictory results about the influence of the occupational group (e.g.: white collar workers, professionals, blue collar workers, etc) in the relationship between job insecurity and its outcomes. Even so, the research has suggested that belonging to a certain occupational group implies a series of characteristics defining the individual (e.g., level of training), as well as the availability of a series of job resources characteristic of a particular occupational status. Thus, belonging to a certain occupational group can influence the perception of the degree of threat presented by job insecurity and, therefore, the seriousness of its outcomes. However, as the results obtained from theoretical and empirical research have been contradictory, the direction of this effect is not clear, and the question about which occupational groups are harmed most by the perception of job insecurity remains unresolved. In order to address these issues, the purpose of the present study is to provide additional empirical evidence about the relationship between job insecurity and worker attitudes and behaviours, and study the moderator role of occupational group in this relationship.

Job Insecurity: An antecedent of attitudes and behaviors on the job

Based on the transactional model of stress (Lazarus & Folkman, 1984), job insecurity has been conceptualized as a source of stress or work stress. This model emphasizes the interaction between the situation and the person or the interaction between the perceived demands and the resources necessary to meet these demands, highlighting that when the available resources are perceived as insufficient to deal with the demands, people experience stress. Job insecurity, as mentioned above, reflects concern about the possible loss of employment (De Witte, 1999), so that it represents a threat to job continuity along with a lack of control to cope with this threat (Greenhalgh & Rosenblatt, 1984). Therefore, the

perception of job insecurity implies the anticipation of a negative event for the individual, the loss of employment, which is associated with a series of negative results, such as the withdrawal of economic and social resources (e.g.: social network) or the disruption of stability and the restructuring of time (Jahoda, 1982). Lazarus and Folkman (1984) found that uncertainty about the occurrence of an event can be more stressful than the event itself; thus, uncertainty about a possible job loss can be as stressful as losing a job, and it can have similar negative effects on employees (Kinnunen, Mauno, Nätti, & Happonen, 1999; Näswall, Sverke, & Hellgren, 2005).

Various studies have shown a negative association between job insecurity and diverse employee attitudes and behaviours in the work place that can be conceptualized as responses to the stress process (distress). The main results on job insecurity were included in the meta-analysis performed by Sverke et al. (2002), and classified in two dimensions: the time period necessary for its appearance (proximal versus distal outcomes) and the orientation (individual versus organizational). In this way, we can categorize the results associated with job insecurity into four types: proximal reactions with an individual orientation, proximal reactions with an organizational orientation, distal reactions with an individual orientation, and distal reactions with an organizational orientation.

One of the distal reactions oriented toward the individual would be a decrease in life satisfaction in general (De Cuyper & De Witte, 2006; Iverson & Maguire, 2000; Silla, De Cuyper, Gracia, Peiró, & De Witte, 2009), while a proximal reaction oriented toward the individual would be less job satisfaction (Chirumbolo & Hellgren, 2003; De Cuyper & De Witte, 2006; Sora, Caballer, & Peiró, 2010), with job satisfaction understood as “a multi-dimensional affective response toward the job itself” (Jones, Flynn, & Kelloway, 1995, p. 43). Among the distal results oriented toward the organization, lower work performance has been identified in many studies (Abramis, 1994; De Cuyper & De Witte, 2006; Rosenblatt & Ruvio, 1996; Wong, Wong, Ngo, & Lui, 2005), and among the proximal results oriented toward the organization, research has found less organizational commitment (De Cuyper, Notelaers, & De Witte, 2009; Filipkowski & Johnson, 2008; Sora, Caballer, Peiró, Silla, & Gracia, 2010) defined as “the identification and involvement of an individual with a certain organization” (Mowday, Porter, & Steers, 1979).

However, other studies contradict those described above, making the research findings inconclusive. In fact, results have been obtained that show a weak or non-significant relation between job insecurity and life satisfaction (e.g.: Appleton & Song, 2008), job satisfaction (e.g.: Adkins, Werbel, & Farh, 2001; De Cuyper & De Witte, 2006; Ito & Brotheridge, 2007; Mäkikangas & Kinnunen, 2003; Näswall, Sverke, & Hellgren, 2005), perceived performance (e.g.: Ashford, Lee, and Bobko, 1989; Robinson, 1996; Yousef, 1998; Stepina & Perrew, 1991) and organizational commitment (e.g.: Adkins, Werbel, & Farh, 2001; Chirumbolo

& Hellgren, 2003; De Cuyper & De Witte, 2006; Ito & Brotheridge, 2007; Rosenblatt, Talmud, & Ruvio, 1999).

Occupational group in the relation between Job Insecurity and its outcomes

Traditionally, job stability has been practically guaranteed throughout employees' working lives, with the case of workers in higher professional categories being especially significant. These employees enjoyed a certain “virtual job security”, as company downsizing was mainly directed toward less qualified employees (King, 2000; Radigan, 1990). However, with the transformations in organizations and the job market in the past few decades, the loss of jobs has affected all the occupational groups, regardless of their qualifications (Mishel & Podgursky, 1988). Thus, the changes that have taken place in recent decades have fostered an increase in the perception of job insecurity, not only in the less qualified employees but in all the occupational groups (e.g., white collar workers, blue collar workers, professionals, etc.) (Greenhalgh, 1983; Sverke & Hellgren, 2002).

Although the perception of job insecurity is present in all the workers in an organization, this stressor probably does not affect everyone equally. In fact, Kozlowski Chao, Smith, and Hedlund (1993) and Sutton and D'Aunno (1989) have pointed out that the outcomes of the perception of job insecurity can vary depending on the occupational group to which one belongs. The characteristics of the different occupational groups can affect to what degree job insecurity is perceived as threatening and, therefore, how vulnerable employees perceive themselves as being to harmful outcomes.

Various theoretical trends have arisen to explain the role of the occupational group in the relation between job insecurity and its outcomes. One part of the research has suggested that qualified employees (i.e. white collar workers, professionals and managers) experience less serious outcomes than low-qualified employees, as the qualified workers present low levels of economic uncertainty and dependence (Frese, 1985). The more-qualified employees have positions which allow them greater control over their own jobs and over the decision-making processes (Swanson & Power, 2001). This perception of control, according to Greenhalgh and Rosenblatt (1984), is an important resource for reducing uncertainty produced by a possible loss of employment, making qualified employees less vulnerable to the perception of job insecurity. Likewise, the higher education level of these employees, compared to the low-qualified ones, can also act as a buffer against the stressor of possible job loss, as their levels of employability are higher, and they have more tools to help them find a new job (Gallie, White, Cheng, & Tomlinson, 1998). In summary, this part of the research suggests that the qualified employees, due to their greater resources, can perceive job insecurity as less stressful than the group of low-qualified employees and, therefore, experience fewer negative outcomes.

On the other hand, another theoretical perspective points out that the relationship between job insecurity and occupational group should be in the opposite direction. This view proposes that as the qualified workers have more training, they have a greater probability of experiencing inconsistency in situations of unemployment and job insecurity. Individuals with higher qualifications tend to base their self-concept and identity on their jobs to a greater degree than less qualified individuals (Kaufman, 1982). Thus, in a situation of unemployment or job insecurity, these employees can experience more serious negative outcomes, as the situation not only affects their employment but also their personal identity.

The empirical evidence in both theoretical trends is scarce and not very conclusive. The studies carried out have presented contradictory results that could provide support for the different assumptions of both theoretical movements, and studies can even be found that reject both, showing non-significant results in the analysis of the relation between job insecurity and its consequences according to occupational group. Sverke et al. (2002) provided empirical support for the former theoretical framework in their meta-analysis. These authors showed significant differences in the relation between job insecurity and performance and intention to leave the organization, depending on the occupational group. The low-qualified employees presented a lower performance level and a greater intention to leave. Luthans and Sommer (1999), although not intending to explicitly measure the job insecurity variable, analyzed differences in the job attitudes and behaviours of workers in different occupational groups (e.g.: blue collar and management) in a situation of personnel downsizing that involved high levels of job insecurity. Specifically, the results showed that the levels of organizational commitment and trust in the work group were lower among the blue collar workers than among management, while no significant differences were found in the levels of job satisfaction and supervisor support.

On the other hand, Roskies and Louis-Guerin (1990), following the second theoretical trend, showed how highly qualified personnel in the organizations studied (management and professionals) did not perceive the threat of job loss as serious; that is, they presented low levels of job insecurity. However, those managers and professionals who did show high levels of job insecurity experienced more serious outcomes associated with their health, attitudes and work behaviours (e.g.: low levels of work performance, trust, career satisfaction, and optimism about their professional career).

Finally, De Witte (1999) did not find significant differences among the different occupational groups (e.g. blue collar workers, white collar workers and managers) in the relationship between job insecurity and mental health. Likewise, Armstrong-Stassen (1997) found no statistically significant differences between the groups of managers and non-managers in their negative emotional reactions to the perception of job insecurity.

The present study

The Spanish job market presents high levels of job instability and insecurity among its workers. The possibility of losing one's job is perceived as one of the most serious job stressors, with a series of negative outcomes on the workers' attitudes and behaviours (e.g.: life satisfaction, job satisfaction, perceived performance and organizational commitment). However, this association is not completely clear, given that the studies carried out until now have not been congruent. Furthermore, additional factors may be intervening in the relationship between job insecurity and its outcomes. One of these factors would be belonging to a certain occupational group, although the theoretical and empirical research has not been congruent here either. Nevertheless, even though there is no clear consensus about the role played by the occupational group in the relationship between job insecurity and its outcomes, based on the theoretical and empirical studies reviewed it can be assumed that this situational factor is a determinant in understanding employees' diverse reactions to the perception of job insecurity.

Based on these gaps in the research and following the theoretical framework of transactional stress theory, this study has a dual objective. The first is to provide additional empirical evidence about the association between job insecurity, conceptualized as a stressor, and the attitudinal and behavioural responses of distress, using the four categories of Sverke et al. (2002). The second objective is carry out an exploratory examination of the possible moderator role of belonging to a certain occupational group (e.g., white collar workers, blue collar workers and professionals) in the relation between job insecurity and its outcomes. Thus, the following hypotheses are proposed:

Hypothesis 1: Insecurity is negatively related to life satisfaction (H1a), job satisfaction (H1b), perceived performance (H1c) and organizational commitment (H1d).

Hypothesis 2: The occupational group moderates the relation between job insecurity and life satisfaction (H2a), job satisfaction (H2b), perceived performance (H2c) and organizational commitment (H2d).

Method

Participants

The participants in the present study were 385 workers from Spanish companies belonging to three different sectors. However, in the statistical analyses, we could only use the data from the 321 participants that we could classify by occupational group. Finally, 51.4% of the participants are hospital employees, 25.7% work in commercial distribution companies, and 22.9 % are office employees in temp agencies. This study belongs to a broader study, SALTSA, whose purpose is to analyze how relational patterns affect

well-being and quality of life. Therefore, a main variable in this study is type of employment. For this reason, three sectors were chosen in which it was possible to find both permanent and temporary workers. Moreover, as this is an international project, the three sectors had to be found in all the countries participating in the study. The three sectors chosen, hospitals, commercial distribution companies and temporary work agencies, are easily located in all the countries and have a high percentage of temporary workers, thus meeting the two necessary sample selection objectives. The majority of the participants are women, 74.3% compared to 25.7% men, and the mean age is 32.3 years ($SD = 6.76$).

Procedure

The research team contacted the heads of the human resources departments of the different participating organizations, requesting the voluntary participation of their employees in the study. The employees answered the questionnaires in the presence of a researcher, who handed it to them and guaranteed anonymity. Only in exceptional cases was the questionnaire handed out to the employees or left in the companies to be filled out later. Given the data collection system, the rate of response is quite high, reaching 80%.

Measures

Type of contract. Subjects were asked about their type of contract in the position they held at the time of filling in the questionnaire. The alternatives were: 1. Permanent. 2 Others. Thus, 66% of the participants had a permanent contract, compared to 34% with another type of contract.

Occupational group. This measure was constructed based on the item: What is your job in the organization? The category of blue collar workers was assigned to those participants who answered “non-qualified worker or operator” or “qualified worker or operator” (official, specialist, etc...). The participants categorized as white collar workers were those who answered “White collar worker (e.g., Salesperson, office worker, clerk)”. Finally, participants were categorized as professionals if they chose that position on the item “Professional (e.g., engineer, teacher, nurse)”. In all, 30 % of the participants belonged to the blue collar group, 20% to the white collar group, and 37% to the professional group. The remaining 13% made up the lost cases.

Job insecurity. This was measured with a 7-item scale constructed and adapted by De Witte (1992, 2000) and De Witte and Claes (2000). The Likert response scale ranges from 1 (“completely agree”) to 5 (“completely disagree”). Some of the items were the following: “1. It is possible that I will soon lose my job”, 2. “I am sure I can keep my job”; “3. I feel insecure about the future of my job”; “4. I think I could lose my job in the near future”. The Cronbach’s alpha is .79.

Life satisfaction. A measure containing 7 items was constructed. The common statement was “How satisfied or happy do you currently feel with...., and the options on the items were the following: 1. your life in general?; 2. your family life?; 3. your free time?; 4. the state of your health and well-being?; 5. your work-life balance?; 6. the financial situation in your home?”. The response scale ranges from 1 (“very unsatisfied”) to 7 (“quite satisfied”). The alpha is .78.

Job satisfaction. This scale has 4 items and an alpha of .71. It was elaborated based on the work by Guest (2001). The items are the following: “1. Most days I feel enthusiastic about my job”; “2. I am not happy with my job”; “3. I am often bored at work”; “4. I enjoy my job”. The response scale ranges from 1 (“completely agree”) to 5 (“completely disagree”).

Perceived performance. This was measured using the scale by Abramis (1994). It has 9 items that represent questions related to tasks performed during the past work week. The person must evaluate his or her level of performance on these tasks on a scale from 1 (“very poor”) to 5 (“very good”). Some of the items are: “1. Making decisions”; “2. Working without making mistakes”; “3. Dedication to his or her work”; “4. Meeting his or her objectives”; “5. Taking initiative”; “6. Accepting responsibility”. The Cronbach’s alpha for this scale is .82.

Organizational commitment. The level of commitment to the organization was measured with the scale by Cook and Wall (1980), which consists of 5 items and, in our study, has a reliability index of .82. The participants indicated their level of agreement with statements presented using a Likert-type scale from 1 (“completely agree”) to 7 (“completely disagree”). The items on this scale are: “I am glad to know that my work has contributed to the good of the company”; “2. I feel part of the company”; “3. Even if this organization weren’t doing well, I would be reluctant to change organizations”; “4. In my work, I would like to feel I’m making an effort not only for myself, but also for my organization”; “5. I am proud to tell people what company I work for”.

Statistical analyses

In the first place, a series of preliminary analyses were performed: descriptive analyses (means and standard deviations), correlations, and a dimensionality analysis of the factors using confirmatory factorial analysis. Random Coefficient Models were performed to test the hypotheses (Bryck & Raudenbush, 1992; Kreft & De Leeuw, 1998). This type of analysis was used instead of Ordinary Least Squared (OLS) regression, given that the participants’ data are nested in three groups (sectors). Nested data can cause the scores to lack independence, thus violating the non-independency OLS assumption and possibly producing biases in the standard error estimates. The possible inferential

errors stemming from this situation can be avoided by using Random Coefficient Models with a random term in the intercept. In addition, differential scores were used to resolve the possible problem of multicollinearity and facilitate model estimations (Aitken & West, 1991). The analyses were performed using Version 3.0 of the program “Nonlinear and Linear Mixed Effects” (NLME) (Pinheiro & Bates, 2000), in the R program (R Development Core Team, 2004).

Results

Preliminary analyses

The correlations among the study variables, and their corresponding means and standard deviations, are shown in table 1. It should be pointed out that the correlations among all the variables were significant, although moderate. The dimensionality of the different scales used in the hypothesis testing was analyzed using confirmatory factorial analysis of the three nested models. Model A represents 5 factors corresponding to the scales that measure the five variables: job insecurity, perceived performance, organizational commitment, life satisfaction, and job satisfaction, and its fit is adequate: $RMSEA = 0.076$, $\chi^2(485) = 1566.69$, $p < .01$. Model B represents 4 factors: job insecurity, organizational results (commitment and performance), life satisfaction, and job satisfaction, and it presents a worse fit, $RMSEA = 0.082$, $\chi^2(489) = 1741.62$, $p < .01$. Finally, model C represents 3 factors: job insecurity, organizational results (commitment and performance) and satisfaction (job and life), and presents the worst fit: $RMSEA = 0.098$, $\chi^2(492) = 2327.53$, $p < .01$. After performing the χ^2 difference test, we can say that the fit of model A is significantly better than that of model B, $\chi^2 \text{ diff}(4) = 174.93$, $p < .01$, and model C, $\chi^2 \text{ diff}(7) = 760.84$, $p < .01$.

Hypothesis testing

The results of the four Random Coefficient Models are presented in table 2. The results show that the perception of job insecurity is related to lower levels of life satisfaction, job satisfaction, and organizational commitment, but is not related to perceived performance. Furthermore, type of contract is negatively related to all the dependent variables.

With regard to hypothesis 2, our data show significant interactions in the prediction of the two types of satisfaction and perceived performance. In the case of life satisfaction, the interaction between job insecurity and the blue collar occupational group is significant. To discover the nature of this interactive effect, a graphic representation and a series of post hoc calculations were performed: we computed the slope of each occupational group and its standard error. The graphic shows that the relation is negative for the three groups, indicating that the higher the perceived insecurity, the lower the levels of life satisfaction. In fact, we showed by means of t tests (slope of group/standard error of the slope) that these slopes are statistically significant, that is, statistically different from a hypothesized value of 0 (Jaccard, Turrisi, & Wan, 1990): for the blue collar group $t(312) = -4.65$, $p < .01$; for the white collar group $t(312) = -.33$, $p < .05$; and for the group of professionals $t(312) = -3.01$, $p < .05$. With regard to the statistical significance of the difference between these three slopes, the t tests indicate that only the slopes corresponding to the blue collar group and the group of professionals are statistically different from each other, $t(312) = 1.63$, $p < .09$. This is a very liberal value, however, in the case of the interactions, it has been suggested to be sufficient. Various researchers, such as McClelland and Judd (1993) and Stone (1986), suggest taking the value of 0.10 as the limit for the level of p in interaction terms, in order to protect the test from the probability of committing a Type II error (Sonnetag & Frese, 2003). These results indicate that occupational group

Table 1
Means, standard deviations and correlations among the study variables

	M	D.T.	1	2	3	4	5	6	7	8	9	10
1. Sex	—	—	—									
2. Age	32.29	6.76	.14**	—								
3. Type of contract	—	—	.02	.35**	—							
4. Job insecurity	2.67	.76	-.07	-.30**	-.46*	—						
5. White collar	—	—	-.03	-.05	.01	.03	—					
6. Blue collar	—	—	-.05	.07	.05	-.13**	-.40**	—				
7. Life satisfaction	5.30	.87	-.04	-.08	.00	-.23**	.06	.04	—			
8. Job satisfaction	3.70	.75	-.06	-.08	-.07	-.21**	.00	-.08	.40**	—		
9. Perceived performance	4.11	.47	-.16**	-.03	-.07	-.16**	.07	-.03	.34**	.33**	—	
10. Organizational commitment	4.54	1.22	.00	.03	-.12*	-.22**	.06	-.03	.30**	.50**	.28**	—

Note. * $p < .05$, two-tailed. ** $p < .01$, two-tailed.

Sex (men = 1, women = 0). Type of contract (permanent = 1, not permanent = 0). White collar (white collar = 1, blue collar and professional = 0). Blue collar (blue collar = 1, white collar and professional = 0)

Table 2
Results of the random coefficient models: Job insecurity and occupational group as predictor variables

	Life satisfaction			Job Satisfaction			Perceived performance			Organizational commitment				
	PE	SE	t-student	PE	SE	t-student	PE	SE	t-student	PE	SE	t-student	p	
(Intercept)	5.36	.13	40.84	.000	.000	.000	4.19	.07	56.62	.000	4.82	.21	22.78	.000
Sex	-0.05	.11	-0.51	.613	-0.10	0.99	-0.17	.06	-2.80	.005	-0.02	.15	-0.16	.869
Age	-0.02	.01	-2.13	.033	-0.01	0.01	-0.00	.00	-0.57	.570	0.01	.01	0.49	.624
Type of contract	-0.25	.11	-2.15	.032	-0.19	0.10	-0.16	0.06	-2.48	.013	-0.61	.16	-3.85	.000
Job insecurity	-0.31	.10	-3.00	.003	-0.18	0.09	-0.09	.06	-1.57	.117	-0.42	.14	-2.94	.003
White collar	0.20	.12	1.66	.098	-0.06	0.10	0.09	.07	1.29	.197	0.14	.17	0.86	.389
Blue collar	0.11	.13	0.83	.409	-0.10	0.12	0.01	.07	0.17	.866	0.09	.20	0.43	.666
Job insecurity*White C.	-0.02	.17	-0.10	.917	-0.34	0.15	-0.05	.09	-0.51	.611	-0.36	.23	-1.56	.118
Job insecurity*Blue C.	-0.26	.15	-1.76	.079	-0.17	0.13	-0.18	.08	-2.28	.023	-0.22	.20	-1.10	.273

Note. * $p < .05$, two-tailed. ** $p < .01$, two-tailed. EP, estimated parameter. SE, standard error. Sex (men = 1, women = 0). Type of contract (permanent = 1, not permanent = 0). White collar (white collar = 1, blue collar and professional = 0). Blue collar (blue collar = 1, white collar and professional = 0)

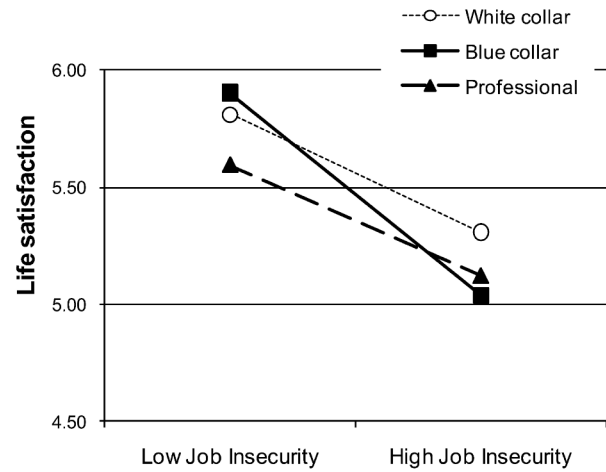


Figure 1. Interaction between job insecurity and occupational group predicting life satisfaction.

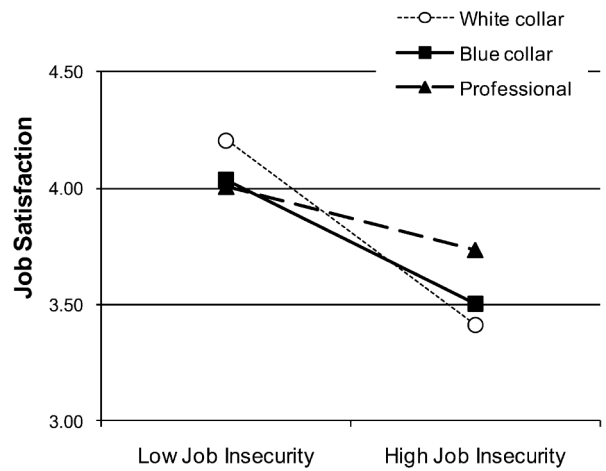


Figure 2. Interaction between job insecurity and occupational group predicting job satisfaction.

moderates the relation between job insecurity and life satisfaction: the slope of the blue collar workers is steeper, indicating that their relation between job insecurity and life satisfaction is stronger when compared to that of the workers in the professional group (see figure 1).

In predicting job satisfaction, the interaction between job insecurity and the white collar occupational group was significant. In this case, the necessary calculations were again performed to find the slopes for each group, their standard error, and the necessary t tests to discover the nature of the interaction. Figure 2 shows how the slopes of the three occupational groups are negative: the greater the job insecurity, the lower the job satisfaction. These slopes are all statistically significant, blue collar $t(312) = -3.50, p < .01$; white collar $t(312) = -4.56, p < .01$; professional $t(312) = -2.00, p < .05$. Regarding the interaction, in this case, the negative relationship between job insecurity and job

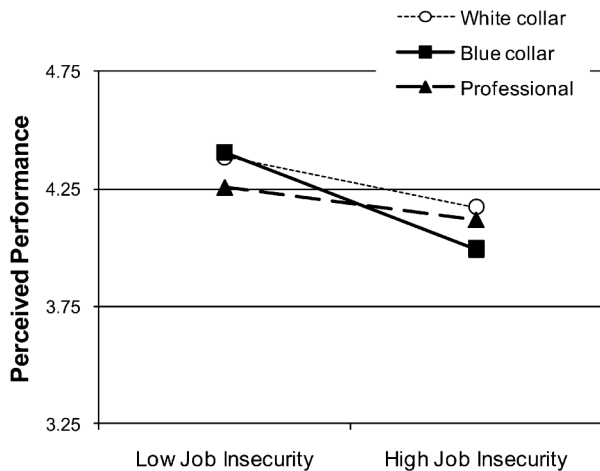


Figure 3. Interaction between job insecurity and occupational group predicting perceived performance.

satisfaction is more intense for the white collar group than for the professional group, as shown by the t test between the slopes of the two groups: $t(312) = -2.34, p < .01$. The slope of the white collar group is more inclined than that of the group of professionals, starting with higher levels of satisfaction in conditions of low insecurity, and reaching lower levels of job satisfaction when there is a high perception of job insecurity.

Finally, although perceived performance is not directly associated to job insecurity, the occupational group-job insecurity interaction significantly predicts this outcome. The post hoc computations suggest that only the slope of the blue collar occupational group is statistically different from 0, $t(312) = -4.26, p < .01$. The t tests between the different slopes indicate that the slope of the blue collar occupational group is statistically different from the slopes of the white collar group, $t(312) = -1.3, p < .10$, and the professional group, $t(312) = -2.06, p < .05$. Figure 3 shows the form of the interaction: the levels of perceived performance are more sensitive to the influence of job insecurity in the case of the blue collar occupational group, whose slope is steeper than those from the other two groups.

Discussion

The purpose of this study was, on the one hand, to provide further empirical evidence about the relationship between the perception of job insecurity and its outcomes (life satisfaction, job satisfaction, perceived performance and organizational commitment) and, on the other to clarify the moderator role of the occupational group variable in these relations.

The results of the study partially confirmed hypothesis 1. Specifically, they showed that job insecurity is negatively related to employees' life satisfaction, job satisfaction and

organizational commitment, so that, with a higher level of job insecurity, employees experience less life satisfaction, less job satisfaction and less organizational commitment. Therefore, these results add empirical evidence to conclusions from other prior studies: job insecurity is perceived as a work stressor that involves a series of negative employee reactions (e.g., Armstrong-Stassen, 1993; Chirumbolo & Hellgren, 2003; De Cuyper & De Witte, 2006; De Cuyper, Notelaers, & De Witte, 2009; Wong, Wong, Ngo, & Lui, 2005).

However, the relationship between the perception of job insecurity and perceived performance was not significant in our study. One possible explanation for the absence of this relationship could be based on the work by Muse, Harris, and Field (2003), which showed an inverted-U relation between stress and performance; and more specifically, the work by Abramis (1994), who presented an inverted-U relation between job insecurity and perceived performance. The relationship between job insecurity, understood as a stressor, and perceived performance can find support in three different theoretical frameworks, thus suggesting three different types of relations. The first is motivation theory, where stressors like job insecurity act as activators or challenges to individuals to perform better, thus making it possible to present a positive relationship between job insecurity and perceived performance. The second is interference theory, which suggests that stressors like job insecurity can interfere in employees' performance, proposing a negative relationship between job insecurity and performance. Finally, the combination theory, which is a combination of the first two, indicates that moderate levels of stressors like job insecurity act as motivators, but at high levels, stressors interfere with performance, suggesting an inverted-U relation. Taking into account the mean levels of job insecurity of the sample in the present study, it is possible that its magnitude was not great enough to produce a significant relationship with job performance. Therefore, we suggest that further research is necessary in order to contrast these theories and clarify the relation between job insecurity and perceived performance.

In another vein, although the relation between type of contract and the dependent variables was not initially hypothesized, our results showed a significantly negative relation. Thus, employees with permanent contracts reported lower levels of life satisfaction, job satisfaction, perceived performance and organizational commitment in comparison with employees with temporary contracts. These results are congruent with the current line of research about types of contracts and their effects on employees. In the literature, type of contract is a clear determinant of job insecurity, so that employees with temporary contracts experience higher levels of job insecurity than employees with permanent contracts. However, permanent employees can perceive this stressor as more threatening and, therefore, experience more negative responses to perceived job insecurity than the temporary employees (De Cuyper & De Witte, 2006; Silla, Gracia, & Peiró, 2005).

Hypothesis 2, which presented the moderator effect of occupational group in the relation between job insecurity and its outcomes, was partially confirmed. The results showed that occupational group moderated the relation between job insecurity and life satisfaction, job satisfaction and performance. In the case of the relation between job insecurity and life satisfaction and perceived performance, the less qualified employees (blue collar workers), when perceiving job insecurity, showed lower levels of distal reactions than the more qualified employees (e.g., white collar workers or professionals). These results were congruent with the theoretical trend that argues that less qualified groups of workers are more vulnerable to the negative consequences of job insecurity, as they have fewer resources to cope with the unemployment situation and less control over their work situation than the qualified employees (Frese, 1985; Gallie et al., 1998; Luthans & Sommer, 1999; Sverke et al., 2002; Swanson & Power, 2001).

In contrast, the results of the present study show how white collar workers report lower job satisfaction than blue collar workers and professionals when they perceive high job insecurity. Making a superficial interpretation, these results would support the second research trend, which points to the job's relevance for the self-concept and identity of qualified workers, at least in their work self-concept dimension. Therefore, in a threatening employment situation, these workers can react more negatively than other less qualified employees for whom their jobs may not be as essential to their own personal identity (Kaufman, 1982; Roskies & Louis-Guerin, 1990). However, from a more detailed analysis of these results, the difference in the decrease in job satisfaction between the white collar workers and the professionals, both considered qualified, when faced with the perception of job insecurity, provides additional evidence to consider. These results fall into the line of research that proposes the need to differentiate among groups of qualified workers in order to study their reactions to threatening job situations within the framework of the first research trend. Worrall and Cooper (2004) highlighted that qualified employees do not behave as a homogeneous group, but instead differences can be found in their reactions throughout the different group hierarchy levels. More specifically, the work by Armstrong-Stassen (2005) and Quick, Cooper, Gavin, and Quick (2002) showed that within the group of qualified employees there are differences in their reactions to job insecurity depending on their hierarchy. The executive-level managers reacted more negatively to the perception of job insecurity than the middle managers, due to the fact that these managers had a greater number of resources because of their position at a higher level in the hierarchy (e.g.: greater control over their work and over the decision-making processes).

In conclusion, the results obtained in this study lie in the direction of the theoretical trend that proposes that employees with less control over their own jobs and over

the decision-making processes are those who usually react more negatively to perceived job insecurity. It is especially noteworthy that this differentiation occurs not only between non-qualified employees and qualified ones, but also within the very hierarchy of these groups. For this reason, we believe that the differentiation or specification of the different hierarchical levels within these occupational groups is essential in order to better understand the role occupational group plays in the relation between job insecurity and its outcomes. In this regard, future research could be directed toward studying the moderator role of occupational group in this relation, but differentiating the occupational groups in more detail. Likewise, future research could also explore this relationship considering the role of other factors. As an anonymous reviewer suggested, future studies should take into account the role of employability and volition in the type of contract, as the mediation of job insecurity may be partial, and employability and volition could be relevant factors in explaining performance, organizational commitment, and job and life satisfaction.

Finally, the results do not show a moderator effect of occupational group in the relation between job insecurity and organizational commitment. One possible explanation for these non-significant results could stem from the tool used to measure the organizational commitment variable. As mentioned by Meyer and Allen (1991), there can be various types of organizational commitment: affective, normative and continuity commitment. In this study, the measure of affective commitment was used to reflect organizational commitment. However, the different types of organizational commitment seem to be associated with different antecedents (Mowday, 1998). For this reason, we propose that the interaction between job insecurity and occupational group could predict other types of organizational commitment that have not been considered in this study. Further research is needed to investigate these relationships.

Limitations

In spite of the results obtained, a series of limitations found in this study should be pointed out. The study design is cross-sectional, which means causal relationships cannot be established. It would be useful to design longitudinal studies to establish these types of relations and study them over time. Furthermore, the results may be influenced by common method variance, given that self-report measures were used to collect the data on all the variables studied.

Practical and theoretical implications

In this study, in addition to studying effects associated with the perception of job insecurity within organizations in a global way, the proposal was also made to analyze these effects taking into account employees' job characteristics and, more specifically, the occupational group to which they

belong. Thus, belonging to a certain occupational group has been presented as a moderator variable in the relation between job insecurity and its outcomes. Based on the results, it can be concluded that within organizations not all employees react to perceived job insecurity in the same way, so that it does not seem advisable to treat the problem of job insecurity equally in the different occupational groups found in an organization. We think it is important for human resource managers to be aware of which groups of employees are more likely to react more negatively to the perception of job insecurity, and which are not, in order to design appropriate intervention and prevention programs for each group and reduce possible negative outcomes of perceived job insecurity for the employees themselves and the organization.

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