

## Job Insecurity and Organizational Consequences: How Justice Moderates this Relationship

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The experience of job insecurity has been related to several organizational outcomes, both immediate and long-term. However, since the strength of these effects have been found to vary across studies, it is essential to identify factors that could influence the relationships. The current study examines interaction effects between job insecurity and organizational justice (distributive, procedural and interactional) for various organizational consequences (affective organizational commitment, citizenship behaviours and perceived performance), some of which have received little research attention. Data from 248 blue collar workers in the Italian organizational context showed the buffer effects of procedural and interactional justice on affective organizational commitment and citizenship behaviours. However, contrary to expectations, the results also indicated that high organizational justice exacerbated the negative impact of job insecurity on perceived performance. Implications for research on job insecurity and the moderating role of organizational justice are discussed.

Keywords: job insecurity, organizational justice, organizational consequences, uncertainty management theory, moderator effects, Italian organizational context,

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### Introduction

Job insecurity has gradually become an important focus for research on working life and became one of the most investigated job stressors (e.g., De Witte, 1999) arising from continuous transformations that have changed the nature of work.

Especially in recent years, the economic crisis probably caused an increase in feelings of uncertainty, stress and anxiety for many workers about the existence and the features of their job. In Italy, for example, the employment context has changed greatly over the past five years: OECD Employment Outlook 2010 indicates worsening labour market conditions and an increase in unemployment not only among workers with temporary and atypical contracts, but also among permanent employees.

Research has generated wide empirical evidence about the negative impact of job insecurity on aspects related to

organizational functioning; however, the strength of these effects has been found to vary across studies. Therefore, the first aim of the present paper is to test the impact of job insecurity on affective organizational commitment (an organizational attitude), citizenship behaviours and perceived performance (self-reported behaviours) in Italy.

A possible explanation for the differences in the results of studies on job insecurity could be the presence of moderating factors that can mitigate its negative outcomes. Some authors have already shown the buffering role of individual characteristics and demographics (e.g., Näswall & De Witte, 2003) and of various sources of social support (e.g., Lim, 1997). Also the positive role of organizational justice has already been identified (e.g., Brockner, 1990), particularly in the layoff and downsizing context. In this study we also intend to examine the moderating role of organizational justice in a more “normal” context for the worker’s life, without organizational changes like mergers

or downsizing. Justice might play a different role in this context. Therefore, the second aim of the present paper is to analyse the interaction between job insecurity and organizational justice in predicting affective organizational commitment, citizenship behaviours and perceived performance. The uncertainty management theory by Lind and Van Den Bos (2002) also suggests an interaction between fairness and uncertainty with job insecurity as buffer. Taking into account the stress theory of Lazarus and Folkman (1984) as well as the postulates of the uncertainty management model (UMM), we argue that high organizational justice may reduce the negative impact of job insecurity on organizational outcomes.

### **Job Insecurity and its Organizational Consequences**

Job insecurity has received growing recognition in relation with the rapidly changing organizational environment over the past decades: today it is considered as one of the main concerns of contemporary societies (De Witte, 2005). Several definitions of job insecurity have been presented in the literature, for example “powerlessness to maintain desired continuity in a threatened job situation” (Greenhalgh & Rosenblatt, 1984, p. 438), “an overall concern about the future existence of the job” (Rosenblatt & Ruvio, 1996, p. 587), and “the subjectively experienced anticipation of a fundamental and involuntary event” (Sverke, Hellgren, & Näswall, 2002, p. 243). In this study, we follow the definition by De Witte (2005) according to which job insecurity is the “perceived threat of job loss and the worries related to that threat” (p. 1). In line with De Witte and most authors, job insecurity is conceived as a subjective experience generated from the evaluation and interpretation of the individual’s current job. Workers in the same objective situation may interpret this situation in various ways; some will feel a threat to the future of their job, whereas others will not worry about losing their job.

Uncertainty about the future of the job contrasts with certainty of dismissal: the experience of job insecurity is different to actually losing one’s job. Uncertainty increases stress because it does not allow the individual to know what strategies to use in order to handle the problem, or what will take place in the future. When the individual actually loses his/her job, insecurity disappears, and the individual can start coping with the situation, for example by looking for a new job.

Numerous studies have documented the negative consequences of job insecurity for both the individual and the organization (for an overview, see e.g. De Witte, 1999; Probst, 2008; Sverke et al., 2002). In fact, research suggests that a change in working conditions, from having been secure to being uncertain, will have an impact not only on employees’ well-being but also on their work attitudes and behaviours and, in the long run, on the vitality of the organization (Sverke et al., 2004). As stated by Greenhalgh and Rosenblatt (1984): “workers react to job insecurity and their reactions have consequences for organizational effectiveness” (p. 438).

The first aim of this study is to examine the relationships between job insecurity and its organizational consequences. To date research on job insecurity and its organizational correlates is less developed than that on job insecurity and its psychological outcomes (such as well-

being). This is also emphasized in a recent overview of research on job insecurity in the past twenty-five years (Greenhalgh & Rosenblatt, 2010): “Studies that focused primarily on organizational outcomes are smaller in number [...] More research needs to be conducted to ascertain the relationship between employee reaction and organizational consequences” (p. 12).

Various theoretical frameworks can be used to explain employees’ (organizational) reactions to job insecurity (e.g., Sverke et al., 2004; De Witte, 2005). For example, the framework utilized in research on psychological contracts may be used to understand the consequences of job insecurity. The psychological contract is described as the perceived mutual obligations between two parties, the employee and the employer. Rousseau (1989) distinguished three types of contracts that characterize the relationship between individual and organization: the formal contract (a written agreement), the implied contract (norms and values) and the psychological contract. The latter is implicit, informal and subjective. It consists of the duties and commitments that the employee perceives to have in the employment relationship as a response to rewards expected for the fulfilment of obligations and for being loyal to the employer (Rousseau, 1989). According to the exchange process underlying the psychological contract, the individual and the organization have expectations of each other regarding opportunities and behaviours. The individual expects to receive specific rewards from the organization; at the same time the organization places demands on the individual. Within the psychological contract, the idea of balance is fundamental: a perceived imbalance between efforts and rewards results in the perception of a violation of the contract.

As regards its content, most of the research has distinguished between transactional and relational psychological contracts (Millward & Brewerton, 2000). The transactional contract refers to a short-term exchange of specific benefits and contributions that are mainly monetary or economic in focus. On the contrary, the relational contract refers to a long term arrangement, and focuses on social-emotional exchange, with job security in exchange for loyalty as critical facets. Therefore, the experience of job insecurity can lead to the perception of a breached relational psychological contract (De Cuyper & De Witte, 2006; Sverke et al., 2004), given that the individual holding predominantly relational expectations considers secure employment as part of his or her implied agreement with the employer.

A breach of the psychological contract may give rise to negative reactions by the party experiencing the violation and may seriously impair the relationship (Robinson, 1996). In the short term, the reaction may be a strong emotional response directed towards the party considered responsible for the violation (Morrison & Robinson, 1997). As a result, these affective reactions may contribute to the formation of negative work attitudes and, in a later phase, of negative behaviours (Rupp & Spencer, 2006). Various studies (see for a review Zhao, Wayne, Glibkowski, & Bravo, 2007) investigating the consequences of psychological contract breach have indeed reported its effects on both work and organizational attitudes and behaviours. Robinson and Morrison (1995), for example, found a decrease in organizational commitment when breach occurs because the employees are less likely to

identify with the organization. Compared with affective reactions and attitudes, behaviours triggered by psychological contract violation can lead to a more tangible impact on the workplace. As Robinson (1996) noticed, organizational citizenship behaviours (behaviours not explicitly required by the job), are less likely when workers perceive a negative relationship with their employer. Also in-role behaviours (performance) are negatively related to psychological contract breach (Turnley, Bolino, Lester, & Bloodgood, 2003), because employees may refuse to fulfil their obligations if they perceive that the organization did not fulfil its duties.

Job insecurity is perceived as an important aspect of the (relational) psychological contract. Consequently, it is vital to restore the psychological contract in order to maintain the relationship between the employee and the organization.

Despite the fact that most research associated job insecurity with negative outcomes, findings have shown that the strength of this relationship varies among studies (see the meta-analysis by Sverke et al., 2002). Taking into account the organizational consequences, for example, most studies have shown that affective organizational commitment has a moderate negative relationship with job insecurity (e.g., Davy, Kinicki, & Scheck, 1997), although other studies have found a strong negative association (e.g., Armstrong-Stassen, 1993) or no significant relation at all (e.g., Kinnunen, Mauno, Nätti, & Happonen, 1999).

The association between job insecurity and performance is not always clear: employees' performance seems to be affected by job insecurity. However, the empirical evidence is not always unambiguous (Sverke et al., 2002). Armstrong-Stassen (1993) and Rosenblatt, Talmud, and Ruvio (1999) found that job insecurity is related to a decrease of self-reported performance. However, other studies suggest that employees who perceive a risk of layoff may increase their work effort in order to be more valuable to the organization, and consequently not to be dismissed (Brockner, Grover, Reed, & DeWitt, 1992; Sverke & Hellgren, 2001). Moreover, in the meta-analysis by Sverke, Hellgren, and Näswall (2002) the negative association between job insecurity and work performance was found to be non-significant. In the more recent meta-analysis of Cheng and Chan (2008), which included a larger amount of studies, this relationship was found to be significant, however.

The relationship between job insecurity and organizational citizenship behaviours has not been thoroughly examined and results thus far have been inconsistent. For example, Bultena (1998) found that job insecurity was related to higher levels of OCB. In the study of Feather and Rauter (2004) however, the opposite result occurred. Also in a recent research conducted by Reisel, Probst, Chia, Maloles, and König (2010), the results showed that employees reduced their OCBs as their job insecurity increased.

This study is conducted in an Italian organizational context. There is little research on job insecurity in Italy. Mainly studies by Chirumbolo and colleagues (e.g., 2003; 2005) provide empirical evidence on correlates of job insecurity, in line with the results of most international research. However, the employment context in Italy has changed greatly during the last years, which might have contributed to increased feelings of insecurity. In fact, the

OECD Employment Outlook 2010 indicates worsening labour market conditions in the last year. The unemployment rate reached 8.7% in Italy in May 2010, an increase of 2 percentage points since the onset of the economic crisis (December 2007). Much of the increase in unemployment in Italy took place in recent years. Moreover, while job losses have initially been concentrated among those on temporary and atypical contracts, the recent pick up in unemployment appears to be largely due to job losses among permanent employees (195,000 permanent jobs have been destroyed in the last years).

Therefore, in order to provide empirical evidence on the relationships between job insecurity and organizational outcomes in the Italian employment context, we hypothesize:

*H1: Job insecurity is negatively related to affective organizational commitment (H1a), organizational citizenship behaviour (H1b), and perceived performance (H1c).*

### **Job Insecurity and Negative Consequences: The Moderating Effect of Organizational Justice**

Job insecurity may thus convey the feeling that the psychological contract between the individual and the organization has been breached. The construct of the psychological contract is based on the theories of equity (Adams, 1965) and organizational justice (Greenberg, 1987). Both have their roots in social exchange theories (Blau, 1964). They emphasize how work involvement and motivation are influenced by the perception of the individual-organization relationship and by the rules that govern it. According to the contribution of equity theory, the attitudes and behaviours in the workplace come from the employee's evaluation of equity between inputs given and outputs received by the organization, compared to other colleagues or to own ideals and representations.

Organizational fairness theory has taken a step forward by expanding the concept of equity and including not only outcome distributions and allocations (distributive justice), but also the fairness of the procedures used to determine outcome distributions (procedural justice). Subsequently, Bies and Moag (1986) also introduced the importance of the quality of the interpersonal treatment that people receive when procedures are implemented: they referred to these aspects as interactional justice. A further specification was made more recently: interactional justice has come to be seen as consisting of two aspects (e.g., Greenberg, 1993), interpersonal justice, which reflects the degree to which people are treated with politeness, dignity and respect by the decision maker, and informational justice, which focuses on explanations provided for the resource allocation decision (Colquitt, Conlon, Wesson, Porter, & Ng, 2001).

Fair treatment has a variety of positive effects on organizational behaviour outcomes: there is ample empirical evidence demonstrating that justice, for example, enhances job satisfaction and organizational commitment (e.g., Masterson, Lewis, Goldman, & Taylor, 2000), promotes organizational citizenship behaviours (e.g., Niehoff & Moorman, 1993), improves job performance (e.g., Cohen-Charash & Spector, 2001), and facilitates the acceptance of company policies (e.g., Greenberg, 1994).

A deeper examination of how people take fairness into account reveals other important functions covered by justice in the organizational context. Recent evidence suggests that people also use fairness to make a number of related but conceptually distinct social and psychological judgments, regarding e.g. the nature of their relationship with the other party (e.g., Lind, 2001), the degree to which the other party can be trusted (e.g., Brockner, Siegel, Daly, & Martin, 1997) and the extent to which they are held in high regard by the other party (e.g., De Cremer & Tyler, 2005).

When people are uncertain about one of these issues, they are more likely to draw on (and thus be affected by) justice information. This line of reasoning has also been developed by Van den Bos and Lind (2002) in their uncertainty management theory. According to these authors, there is a strong connection between justice and uncertainty: they “are so closely linked that it is in fact impossible to understand the role of one of these concepts in organizational psychology without reference to the other” (Lind & Van den Bos, 2002, p. 181). Uncertainty management theory suggests that a key function, maybe the key function, of justice is that it provides people with a way to cope with uncertainties that arise in their life. Accordingly, individuals appear to make greater use of justice judgments when they are experiencing uncertainty, and fairness effects become stronger in the presence of various sources of uncertainty (as demonstrated by Lind & Van den Bos, 2002, in several laboratory studies). In this case, fair treatment will provide a guide that directs personal attitudes and actions needed to deal with uncertainty. In this way, the individual will be able to maintain positive behaviours and favourable feelings toward the organization.

Uncertainty not only affects how justice judgements are used, but also how they are generated. The psychological dynamics of fairness judgments change depending on whether they are held with greater or lesser certainty. This is also suggested by earlier research on fairness heuristic theory by Lind (e.g., 2001), according to which people use cognitive shortcuts to generate fairness judgements substituting one type of justice for another. More precisely, if an individual has some information about one type of justice (e.g. procedural justice), but is uncertain about another type (e.g. distributive justice), he or she will use the available and certain information to generate a belief about the uncertain type (substitutability effect).

Therefore, drawing on fairness heuristic theory, uncertainty management theory argues that when individuals are confronted with uncertainty, they turn to their evaluations of fair or unfair treatment in order to decide how to react. If they are insecure about their justice judgements, they resolve this uncertainty by using cognitive shortcuts, such as substituting one type of justice for another. When justice information is available, and people think that they have been fairly treated, they will show the positive effects of justice in terms of attitudes and behaviours favourable toward the organization. Fairness perceptions will serve them to reduce the concerns about uncertainty. On the other hand, if people believe that they have been treated unfairly, they will engage in self-protective actions or even in counterproductive behaviours

in order to decrease uncertainty by seizing control of their fate and identity (Lind & Van den Bos, 2002).

The uncertainty management theory has the merit of having specified the conditions under which fairness judgments may have a stronger impact on a variety of outcomes. Therefore, the theory responds to a fundamental question in the psychology of social fairness: why and when do justice become more important for employees?

In their model, Lind and Van den Bos state that people are especially concerned about fairness when they find themselves in unclear or unpredictable situations because they use justice to remove uncertainty or alleviate the discomfort that it generates. Consequently, the authors are assuming that uncertainty will play a moderating role in the relationship between justice and outcomes.

The interaction effect between justice and uncertainty can be also viewed in another way, by considering justice as moderator. In this study, we want to examine the buffering role of justice in moderating the association between job insecurity and organizational outcomes. In order to support this postulate, the principles of the uncertainty management model will be extended with notions from stress theory, suggesting that high levels of stress have adverse effects on employees’ attitudes and behaviours. According to Lazarus and Folkman (1984), the level of stress that individuals perceive depends on evaluations of the degree of threat to their wellbeing (primary appraisal) and on beliefs about the likelihood of being able to counteract the negative consequences of the threat (secondary appraisal). Stress is jointly and interactively determined by people’s primary appraisal, which refers to the perception of threat, and their secondary appraisal, which refers to the perception of control. Consequently, the experience of strain is an interactive function of these two aspects and will be more intense when the perceived threat is high and perceived control is low. The effects of psychological strain are generally negative: high levels of stress are associated with reductions in emotional and physical well-being, as well as with a decrease in important work attitudes (e.g., organizational commitment) and behaviours (e.g., job performance). Indeed, some stress reactions occur closer in time to the stress experience, whereas other type of strains (e.g., behaviours) may only develop over time (Zapf, Dormann, & Frese, 1996). Moreover, Brockner et al. (2004) use Homans’ Exchange theory (1961) to motivate why emotional strain can extend to attitudes and even behaviours over time.

Lazarus and Folkman’s (1984) framework suggests that job insecurity may be considered an important work stressor, as demonstrated in many studies (e.g., De Witte, 2005). That is, insecure employees perceive the threat of losing their job and it is not clear whether it will happen in the future (unpredictability). Moreover, they also experience a sense of powerlessness in maintaining their job (uncontrollability). Uncertainty about the possibility of job loss makes it difficult for individual to use effective and appropriate coping strategies in order to counteract the threat. Therefore, perceptions of both high threat and low control characterize job insecurity as a source of intense stress.

By integrating stress theory and organizational justice theory in order to describe the predicted interactive relationship between perceived threat and perceived

control, we suggest that justice may be a proxy for the secondary appraisal of perceived control, which enables people to determine whether they will be able to neutralize the perceived threats (Brockner, 2010). Indeed, specific elements of process fairness may shape people's perceptions of control. Considering the criteria underlying procedural justice, one could assume that when people are allowed to have voice in a decision process, they may influence the extent to which they believe that they will be able to deal with the threat. Thibaut and Walker (1975) originally conceived voice as process control and decision control that are two fundamental criteria for procedural justice. Moreover, when people believe that they have been treated with interactional justice, they may experience social support, which in turn make them feel more empowered to deal with the threat in their environment (Brockner, 2010). People's control perceptions also depend on the extent to which they believe that outcomes, especially unfavourable outcomes, are predicable (e.g., Affleck, Tennen, Pfeiffer, & Fifield, 1987). Several studies have found empirical evidence for the positive role of the various factors related to fairness. For example, employees report higher job satisfaction when they have an opportunity to provide input into how decisions are made (e.g., Lind & Tyler, 1988). Having an influence on decision-making and perceptions of fair process has been associated with less negative reactions to job insecurity (Brockner, 1990). Therefore, employees feel a sense of control over the situation when they have an opportunity to influence the decisions being made. Barling and Kelloway (1996) reported that control perceptions had a positive direct effect on various health indicators and work attitudes. Tetrick and LaRocco (1987) have also shown that control moderated the relationship between perceived stress and job satisfaction.

Fairness in general is more likely to engender outcome predictability, especially over the longer haul, and the resulting sense of control is likely to buffer reactions to stressful situations (Greenberg & Colquitt, 2008).

Consequently, considering the interactive relationship predicted in Lazarus and Folkman's theory, in this study job insecurity may map onto perceived threat, and justice may map onto perceived control. We expect high perceived control (i.e., justice) to reduce the extent to which a high threat (i.e., job insecurity) will have a negative effect on attitudes and behaviours, relative to when perceived control is low. Thus, employees fairly treated believe that they have the control over threatening situations and the resources to counteract its harmful effects, thereby minimizing their impact. High fairness may serve as an antidote for the negative feelings that are elicited by the event and in so doing reduce psychological strain.

To date, several studies have found empirical support for the positive role of fairness in contexts of layoff and downsizing, where job insecurity is expected to be widespread (e.g., Brockner, 1990). However, "more research is needed to clarify the moderating role of perceptions of fairness on the relation between job insecurity and its consequences" (Sverke et al., 2002, p.258). This study aims to expand these previous findings examining the role of justice in a more "normal" (and probably less uncertain) work context, in a workplace without organizational changes. In effect, most downsizing studies have focused on justice of the layoff process; that is

specifically justice related to decisions made regarding the downsizing process or the treatment received by victims (survivors). In these cases, justice may play a different role.

Moreover, the uncertainty management model assumptions have not been tested in real-work settings. This research proposes to extend the use of justice to include not only uncertainty related to social interdependence interactions (examined by UMM), but also other sources of uncertainty like job insecurity.

On the other hand, this study may also contribute to specify the conditions under which the negative impact of job insecurity is less strong, contributing to research on variables that reduce job insecurity and its harmful components. Consequently, the following hypotheses are formulated:

*H2: Organizational justice (Distributive, Procedural and Interactional) buffers the negative impact of job insecurity on organizational outcomes: affective organizational commitment (H2a), OCB (H2b) and perceived performance (H2c).*

Specifically, when justice is high, the negative association between job insecurity and outcomes will be less strong.

## Method

### Participants

The survey was conducted in 2 companies of the North-East of Italy (Verona): one organization was a paper mill industry (158 workers) and the other was a cooperative of services, cleaning and logistics (92 workers). All the employees involved (N= 250) were blue-collar workers, a category heavily affected by the economic crisis of recent years.

Table 1. Characteristics of the sample

Variables		N	%
Gender	Male	189	75,6%
	Female	61	24,4%
Age	18-35	83	33,2%
	36-45	103	41,2%
	46-65	64	25,6%
Educational level	< 5 years	2	0,8%
	5-8 years	74	29,6%
	9-13 years	159	63,6%
	> 13 years	15	6%
Tenure	< 1 year	18	7,2%
	1-5 years	71	28,4%
	5-10 years	53	21,2%
	> 10 years	108	43,2%
Contract	Permanent	226	90,4%
	Temporary	24	9,6%

The sample was composed of 75,6% men and 24,4% women. The mean age was included in the range from 36 to 45 years (42%). The majority of the participants, 63,6%, had an educational level from 9 to 13 years of school,

corresponding to a secondary school degree. With regard to tenure, 43,2% of the participants had been working in the company for more 10 years and 90,3% had a permanent contract (see Table 1 for the characteristics of the sample). The response rate was 66 percent.

An analysis of missing data was carried out: there were two cases with more than 5% missing values, so they were removed (Chemolli & Pasini, 2007). All other cases did not have missing values, so the sample size consisted of 248 cases.

#### *Procedures*

The proposal of the project was explained to the head of the organization. After having obtained the agreement, workers union representatives were informed about the aim of the project and its relevance. Subsequently they communicated this information to their colleagues emphasizing the importance of participation in the project. Questionnaires were administered in meetings organized during working hours, where the researcher explained how to fill it out and guaranteed confidentiality. Respondents were assured that there was no right or wrong answer and that they should answer all questions honestly.

#### *Measures*

Control variables. Some variables were statistically controlled for because they might have a confounding effect on the results. For example, in the job insecurity literature, individual background characteristics emerge as determinants of job insecurity perceptions. In particular, the roles of gender, age and branch of industry have been emphasized. Given that control variables were categorical measures in this study, they were codified as dummy variables: gender (1 = male; 0 = female); age, two dummy variables, young (1 = - 35 years; 0 = rest) and old (1 = + 45 years; 0 = rest); type of organization (1 = paper industry; 0 = cooperative).

Job insecurity was measured using 4 items focusing on the worker's perception and worry of whether they would be able to keep their current job (De Witte, 2000). One example of the items used is: "I am sure I can keep my job" (reverse coded). Participants were asked to express their own agreement/disagreement with the items on a scale from 1 (= strongly disagree) to 5 (= strongly agree). The Cronbach's alpha of this scale was .84.

Organizational justice. Organizational justice is defined as the set of rules and social norms governing how outcomes should be distributed, the procedures used for making such distribution decisions, and how people are treated interpersonally (Folger & Cropanzano, 1998).

Distributive justice was measured with 4 items from Niehoff and Moorman (1993), evaluating the fairness of different work outcomes, including pay level, work schedule, workload and job responsibilities (e.g. "I think that my level of pay is fair"). Respondents scored these items on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The reliability (Cronbach's alpha) for this scale was .73.

Procedural justice was measured with 5 items from Niehoff and Moorman (1993), assessing the degree to which job decisions included mechanisms that ensured the gathering of accurate and unbiased information, employee voice and an appeal process (e.g., "All job decisions are applied consistently across all affected employees"). The

response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The scale reached a Cronbach alpha of .87.

Interactional justice was measured with 7 items from Niehoff and Moorman (1993), evaluating the degree to which employees felt their needs were considered in, and adequate explanations were made for, job decisions (e.g.: "When decisions are made about my job, the general manager treats me with respect and dignity"). The scale ranged from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha for this scale was .94.

Affective organizational commitment was measured with 4 items referring to the affective attachment toward the organization (Meyer & Allen, 1991). A sample item was "This organization has a great deal of personal meaning for me". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The scale reached a Cronbach alpha of .83.

Organizational citizenship behaviours are behaviours that help the organization but may not be directly or explicitly recognized in the organization's formal reward system (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Altruism was selected as example of OCBs in this study. Altruism (e.g., helping new colleagues and freely giving time to others) is directed toward other individuals and contributes to group efficiency by enhancing individuals' performance. It was measured with 4 items from the scale of Podsakoff, MacKenzie, Moorman, and Fatter (1990). A sample item is "I help others who have heavy work load". The responses were made on a five-point scale (1 = never; 5 = always). The reliability (Cronbach alpha) was .77.

Perceived performance was measured with 4 items from Abramis (1994). This scale was already used in previous studies (e.g., the European PSYCONES study, 2006); Abramis refers to this measure as technical performance. Employees were asked to evaluate the quality of their performance during the last working week ("How well did you fulfil the following tasks?"). The scale ranged from 1 (very badly) to 5 (very well). Items referred to, for example, achieving one's objective or performing without mistakes. The Cronbach's alpha of this scale was .64.

#### *Data Analysis*

First, descriptive statistics and correlations among the variables were computed.

Then, a confirmatory factor analysis was conducted in order to further validate the measures. The two tested models included all variables involved in this study, namely job insecurity, organizational justice, affective organizational commitment, altruism and perceived performance. The first model included five factors considering all scales with a single factor structure, also for organizational justice, in which all items were indicative of one large factor.

In the literature, organizational justice scales are considered with different factor structures. The most commonly used is a two-factor model, with distributive justice as one factor and procedural justice, including interactional, as the other. The second most commonly used conceptualization is a three-factor model, with distributive, procedural and interactional justice. Moreover, Greenberg and Colquitt (2008) suggest that when dimensions are highly correlated, organizational justice can be modelled as a higher order factor that drives scores on

the distributive, procedural and interactional dimensions. The latter is our case. Therefore, the second measurement model encompassed the same factors as the first, but for organizational justice a factorial structure of second-order was used. In this model, the three first-order factors (distributive, procedural and interactional justice) acted as indicators of one higher order factor (organizational justice).

The fit of the models was evaluated using various indices: 1- the Non-Normed Fit Index (NNFI); 2- the Comparative Fit Index (CFI); 3- Root Mean Square Error of Approximation (RMSEA); 4- Standardized Root Mean Square Residual (SRMR); 5- Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). The latter two indices are used to compare the fit of two or more models estimated from the same data set; lower values indicate a better fit. For NNFI and CFI values between .90 and .95 are acceptable. RMSEA and SRMR values indicate a good fit when they are smaller than or equal to .08. Competing models were also compared based on the chi-square difference test in addition to the fit indices.

In order to test the moderation hypothesis by justice, an hierarchical regression analysis was performed. As described by Cohen, Cohen, West, and Aiken (2003), a three-step regression model was carried out. In the first step control variables (type of organization, gender and age) were introduced. In the second step, job insecurity and

the three dimensions of organizational justice (distributive, procedural and interactional) were added to the regression model. Finally, the interaction term (job insecurity x organizational justice) was introduced in the third step. Before calculating the interaction terms, the predictor variable (job insecurity) and the moderator variable (organizational justice) were centred in order to minimize multicollinearity among interactions and their individual components (Aiken & West, 1991).

To identify the form of moderation, when significant, the regression model was plotted at two values of the moderating variable; that is one standard deviation above the mean and one standard deviation below the mean.

**Results**

Descriptive statistics of the scales (means and standard deviations), intercorrelations among the variables and Cronbach's alphas are reported in Table 2. As expected, the correlation matrix showed that job insecurity and the organizational outcomes are significantly correlated. Pearson correlation coefficients indicate a significant negative relationship between job insecurity and affective organizational commitment ( $r = -.43, p < .01$ ), between job insecurity and altruism ( $r = -.29, p < .01$ ), between job insecurity and perceived performance ( $r = -.10, p < .05$ ).

Table 2. Means, Standard Deviations, Reliabilities (Cronbach's alpha) and Correlations among all variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Type of organization (dummy)	-	-	-										
2. Gender (dummy)	-	-	.62**	-									
3. age young (dummy)	-	-	.47**	.21**	-								
4. age old (dummy)	-	-	-.30**	-.17**	-.41**	-							
5. Job Insecurity	2.18	.90	.31**	.37**	.17*	-.13*	(.84)						
6. Distributive Justice	2.97	.87	-.07	-.05	.05	-.03	-.48**	(.73)					
7. Procedural Justice	2.49	.95	.18**	-.11	.17**	-.07	-.24**	.49**	(.87)				
8. Interactional Justice	2.66	1.01	.24**	-.07	.23**	-.05	-.24**	.52**	.71**	(.94)			
9. Affective organiz. commitment	3.22	1.01	-.39**	-.40**	-.21**	.23**	-.43**	.54**	.35**	.34**	(.83)		
10. Altruism	3.59	.92	-.47**	-.49**	-.22**	.07	-.29**	.08	.12*	.15*	.39**	(.77)	
11. Perceived Performance	4.01	.56	-.04	.13	-.06	.05	-.10*	-.07*	-.08*	-.06*	.14*	.15*	(.64)

Note. N = 248. Reliability estimates (Cronbach's alpha) are in parentheses. Type of organization: 1 = paper industry; 0 = cooperative service. Gender: 1 = male; 0 = female. Age young: 1= -35 years, 0= rest. Age old: 1= +45 years, 0= rest. \*  $p < .05$ ; \*\*  $p < .01$

*Confirmatory Factor Analysis of the measurement model*

In order to test the measurement model, confirmatory factor analysis (CFA; maximum likelihood estimation) was carried out using AMOS 16.0 (Arbuckle, 2005). Two different models were tested and compared. The first model included five factors considering all scales with a single factor structure, also for organizational justice, in which all indicators loaded on one factor. The results of the first model show a significant chi-square value ( $\chi^2(454) = 1011.550, p < .001$ ). However, because the chi-square formula includes the sample size, its value is biased with large sample sizes and it is almost always statistically significant. For this reason, the goodness of fit of the models was assessed with other fit indices. The NNFI and CFI values were below the threshold of .90 (NNFI = .87; CFI = .88); the values of RMSEA and SRMR, instead, did

not exceed the critical value of .08 (RMSEA = .07, Confidence Interval = .065 - .076; SRMR = .08). The values of AIC and BIC were 1159,550 and 1419,544 respectively.

The second CFA model included the same five factors but for organizational justice, a factorial structure of second-order was used. The results of this model provided a better fit:  $\chi^2(453) = 910.482, p < .001$ ; NNFI = .90; CFI = .90; RMSEA = .06 with C.I.= .058 - .070; SRMR = .07. Moreover, the AIC and BIC values were smaller, 1060.482 and 1323.989 respectively. This second model fitted the data significantly better than the first, not only for the values of fit indices but also for the chi-square difference test ( $\Delta\chi^2(1) = 101.068, p < .001$ ).

*Main effects and moderating effects*

Table 3 shows the regression results for job insecurity and organizational justice in predicting affective organizational commitment, altruism and perceived performance, after controlling for type of organization, gender and age.

As shown in Step 2, the main effects of job insecurity on organizational consequences were significant and negative, thus supporting hypothesis 1. Specifically, job insecurity was significantly and negatively related to affective organizational commitment (H1a,  $\beta = -.25$ ;  $p < .01$ ), altruism (H1b,  $\beta = -.21$ ;  $p < .01$ ) and perceived performance (H1c,  $\beta = -.18$ ;  $p < .05$ ). Hence, employees reported lower levels on these organizational outcomes when they experienced job insecurity.

Hypothesis 2 on the moderating effects of organizational justice in the relationship between job insecurity and organizational consequences, was only partially confirmed (see Step 3). The results showed significant interactions between job insecurity and procedural justice, as well as between job insecurity and interactional justice, to explain affective organizational commitment, altruism and perceived performance. The results of Step 3 thus indicate that the main effects were qualified by the presence of significant two-way interactions (Aiken & West, 1991), which accounted for a significant amount of additional variance in outcomes and yielded a significant regression weight. The interaction between job insecurity and distributive justice was however only significant for perceived performance.

Table 3. Results of hierarchical regression analyses (standardized regression coefficients) for job insecurity and its organizational consequences (affective organizational commitment, altruism and perceived performance).

	Affective Organizational Commitment	Altruism	Perceived Performance
Step 1			
Type of organization (dummy)	-.23**	-.26**	-.17**
Age young (dummy)	.18**	.07	.06
Age old (dummy)	.24**	.22**	-.18**
Gender (dummy)	-.02	-.04	-.01
Step 2			
Job Insecurity	-.25**	-.21**	-.18**
Distributive Justice	.24**	.11*	.13*
Procedural Justice	.22**	.10*	.21**
Interactional Justice	.26**	.22**	.23**
Step 3			
JI x DJ	.06	.05	-.10*
JI x PJ	.14**	.11*	-.12*
JI x IJ	.09*	.08*	-.12*
R2 change Step 1	.11	.10	.09
R2 change Step 2	.19	.18	.15
R2 change Step 3	.01	.01	.00

Note: N = 248. Values are standardized betas. Only the last step of the regression analyses is reported. Type of organization: 1 = paper industry; 0 = cooperative service; Gender: 1 = male; 0 = female. Age: young: 1 = -35 years, 0 = rest; age old: 1 = +45 years, 0 = rest. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

In order to identify the nature of the interactions, the regression model was plotted at two level of the

moderating variable (e.g. one standard deviation above and one standard deviation below the mean). Figure 1, for example, shows that the relationship between job insecurity and affective organizational commitment was more negative for employees experiencing low procedural justice than for employees experiencing high procedural justice, thus supporting the moderating (buffering) role of perceived justice. In fact, workers reported lower levels of affective organizational commitment, were those with high job insecurity and low perceptions of procedural justice. A similar pattern was found regarding altruism: here too the association between job insecurity and altruism was stronger for respondents scoring low on justice.

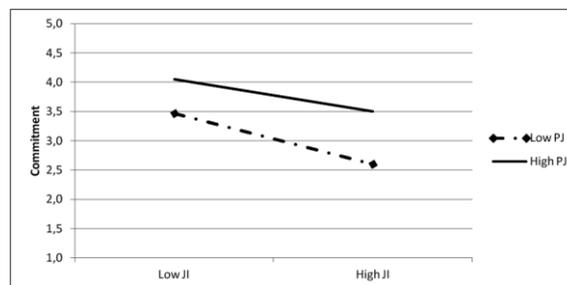


Figure 1. Interaction between Procedural Justice and Job insecurity in predicting Affective Organizational Commitment

Similar findings were found regarding the interaction between job insecurity and interactional justice: the negative impact of job insecurity on both affective organizational commitment and altruism (for altruism, see Figure 2) was buffered by high perceptions of interactional justice. The association between job insecurity and the organizational outcomes was less strong among the workers who perceived a high level of justice compared to those who perceived low justice. Workers who reported high levels of interactional justice and were highly insecure did not differ significantly on affective organizational commitment and altruism when compared to their more secure colleagues.

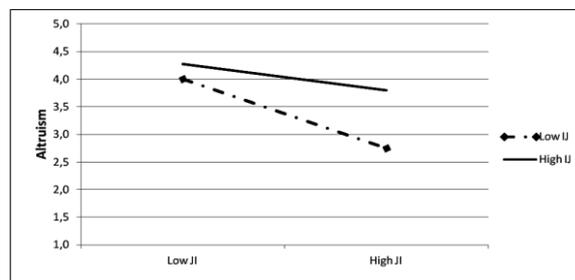


Figure 2. Interaction between Interactional Justice and Job insecurity in predicting Altruism

However, contrary to expectations, the significant interactions between job insecurity and procedural, distributive, interactional justice in predicting perceived performance showed the opposite pattern. In this case high justice exacerbated the negative impact of job insecurity on perceived performance. That is, the association between job insecurity and perceived performance was stronger for employees who reported high perceptions of justice (PJ, DJ, IJ). This is illustrated, for example, in Figure 3.

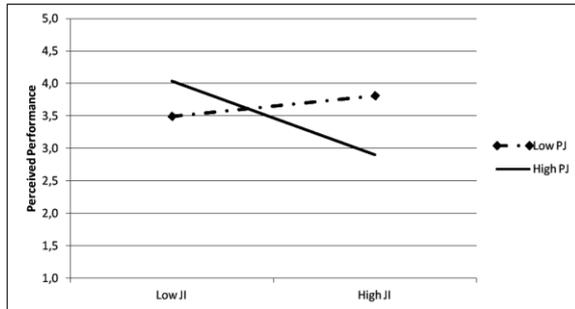


Figure 3. Interaction between Job Insecurity and Procedural Justice in predicting Perceived Performance

### Discussion

The aim of this study was to investigate the buffering role of justice in moderating the negative relationship between job insecurity and its organizational consequences. The present study aimed to replicate previous research on the negative correlates of job insecurity in the Italian organizational context, providing additional evidence on job insecurity as an important work stressor. Next, it developed and tested the hypothesis of an interactive association between job insecurity and organizational justice in predicting outcomes.

In support of hypothesis 1, the results identified a negative association between job insecurity and its organizational consequences. When job insecurity increased, affective organizational commitment, altruism and perceived performance decreased. These findings are consistent with the results of previous empirical research on the negative consequences of job insecurity (e.g., Cheng & Chan, 2008). Next, the results are also in line with the theoretical framework on the breach of the (relational) psychological contract and its consequences for organizational outcomes.

Hypothesis 2 stated that organizational justice moderates the relationships between job insecurity and its postulated negative correlates. The results partially confirmed this hypothesis. Procedural and interactional justice did reduce the impact of job insecurity on affective organizational commitment and altruism, as expected. Thus, these negative correlates of job insecurity became more notable in the absence of justice.

With regard to perceived performance, the interaction terms among job insecurity and the three dimensions of justice were significant, but the direction of the interaction was contrary to expectations: job insecurity was associated with less (instead of more) perceived performance when justice was high. For these findings, justice literature and some specific models could offer a possible explanation. Research shows that in general, workers react more positively when justice is high, because higher fairness leads people to have more positive feelings and evaluations about themselves (De Cremer & Tyler, 2005). Two theories may account for the positive relationship between justice (in particular, procedural or interactional) and self-evaluations: Group Value Theory by Lind and Tyler (1988) and Relational Theory by Tyler and Lind (1992). According to these frameworks, individuals use procedural and interactional justice information to make inferences about how they are regarded by the parties involved in the procedures. Fair procedures indicate that individuals are

viewed more favourably, therefore engendering more positive self-evaluations (Tyler, DeGoe, & Smith, 1996). On the other hand, recent studies (e.g., Schroth & Shah, 2000) have identified that, when the outcomes are unfavourable, negative, stressful and personally important, the positive relationship between justice and self-evaluations is less likely and, in some case, could even be reversed. The explanation draws on the Attribution Model of Justice (Brockner, 2002; Van den Bos, Bruins, Wilke, & Dronkert 1999) according to which individuals make internal or self-attributions for their outcomes. Low justice leads people to externalize the reasons for their outcomes, whereas high justice causes people to believe that they received the outcomes they deserved. Thus, high fairness influences individuals' tendency to make more internal attributions for their outcomes, and in the case of negative outcomes, the positive relationship between fairness and self-evaluations can be reduced or even inversed (Brockner et al., 2003).

On the other hand, job insecurity threatens a person's self esteem (Kinnunen, Feldt, & Mauno, 2002), because it is determined by feelings of powerlessness to counteract the fear and worries of job loss. Therefore, integrating this perspective with the one of the Attribution Model of Justice, we can suppose that insecure individuals experience more threats to their self-esteem. At the same time, they may be inclined to attribute their insecure position to an internal and stable cause (e.g., lack of ability, in the case of performance) rather than to an external cause (e.g., an unfair situation). Consequently, the interaction between job insecurity and organizational justice may lead to a lower appraisal of one's performance, rather than to a lower actual performance. This perspective could perhaps explain why we observe a stronger negative association between job insecurity and perceived performance when employees perceive more justice.

Drawing on the justice literature, could also help us explaining the lack of a significant interaction with distributive justice. The perception that the formal procedures and the quality of treatment received from authorities (e.g. procedural and interactional justice) are fairly implemented, will lead to confidence that their interests will be protected by the organization. Control perceptions over decisions, underling these two types of justice, are the most significant factor in the procedural system. Employees who experience job insecurity probably assign more importance to procedural and interactional justice, because they need to feel a sense of control. The perception of a relatively high sense of control among insecure employees might lead them to think that they are able to counteract the threat regarding the future of their job. Thus, procedural and interactional justice, rather than distributive justice, may alleviate the feeling of uncontrollability and unpredictability characterizing job insecurity. Therefore, these forms of justice are probably more able to act as moderators of the negative consequences of job insecurity.

Overall, the findings of this study on the moderating role of justice in the Italian organizational context are consistent with previous research on layoff survivors and the uncertainty management model (Brockner, 1990; Lind & Van den Bos, 2002). In agreement with the UMM, individuals who are insecure rely more on fairness judgments and the effects of justice are expected to be

larger. Becoming more salient, justice perceptions can buffer the negative correlates of job insecurity. On the other hand, layoff studies have substantiated the benefits of justice policies during a layoff process and have emphasized the important role of justice in this context.

The present study can contribute to both theory and practice. Testing the uncertainty management model in workplace and specifically the moderating role of justice, can help us understanding both the negative organizational consequences of job insecurity as the factors that can mitigate its harmful components. As several authors pointed out (e.g., Sverke & Hellgren, 2002), the factors that may moderate the negative outcomes of job insecurity represent a fruitful area of research from both the individual and the organizational perspective.

From a practical point of view, the fact that organizational justice was found to buffer the consequences of job insecurity suggests that enhancing fairness perceptions can also improve the relationship between job insecurity and outcomes. These results provide evidence about measures and actions that organizations can take in order to prevent job insecurity or at least mitigate its consequences, because justice-enhancing policies are found to be especially beneficial when workers are insecure.

#### *Limitations and implications for future research*

There are some limitations related to this study that might affect our conclusions. First, the findings were based on cross-sectional data, which limits causal interpretation. Second, all of our measures were self-reported. The fact that the same person provides the information on predictor and criterion variables may be a potential source of common method variance and could have effects on the research findings (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Several procedural recommendations were adopted in order to control for method biases: counterbalancing the order of the measurement of the predictor and criterion variables; using different scale endpoints and formats for the predictor and criterion measures; avoiding the use of bipolar numerical scale values and providing labels for the midpoints of scales; utilizing scales with reverse-coded items phrased in a positive manner. Moreover, guarantying confidentiality and assuring respondents that there are no right or wrong answers, are expected to reduce social desirability.

Another possible shortcoming present in this study relates to the measure of job performance used. Several authors have pointed out the problematic nature of measuring performance through a self-report questionnaire (e.g., Sverke et al., 2002). There is empirical evidence that individuals tend to overestimate their performance and that ratings of performance given by others (e.g., managers or supervisors) can be more valid than self-rated performance measures (Ford & Noe, 1987). In addition, job performance seems to be a multidimensional construct with a complex latent structure (Scullen, Mount, & Goff, 2000). It is also worth noting that the measure of performance used in this study may be "less stable" than other scales because a reference period was used (e.g. "During the last working week, how well did you fulfil the following tasks?"). Therefore, it could be interesting to replicate these results using multiple measures of job performance, distinct from self report ratings in future research.

Another research avenue could be examining the interaction effects between job insecurity and organizational justice from a multilevel perspective. In this way, one is searching for contextual buffering factors that could also refer to collective coping strategies to confront job insecurity. Recent studies (e.g., Sora, Caballer, Peiró, Silla, & Gracia, 2010; Li & Cropanzano, 2009) have attempted to provide empirical evidence on the construct of organizational justice climate. It seems plausible that members' perceptions of the same organization are shared and that an organizational climate emerges through this process. Additionally, it would be interesting to examine justice climate or job insecurity climate at other levels, for example in different units or departments of an organization, and to test their effects (see e.g., De Cuyper, Sora, Caballer, & Peiró, 2009) Since job insecurity is increasingly present in actual working life, examining its context may help us to better understand its attitudinal and behavioural correlates.

Finally, it also seems interesting to study the interaction effects between job insecurity and organizational justice considering a wider set of organizational consequences, including for example outcomes related to safety climate, as some studies have emphasized (e.g., Probst, 2004).

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