

## **(In)justice contexts and work satisfaction: The mediating role of justice perceptions**

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### ***Abstract***

This study explores the impact of the social context, namely (in)justice climate and target, in workers' justice perceptions and satisfaction. Individual's justice judgments are expected to mediate the relationship of (in)justice climate and target with work satisfaction. We found mediation effects of procedural justice in the relationship between justice climate and satisfaction, and interactional justice in the relationship between injustice target and satisfaction. Distributive justice does not affect the relationship between the (in)justice context and satisfaction. Findings demonstrate the relevance of framing organizational justice in a socially contextualized perspective since they seem to influence individual justice reactions and work attitudes. Using an experimental methodology, it was possible to explore the role of seldom studied contextual variables.

**Keywords:** Organizational justice, social context, justice climate, justice target, work satisfaction, mediation

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## **1 INTRODUCTION**

Organizational justice is an important domain in the study of organizations (e.g., Ambrose & Schminke, 2002; Chia, Foo, & Fang, 2006). In organizations, justice is an important feature of outcome distribution (*i.e.*, distributive justice), decision making processes (*i.e.*, procedural justice) and daily personal interactions (*i.e.*, interactional justice). Justice judgments are related to several aspects of workers' attitudes that are reflected in their performance (e.g., Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Lam, Schaubroeck, & Aryee, 2002; Nowakowski & Conlon, 2005). Consequently, it is important to understand the mechanisms through which justice perceptions develop and are reflected in workers' behaviours and attitudes.

Many authors (e.g., Inness, Barling & Turner, 2005) have stated the relevance of the social context to understand workers' justice-related reactions. Well-established theories, such as the relational (e.g., Lind & Tyler, 1988) or the group engagement model (e.g., Blader, & Tayler, 2009) have suggested that fairness appraisals are socially constructed, yet most of the studies that examine the influence of justice perceptions on workers' attitudes and behaviour focus on hierarchical decision-making or resource allocation situations (Fassina, Jones, & Uggerslev, 2008). These studies adopt an "exchange perspective" of justice (Bies, 2005). Specifically, this approach emphasizes an individualistic view of justice, focused on the transactions between an agent, the one who acts fairly or unfairly, and a recipient or justice target, the one who makes the fairness appraisal.

However, a more socially contextualized "encounter perspective" of justice (Bies, 2005) has been neglected. Justice is conceptualized as a set of socially construed values that guarantee that self-interest and opportunism do not interfere with the overall social fabric of societies and organizations (Folger & Cropanzano, 1998).

One way to bridge the gap between the conceptualization of justice as a social phenomenon and the highly individualistic study of justice perspectives is to explore the impact of the immediate social context of justice events. One aspect of the immediate social context that has been often overlooked in organizational justice literature is the relationship between co-workers. Namely, how work colleagues' perceptions and experiences help shape individuals' reactions to fairness.

The importance of lateral relationships – relationships with other individuals situated in the same stratum of an organizational hierarchy and with whom one executes tasks and has routine interactions has increased as flatter organizational structures and team-based work have become widespread. Indeed, in most jobs, workers interact more frequently with co-workers than with their supervisors (Chiaburu and Harrison, 2008). Work colleagues often comment on their experiences and perceptions regarding workplace justice, and so share a sense-making activity that may shape other workers' interpretation of organizational events and their subsequent attitudes and reactions. Therefore, co-workers may be at least as important as other organizational agents, in shaping individuals' justice perceptions (e.g., Hung, Chi, & Lu, 2009).

This study intends to explore the way co-workers perceptions and experiences influence the development of justice perceptions, and their effect on workers' satisfaction. Specifically, we will examine the influence of two social context variables: (1) Justice climate, which refers to the degree of justice a group considers it is receiving; (2) Justice target, which refers to the direction of the (in)justice event, which can target the self or a co-worker. In addition, it is expected that these justice related social factors will impact employees' work satisfaction through their influence on individuals' justice appraisals. In other words, we investigate justice perceptions as a potential mechanism linking the social context and employees' work attitudes.

This study aims to contribute to the literature in two ways. First, this study highlights the relevance of the social context to the development of individual perceptions of workplace justice and work satisfaction. It examines the impact of seldom studied aspects of the (in)justice context, namely injustice target and justice climate on individual justice judgments, and it links them to worker's satisfaction. Second, by employing an experimental methodology, this study contributes to the clarification of the causality directions of these relationships. Because most management research on organizational justice is cross-sectional there may be doubts regarding how social context and justice judgments interact to influence work attitudes. Some authors have considered justice climate as a moderator of the impact of individual justice on workers attitudes (Liao & Rupp, 2005). We believe that justice climate and target have a direct impact on the development of justice judgments, and that justice judgments mediate their impact on workers attitudes. Applying an experimental approach can help to clarify this process as it more accurately illustrates causality.

## 2 LITETERATURE REVIEW

### **Injustice target as an antecedent of justice judgments**

People's perception of the world is built, not only through direct experience but also by social learning, through the experience of others (e.g., Carroll & Bandura, 1987). A recent meta-analysis by Chiaburu and Harrison (2008) has demonstrated that co-workers' actions predict perceptual, attitudinal, and behavioural outcomes of their colleagues, even when the influence of the direct leaders is accounted for. According to the authors, co-workers affect how their colleagues perceive and shape their work roles, and how they form, retain, and access work related attitudes (Chiaburu & Harrison, 2008).

The study of the impact of other person's justice experiences on one's own justice perception has focused primarily on the procedural justice dimension. In two experimental studies, (Van Den Bos & Lind, 2001) show that the treatment received by others can sometimes be such as potent consideration in procedural justice judgments as is one's own treatment. Colquitt (2004) has explored this effect in a field and in an experimental study in team settings. The author found that individual members' own procedural justice perceptions interacted with other members procedural justice evaluations, such that higher levels of role performance occurred when justice judgments were consistent within the team. (De Cremer & Van Hiel, 2006) based on the results from a scenario experiment, a cross-sectional survey, and a laboratory experiment, have proposed that how fairly another is treated influences one's emotional and behavioural reactions and that the way other colleagues are treated can be considered important organizational information in shaping one's own feelings and actions.

Some research on the effects of other people's justice experiences has been based on the deontonic perspective, an aspect of fairness theory (e.g., Cropanzano, Goldman & Folger, 2003, Beugré, 2010). This perspective focuses on the observer's inherent tendency to notice and react to perceived violations of justice. Some research has shown that third party observers tend to experience negative emotional responses, and even to engage in reciprocating behaviours against the perpetrator of the perceived unfairness (Folger, Cropanzano & Goldman, 2005). These reactions seem to occur regardless of any connection observers might have with the victim and even in situations where retaliation results in the loss of personal benefits (Turillo, Folger, Lavelle, Umphress & Gee, 2002). As such, one might expect that co-workers' experiences have a strong effect on employees' attitudes.

Despite the deontonic perspective assumptions, some research has demonstrated that there appear to be fundamental differences between the reactions of individuals towards unfair events that target the self as opposed to events that target other people. Lind, Kray, and Thompson (1998) have demonstrated that justice perceptions are more negative when the self is deprived of voice than when another person is deprived. Beehr, Nair, Gudanowski and Such (2004) have found that people tend to consider promotions based on performance fair, while promotions based on personal characteristics are considered unfair. However, workers tend to evaluate a promotion based on personal characteristics as more fair if it targets themselves, rather than a colleague. More recently, Spencer and Rupp (2009) have shown that an individual's emotional labour increases as a result of customer unfairness directed towards themselves as well as their co-workers. However, emotional labour was significantly higher when the injustice was directed at the self.

Accordingly, although we acknowledge the relevance of co-workers' experiences to an individual's justice perceptions, we conservatively expect that faced with an injustice situation, justice perceptions will be more negative when the injustice is directed at the self. We suppose that the different evaluations regarding one's own injustice experiences and those of co-workers may be due to three different reasons: attribution bias, memory bias and just-world beliefs.

First, individuals may use different criteria for themselves and for others when evaluating the justice of events. Recent studies on accountability and multifoci justice suggest that injustice events tend to be attributed to a specific source (Rupp, McCance, Spencer, Sonntag, 2008). Consequent attitudes and behaviours will be directed back at the perceived source of injustice. It is probable that, when faced with an injustice directed at the self, individuals tend to be more inclined to consider the injustice as being caused more by another organizational agent and less by the person being mistreated (i.e. themselves) than when the injustice is directed at a co-worker.

Second, research concerning self-enhancing bias has shown that people perceive and remember events in a way that favours their self-image (e.g., Sedikides, Gaertner, & Vevea, 2005). These distortion processes tend to occur more in regard to one's own experiences than in the analysis of another's experiences.

Finally, according to the just-world theory (Lerner, 1980), individuals tend to believe that people are rewarded or punished as a direct consequence of good or bad deeds, so people *supposable* get what they deserve. This theory was been successfully applied to the organizational context (e.g., Bobocel & Hafer, 2007). The belief in a just world is a "basic illusion", useful because it leads individuals to perceive the world as a more predictable and controllable place (Hafer, Bègue, Choma, & Dempsey, 2005). But numerous studies (e.g., Hafer *et. al.*, 2005) indicate that the belief in a just world contributes to adverse reactions when another person suffers

an injustice, such as avoidance, depreciation or condemnation of the victim, or the minimizing of the injustice situation.

*H1: Organizational justice perceptions will be more negative when the injustice is directed at the self, than when it is directed to a co-worker.*

### **Justice climate as an antecedent of justice judgments**

The justice climate refers to shared cognition concerning the degree of justice the workers' normally receive (Mayer, Nishii, Schneider & Goldstein, 2007). The justice climate can be considered an antecedent of individuals' justice perceptions. In contrast to justice perceptions, which are related to the individual cognitions of each employee, the justice climate, like the organizational climate, is located at the inter-individual level. Repeated reception of input from co-workers leads to reciprocation and fosters climates that encourage the individual to display more positive or negative attitudes and interpersonal actions (Chiaburu & Harrison, 2008).

Workers may not spontaneously conclude that a certain event is fair or unfair (Lamertz, 2002). On the contrary, they may experience a period of ambiguity that motivates them to look for social information to help make sense of situations through social comparison and interpersonal validation of reality. Additionally, they try to influence, and are in turn influenced by the people with whom they interact (Lamertz, 2002; Meyer, 1994). Thus, in order to evaluate the impact of an (un)fair event in workers' justice perceptions and satisfaction one should take into account the social context in which it occurs.

Previous studies (*e.g.*, Colquitt, Noe, & Jackson, 2002; Liao & Rupp, 2005; Mayer, *et al.*, 2007) have addressed specific facets of the justice climate, such as procedural and interactional dimensions. Those studies revealed that the justice climate predicted justice perceptions and individual and team outcomes above and beyond the effects of individual-level justice perceptions.

In the present study, distributive, procedural and interactional justice concerns were operationalized so that the distinct effects of these dimensions on the different facets of justice perceptions could be evaluated. Recently, there has been growing interest in holistic justice judgments (Lind, 2001). Ambrose and Schminke (2009) have suggested that the focus on the effects of specific types of justice may not capture the depth and richness of individuals' justice experiences. The authors proposed an overall justice scale comprising two subscales. The first assesses the individual personal justice experience; the second is more socially focused and assesses the perception of how fairly employees, in general, feel they are treated by the organization. This dimension is similar to the justice climates' construct proposed here.

Workers do not always have access to the causes behind decisions that affect them (Johanson, 2000). As so, they experience uncertainty concerning their relationship with the organization. In order to avoid exclusion or social exploitation, workers look for clues that serve as heuristics to evaluate the reliability and degree of trust that organizational authority figures deserve, as well as for clues to assess their own status as members of the organization (Lind & Van den Boss, 2002; Thau, Bennett, Mitchell & Marrs 2009). Through social influence processes, the justice climate may serve as a source of information to help evaluate the organization and interpret events experienced by workers (Lamertz, 2002).

By acknowledging that the justice climate serves as an information source for the interpretation of events, it is possible to conceive two alternative relationships between the justice climate and justice event judgments. The literature on expectancy violation (*e.g.*, Bell, Wiechmann & Ryan, 2006), and some justice theories, such as the group-value model (*e.g.*, Blader & Tayler, 2009) and the fairness theory (*e.g.*, Folger & Cropanzano, 2001) emphasize the comparison process individuals engage in when evaluating their justice experiences. According to these theories, when the justice climate is high, individuals may judge unfair experiences more negatively. When there is a difference between the unfairness of personal experiences and the justice climate within the group, it contradicts expectations about what "might" and "should" have been, and may be perceived as a sign that the individual is not as respected and valued as other group members. On the other hand, the justice climate may have a direct influence on individual perceptions, leading to an assimilation of the groups' opinion. In that case, an injustice event will lead to less negative justice perceptions when the justice climate is high, than when it is low.

Most studies indicate that shared opinions in the work environment concerning justice influence an individual's justice perceptions (Degoey, 2000). For example, Lind, Kray & Thompson (1998) have shown that communication between workers concerning a supervisor's personal treatment influenced individuals' justice perceptions. Jones and Skarlicki (2005) also observed that a discussion between workers concerning the justice reputation of an authority figure affected the interpretation of his subsequent behaviour. In both cases individuals tended to conform to the group's opinion. In addition, Choi (2008) found that when employees' perceptions of the organization as a whole are positive, they tend to react less negatively to unfair events. So we expect that the justice climate will exert an influence on the interpretation of personal experiences and that faced with an injustice situation, justice perceptions will be less negative when the justice climate is high.

*H2: Organizational justice perceptions will be more positive when the justice climate is high, as opposed to when it is low.*

**The (in)justice social context and work satisfaction**

The social context in which injustice takes place has an effect on workers’ satisfaction. A work environment perceived by the work group as fair will have a greater chance of satisfying workers and raising morale (Forret & Love, 2007) than a climate perceived as unjust. We expect that in high justice climate situations, participants will experience higher levels of satisfaction. On the other hand, based on attributional bias, memory bias and the just-world theory, we expected that an injustice directed at the self would result in lower levels of satisfaction than an injustice directed at a colleague. It is predicted that these social context variables will have an indirect effect on satisfaction, so when justice judgments are statistically controlled, the amount of variance in work satisfaction explained by the justice climate or the injustice target will be significantly reduced.

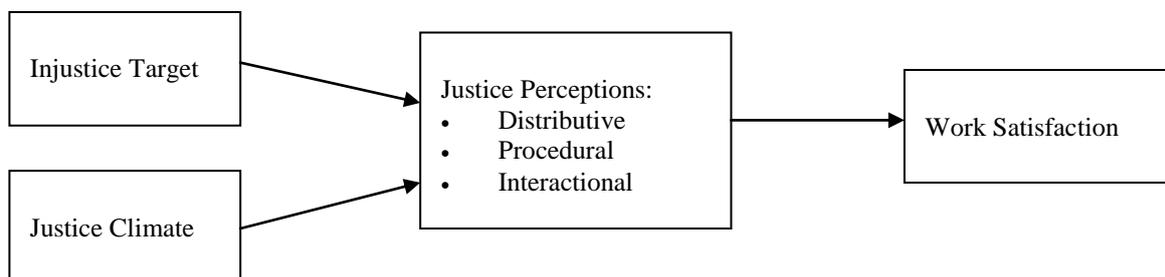
The relationship between justice perceptions and work satisfaction has been one of the most studied in organizational justice literature. In fact, the first theories concerning justice perceptions (e.g., Adams, 1965) stated that the evaluation of a situation as fair would lead to satisfaction, while an unfair situation would lead to psychological tension and feelings of anger. Since then, many studies have replicated this relationship, finding that organizational justice perceptions are strong and consistent cognitive predictors of work satisfaction (Cohen-Charash & Spector, 2001; Colquitt *et. al.*, 2001; Tremblay & Roussel, 2001). These emotional outcomes have been related to withdrawal behaviours such as employee absenteeism, turnover intentions, work alienation, and self-medication with alcohol (Howard & Cordes, 2010). Some authors state that among the multiple factors that affect work satisfaction, the most important organizational characteristic is justice perception (Clay-Warner, Reynolds & Roman, 2005).

Different approaches have been proposed to understand the relative effects of each dimension of justice on job satisfaction. Instrumental models argue that distributive justice is the most important predictor of satisfaction (McFarlin & Sweeney, 1992). These models state that employees value justice because it allows them to predict and control the outcomes they are likely to receive from organizations (Cropanzano, Bowen & Gilliland, 2007). On the other hand, some models support a more relational view of justice (e.g., Tyler & Blader, 2000, 2003; Blader & Talyer, 2009). They state that fair procedures and personal treatment provide identity-relevant information, which confer respect and status and thus improve the image of the group and increase self-esteem. This in turn, leads to a positive evaluation of the organization as a whole, and an increase in satisfaction. Thus far, we have argued that social context influence people’s justice perceptions, which, in turn, contribute to work satisfaction. Therefore, we propose:

*H3: Justice perceptions will mediate the relationship of the (in)justice target and climate with satisfaction.*

Figure 1 presents a simplified model of the expected relationship between variables.

**Figure 1: Theoretical Model**



This model is consistent with socially contextualized justice perspectives such as the group value and the deontonic models. The social context in which the (in)justice takes place is of great importance.

We expect that when faced with an injustice situation directed at the self, the worker’s justice perceptions will be more negative than when the injustice is directed at other colleagues. Even if deontonic concerns may lead people to be sensitive to others’ mistreatments, the joint effect of attribution and memory bias, and just-world beliefs lead to an emphasis of one’s own experience and a deemphasizing of other people injustice

experiences. On the other hand, we believe that justice climate will influence the interpretation of justice experiences. Because individuals tended to conform to the group's opinion (Jones & Skarlicki, 2005) we believe that, contrary to group-value model's (e.g., Blader & Tayler, 2009) and the fairness theory's assumptions (e.g., Folger & Cropanzano, 2001), justice perceptions will tend to be less negative when the justice climate is high.

It is predicted that these social context variables will have an indirect effect on satisfaction, mediated by justice perceptions. The relative importance of each justice dimension will be investigated, to compare instrumental models' (McFarlin & Sweeney, 1992; Cropanzano, Bowen & Gilliland, 2007) and relational models' predictions (e.g., Tyler & Blader, 2000, 2003; Blader & Tayler, 2009).

### **3 METHOD**

#### **Experimental design**

To analyse the effect that the independent variables, justice climate and injustice target, have on the mediating variable, organizational justice judgments (i.e., distributive, procedural, interactional), and their joint effect on work satisfaction as the dependent variable, a 2 x 2 (justice climate: high vs. low x injustice target: self vs. other) cross-factor design was used.

A scenario methodology (e.g., Lind & Tyler, 1988; Hafer, Bègue, Choma, & Dempsey, 2005) was used to manipulate the independent variables. According to Lind and Tyler (1988, pp.47) "This method involves the presentation of descriptions of scenarios, which respondents are asked to imagine happening to themselves or to others, and the assessment of attitudes and beliefs with respect to the scenarios." In the present study, participants are invited to assume the point of view of an employee of a fictitious company, and evaluate what their attitudes and behaviors would be in that situation.

#### **Participants**

A sample of 140 volunteers participated in this study. The participants were approached while waiting in a government building with several governmental services divisions such as ID and Passport emission, Social Security Services, Post Office, etc. and asked to complete the survey. Seven participants were excluded from the sample for having correctly identified the purpose of the study in a control question. This left a valid sample of 133 individuals. Of that valid sample, 57.9% (n=77) were women. Ages varied between 17 and 65, with an average age of 34 (SD=11.813). The majority of participants, 75% are employed and 44% of those had had tenure for over 10 years (M=14.65; SD=11.59).

#### **Procedure**

The study was presented as an inquiry about "human resources management practices" in national companies. Participants were given a text to read describing a company, designated company X. They were asked to imagine they worked for company X and to answer the questions with that in mind.

At the beginning, the text describes the justice climate prevalent in company X. Depending on the experimental situation, the justice climate is described as either high or low. Then, a specific injustice situation taking place in this company is portrayed. Depending on the experimental situation, the target of the injustice situation is presented as the self, as a worker of company X (target self), or as a co-worker (target co-worker). After reading the text, participants are asked to turn the page and not to consult it again. Afterwards, they are requested to position themselves on the scales from the point of view of an employee in company X.

#### **Measures**

A pre-test was conducted (n=11) to test the effectiveness of the independent variable manipulation, and that the participants thoroughly understood the scales used. The pre-test was also useful to verify the level of the scenario's credibility, since "the key to valid scenario studies is to design the study to deal with situations the respondents have experienced and understand" (Lind & Tyler, 1988, pp. 47). It was observed that participants in the pre-test found the story told to be entirely believable, (M=4.36; SD=.667 in a 1 to 5 scale), some participants even mentioned having had similar experiences in their professional life. Participants did not express any difficulties in understanding the questions so there was no need to carry out further adjustment to the material.

The text displaying the experimental scenario started by requesting the participants to: "Imagine that you have been working for some time now in company X". The justice climate manipulation was adapted from the procedural justice climate manipulation carried out by Aquino, Trips and Bies (2006). Aspects of distributive and interactional justice were introduced to allow a manipulation of the different aspects of the justice climate.

*... they are known for their good (poor) treatment of employees. Employees feel they are treated with (little) a lot of respect and consideration. (Often) Rewards are (not) distributed according to the effort each employee makes. Besides, employees feel they are (never) involved in upper-level decision making. In fact, as*

*you and your colleagues have witnessed on numerous occasions, managers have always (rarely) considered employees' views before making major decisions, have always applied the rules consistently (frequently applied the rules inconsistently) across employees, and make sure to base decisions (never ensure that decisions are based) on accurate information. Even then, if employees disapprove of a decision, managers have shown a willingness (not been willing) to reconsider."*

Then the manipulation of the target was presented:

*"One day, your supervisor tells you and your colleagues that an element of the team, normally in charge of a particular function is absent. And he says you (your co-worker Joseph) will have to replace him. You (He tries) try to explain that you have (he has) never performed this task and you don't (he doesn't) think you have (he has) the proper knowledge or skills needed to perform the task. But the supervisor does not reconsider, saying he is available if you need (your co-worker needs) help."*

The description of the injustice situation was adapted from Kray and Lind (2002).

*"(Later, your co-worker Joseph comments to you :) How frustrating! The tasks were difficult, the computer repeatedly shut down, and to make matters worse, the supervisor didn't help at all. You (I) sent messages after each task asking for help because, besides not having sufficient knowledge or skills to perform the task, the computer was off-line so much that you couldn't work as hard as you wanted. Each time that you (I) sent a message, you (I) got a response that made you (me) think your (my) supervisor hadn't even read your (my) message. Your (my) doubts and concerns were falling on deaf ears. In fact, on one occasion, the manager even stated explicitly that your (my) message was unread. You were (I was) told your (my) 'excuses' weren't good enough and that they would not be considered when deciding on your (my) performance appraisal or on pay bonuses. You think to yourself (I thought to myself): What did I do to deserve this kind of treatment? I try to work hard...on top of it all, a promotion is going to be decided soon."*

To check the effectiveness of the manipulation of the justice climate a control question was introduced at the end of the questionnaire: "In general, not taking into consideration the specific situation described in the text, workers feel justly treated in company X". In order to check whether participants recognized the situation described as an injustice situation they were asked if: "The specific situation that happened to the worker in company X is an injustice situation" and "The specific situation that happened to the worker in company X is serious". Finally, an open question, regarding the perceived aim of the questionnaire, was introduced to control implicit justice theory biases. All items were measured on a 1- Totally disagree to 5- Totally agree Likert type scale.

Organizational justice perceptions were measured using the justice scales adapted from Niehoff and Moorman (1993) and Folger and Konovsky (1989). Four items assessed distributive justice ( $\alpha = .913$ ) (e.g., "Overall, the rewards I receive here are quite fair"), three items assessed procedural justice perceptions ( $\alpha = .893$ ) (e.g., "To make job decisions, my supervisor collects accurate and complete information"), seven items assessed interactional justice ( $\alpha = .947$ ) (e.g., "My supervisor treats me with kindness and consideration").

Work Satisfaction was assessed through an item where participants showed how they would feel working for company X by choosing from 1 - "Totally unsatisfied" to 5 - "Totally satisfied". Many researchers (eg, Hackman & Oldham, 1980, Quinn & Shepard, 1974) have adopted an additive approach in measuring job satisfaction. Several items are used to separately measure satisfaction with different aspects of organizational life, then a global satisfaction index is computed (Snipes Oswald, LaTour, & Armenakis, 2005). However, some authors, such as Scarpello and Campbell (1983) believe that a single item satisfaction measure is more credible than the sum of scales for each aspect of job satisfaction, since multi items scales may overlook aspects of work that are important to the employee (eg., Ironson, Smith, Brannick, Gibson, & Paul, 1989; Scarpello & Campbell, 1983; Wanous, Reichers, & Hudy, 1997). Furthermore, in a meta-analysis by Wanous and colleagues (1997), the authors compared studies using multi-item scales, and studies using a single item of job satisfaction. Results showed a high correlation, suggesting that job satisfaction can be operated through a single item. In addition this study used a single item satisfaction measure because, given that the manipulation was conducted through the presentation of a scenario, we believed participants would find it easier to assess what their general levels of satisfaction would be, rather than to rate specific satisfaction dimensions.

## 4 RESULTS

### Manipulation check and descriptive statistics

Participants agree that the situation described is an injustice situation ( $M=4.07$ ;  $SD=.612$ ). Additionally, 72% of the participants consider that the situation described is very serious ( $M=3.83$ ;  $SD=.78$ ).

To verify if there is a difference in the justice climate perception between the two situations, a  $t$  test for independent samples was carried out. This revealed a significant difference ( $t_{(414)}=6.706$ ;  $p\leq.001$ ) in the expected direction. Those in the high justice climate situation tended to believe that, in general, the company dealt with the workers more fairly ( $M=3.30$ ,  $S.D= 1.301$ ) than those in the low justice climate situation ( $M=1.91$ ,  $S.D=.91$ ).

Table 1 presents the means, standard deviations and correlations of the variables considered in this study. As can be observed, all variables are significantly correlated with each other except for: the justice climate and procedural justice; the justice climate and interactional justice; and the justice climate and injustice target. All correlations show positive relationships between variables except for the injustice target, which appears to have a negative relationship with the remaining constructs. These magnitudes of correlations, ranging from relatively high to medium, have often been found between justice dimensions (e.g., Colquitt et. al., 2001).

**Table 1: Descriptive statistics**

Measures	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Distributive Justice	2.55	1.00					
2. Procedural Justice	2.35	1.10	.63**				
3. Interactional Justice	2.11	.95	.44**	.43**			
4. Work Satisfaction	2.48	1.10	.47**	.56**	.46**		
5. Justice Climate			.49**	.56**	.17	.35**	
6. Injustice Target			-.27**	-.10	-.25**	-.17	-.022

Notes: \*\*= $p\leq.001$ .

### Hypotheses testing

Hypothesis 1 predicts that an injustice directed at the self will lead to more negative justice perceptions than an injustice directed at a co-worker. Hypothesis 2 predicts that when the justice climate is high justice perceptions will be less negative than when the justice climate is low. Multiple regression analyses were conducted to assess the effect of these social context variables on justice perceptions. Because the independent variables are a dichotomy they were recoded as dummy variables. Recoding was conducted in the following way: justice climate 0= low; 1 =high; injustice target 0 =self; 1 =co-worker. The regression coefficients represent the difference between the lower and higher values, that is, between low and high justice climate situations, and between injustice directed at the self or at a co-worker. The results are summarized in table 2.

The model is significant ( $F_{(2,123)}= 26.214$ ;  $p\leq .001$ ) in predicting distributive justice perception. The (In)justice climate and target have an effect on distributive justice perception, which would explain 29% of its variance. From the low to the high climate situation there is an increase in distributive justice perception. Distributive justice perception tends to be more positive when the injustice targets a co-worker than when it targets the self.

The effect of (in)justice climates explains 31% of the variance in procedural justice perceptions ( $F_{(2,126)}= 29.911$ ;  $p\leq .001$ ). In the high justice climate situation, perceptions of procedural justice tend to be higher than in the low climate situation. Although the relationship between the injustice target and procedural justice follows the expected direction, it is not significant.

The model explains about 8% of the variance in interactional justice ( $F_{(2,121)}= 6.137$ ;  $p\leq.05$ ). Interactional justice perception tends to be higher when the target is a co-worker than when it is the self, or when the justice climate is high as opposed to when it is low. Although the relationship between the justice climate and interactional justice follows the expected direction, it is not significant.

**Table 2: Organizational Justice regressed on (in)Justice climate and target**

Depended Variables	Independent Variables	$\beta_a$	$R^2_a$	$\Delta R^2$
Distributive Justice	Climate	.48**	.23	.23**
	Target	-.24*	.29	.06*
Procedural Justice	Climate	.56**	.31	.32**
	Target	-.07	.31	.00
Interactional Justice	Climate	.17	.08	.00
	Target	-.25*	.08	.09*

Notes: \* =  $p \leq .05$ ; \*\* =  $p \leq .001$

These results show that distributive and interactional justice perceptions were more negative when the injustice situation was directed at the self rather than towards a co-worker. So hypotheses 1 was supported for distributive and interactional justice perceptions. Results also show that distributive and procedural justice perceptions tend to be less negative in the high justice climate situation. Hypothesis 2 was supported for distributive and procedural justice judgments.

Although the hypotheses did not predict any interaction between the (in) justice climate and target, we conducted a multiple variance analysis to explore that possibility. No effects were found.

Hypothesis 3 predicts that organizational justice will mediate the relationship of the justice climate and the injustice target with satisfaction. The proposed model involves multi mediators that have relatively high to medium correlation levels. Taking into account that the sample size does not permit structural equation analysis, we have chosen to follow Preacher and Hayes (2008) recommendations and employ bootstrap analysis. The authors state this method has four major advantages over classic multiple linear analyses: (1) it tests the “total indirect effect” of the independent variable on the dependent variable which makes it possible to determine whether an overall mediation effect exists and to assess its magnitude; (2) it makes it possible to determine to what extent specific mediator variables mediate the relationship between the independent variable and the dependent variable, in the presence of other mediators in the model; (3) the likelihood of parameter bias due to omitted variables is reduced; (4) it makes it possible to compare the relative magnitudes of the specific indirect effects associated with which mediators within the model. Separate analyses were conducted for each independent variable including all three justice dimensions as mediators, and satisfaction as a dependent variable. The results are presented in tables 3 and 4.

Justice perceptions fully mediate the effect the justice climate has on satisfaction. The model explains 37% of the variance in satisfaction levels ( $F_{(4,114)} = 17.998$ ;  $p \leq .001$ ). Only procedural justice was a significant specific indirect effect, mediating the relationship between the justice climate and work satisfaction. This means that, within this model and relative to the other mediators, procedural justice explains the overall effect of climate on satisfaction. Satisfaction tends to be higher when the justice climate is high because it promotes more positive procedural justice judgments.

**Table 3: Bootstrap Analysis: Justice Dimensions as mediators between Justice Climate and Satisfaction**

	$\beta$	P	Ba 95% CI	
			Lower	Upper
Direct Effect				
Justice Climate	.80	.00		
Indirect Effects				
Justice Climate	.16	.41		
Total	.64	.00	.32	.98
Distributive Justice	.10	.34	-.10	.32
Procedural Justice	.44	.00	.15	.78
Interactional Justice	.10	.07	.01	.26
$R^2$	.37			

Note— BCa. bias corrected and accelerated; 5.000 bootstrap samples.

Justice perceptions also fully mediate the effect the injustice target has on satisfaction. The model explains 37% of the variance in satisfaction levels ( $F_{(4,114)} = 18.012$ ;  $p \leq .001$ ). One can observe that interactional justice is the only mediator with a significant specific indirect effect. This means that within this model and relative to the other mediators, interactional justice explains the overall effect of injustice targets on satisfaction. Satisfaction tends to be lower when injustice is directed at the self, compared to when it is directed at a co-worker, because injustice directed at the self-promotes more negative interactional justice perceptions.

**Table 4: Bootstrap Analysis: Justice dimensions as mediators between injustice target and satisfaction**

	$\beta$	p	$\beta$ 95% CI	
			Lower	Upper
Direct Effect				
Injustice Target	-.41	.03		
Indirect Effect				
Injustice Target	-.14	.40		
Total	-.27	.00	-.55	-.03
Distributive Justice	-.06	.38	-.22	.07
Procedural Justice	-.09	.24	-.31	.05
Interactional Justice	-.12	.05	-.29	-.03
R <sup>2</sup>	.37			

Notes: BCa. bias corrected and accelerated; 5,000 bootstrap samples.

The results partially support hypothesis 3. The relationship between the injustice target and satisfaction is totally mediated by interactional justice. The relationship between the justice climate and satisfaction is totally mediated by procedural justice. However, no mediating effect of distributive justice was verified.

#### 4 DISCUSSION

This study attempted to understand the influence of the (in) justice social context in the development of justice judgments, and its consequences. It explored the effect of co-workers' experiences (i.e., the injustice target), and co-workers' shared perceptions (i.e., the justice climate) on employees' justice perceptions and job related attitudes, namely job satisfaction.

Our findings indicate that injustice situations experienced by the self-generate more negative distributive and interactional justice perceptions than injustice situations directed at other people. The injustice target has a greater effect on interactional justice when compared to distributive justice. Contrary to our hypothesis, as far as procedural justice judgments are concerned it makes no difference if the unfair event targets the self or a co-worker. This may be due to the fact that procedural justice judgments are related to structural aspects of organizational decision making processes. Even if the unfair procedures are experienced by a co-worker, they may have a more general impact in situations that may affect individuals directly in the future.

Interactional justice judgments mediates the effect injustice target has on satisfaction. Injustices directed at the self, generate more negative distributive and interactional justice perceptions than those directed at another. Unlike distributive justice perceptions, which focus on specific outcomes, interactional justice focuses on the more subjective quality of human interactions most likely to be influenced by attributional and memory biases. Interactional justice relates directly to the image of supervisors (Colquitt *et. al.*, 2001; Nowakowski & Conlon, 2005; Aryee, Chen, Sun, & Debrah, 2007), who are seen as the key agents of the organization. Thus perceptions of interactional justice affect the extent to which individuals are satisfied with their employment relationship (Lamertz, 2002), influencing job satisfaction.

When workers hear about an unfair event directed at a co-worker they consider the responsibility of both parties involved. Influenced by just-world beliefs (*e.g.*, Bobocel & Hafer, 2007) they attribute some, or most, of the responsibility to the co-worker, and the event is evaluated as more fair. On the other hand, when the injustice is directed at the self, workers are influenced by self-enhancing bias (*e.g.*, Sedikides, Gaertner, & Vevea, 2005), and assign all the responsibility for the transgression to the perpetrator, thus perceiving the interaction as less fair. This leads to a decline in the supervisor's image and the employment relationship, resulting in lower levels of satisfaction. This effect indicates that, despite the deontonic perspective assumption that a perceived injustice provokes negative emotional and behavioural reactions by third party observers (Cropanzano, Goldman & Folger, 2003) these reactions are not as extreme as when the self is the target of the injustice.

Regarding the justice climate, findings indicate that justice plays a role as an antecedent of individuals' justice perceptions. Facing the same injustice situation, individuals' distributive and procedural justice perceptions are more positive when the work group considers it is being treated fairly. The results contradict assumptions based on the literature on expectancy violation (Bell *et. al.*, 2006), and justice theories, such as the group-value model (Tyler & Lind, 1992) and the fairness theory (Folger & Cropanzano, 1998, 2001). If individuals experience unfair events in groups that believe they are generally treated fairly, individuals will likely compare their experience with that of the group. Even so, instead of generating more negative justice perceptions and dissatisfaction, the dissimilarity between what was experienced and the fairness people are generally treated within the organization, may lead them to think of the incident as a one-off occurrence and to give it less importance.

The justice climate has a stronger impact on procedural than on distributive justice judgments, and has no effect on interactional justice perceptions. This may be related to the differences between these justice dimensions. According to Greenberg (1993a), people are conceptually able to form justice judgments that evaluate relatively stable aspects of the work environment, as well as events that happen at work on a day-to-day basis. Procedural justice perceptions relate to structural aspects of organizational decision-making. Interactional justice on the other hand, pertains to the quality of event-level interactions between employees and direct supervisors. Therefore, procedural justice may have a more general impact on work groups than more situational interactional justice. As such, individuals may rely more on socially influenced information processes, like the justice climate, to make procedural justice evaluations. While interactional justice judgments are more prone to particular event related attribution processes.

Procedural justice mediates the effect of the justice climate on satisfaction. When the justice climate is high, procedural and distributive justice perspectives will be more positive. But unlike distributive justice, which targets particular individual outcomes, the fairness of organizational procedures is more widespread, so an individual may resort to group-level information for their evaluation. Satisfaction is said to occur not only as a result of affective reactions but also as a consequence of calculative evaluation about the organization's fair dealings in the employment relationship (Lamertz, 2002). Procedural justice is a good indicator of the fairness of structural institutional organizational practices and as such, it contributes to the cognitive facet of satisfaction. Because of its generalized character, reflected in the coherence norm, workers' may rely on social information sources, like the justice climate, to make procedural justice judgments, which are then reflected in satisfaction levels.

No mediating effects of distributive justice were found. Distributive justice does not appear to play a major role in the relationship between contextual social factors, like the (in) justice climate and target, and satisfaction. This finding questions the assumptions of instrumental models of justice (e.g., Thibaut & Walker, 1975; McFarlin & Sweeney, 1992). Satisfaction does not appear to be primarily influenced by distributive concerns. On the other hand, results illustrate the importance a justice related social context has on satisfaction, and they support the prediction of group value models (Tyler & Blader, 2000, 2003) that fair procedures and personal treatment provide identity-relevant information influencing satisfaction.

Unlike distributive justice, procedural and interactional justice can serve dual roles: as outcomes in their own right, and as sources of information about events (Barclay, Skarlic & Pugh, 2005) and social identity (Blader & Tayler 2009). Individuals are sensitive to procedural and interactional justice because they signal the degree to which members are valued and respected in the group and because transgressions contradict expectations about the norms that regulate procedures and personal treatment. When individuals' expectations for socio-emotional outcomes are violated, they can experience emotional reactions regardless of whether their economic expectations have been violated (Barclay, Skarlic and Pugh, 2005). Although violations of any type of justice perspective can trigger attributions, procedural and interactional justice, carry attributional information which can be used in the appraisal of the situation. As such, procedural and interactional justice judgments are important to attitudes workers form based on social information.

Like most studies, the present study has its limitations. Some authors (e.g., Fraizer, Barron & Tix, 2004) recommend that in the case of multiple mediator model analyses of structural equations, analysis should be used in order to control the combined effect of the variable and the fit of the overall model. In this study that was not possible due to the sample size. However, we followed Preacher and Hayes' (2008) recommendations and conducted bootstrap analysis. Although bootstrap analysis does not indicate the overall fit of the model, or permit the simultaneous testing of both independent variables, nevertheless, it allows us to compare the effects of multiple mediators.

Another limitation is the fact that participants of this study were presented with a description of an injustice situation and not involved in a real life situation. Although we made certain that the described situation was believable, differences may exist between the way people perceive they would behave and the way they actually would. In part because "people are especially inaccurate in predicting how they will behave in a new situation" (Lind & Tyler, 1988, pp. 47) and in part, because this method is particularly likely to be biased by social desirability, since instead of acting spontaneously, the participants cognitively esteem how they would behave. Future research could test our model in an organizational field study.

Our findings have some implications for human resources management. On the one hand they suggest that the social context in which the (in)justice occurs has an effect, both in workers' justice perceptions, and in their satisfaction levels. Work environments normally characterized as fair have a buffering effect in the development of workers' negative justice perceptions. This suggests that organizations and their supervisor must strive to maintain a high justice climate work context, if they wish to encourage higher satisfaction levels and more positive justice perceptions. So, it is not only necessary to treat workers fairly, organizations must strive for workers to have a shared perception that indeed, fair treatment is part of "the way things work around here". On the other hand, our findings indicate that, at least as far as procedural justice judgments are concerned, it makes no difference if the unfair event targets the self or a co-worker. This indicates that organizations should strive to

be consistent in the way they treat their employees. Furthermore, it seems that procedural and interactional justice play an important role in the relationship between the context in which the (in)justice occurs and workers' attitudes. Managers should be aware that even if work outputs are fairly distributed, the way policies are designed, and implemented by supervisors, have an impact in workers' satisfaction.

Justice is an important predictor of workers' attitudes and behaviours. These findings are relevant to human resources management practices, since they imply refocusing justice concerns so that they are not solely on individuals but extended to groups. If co-workers' experiences and perceptions have an impact on individual justice perceptions, we can infer that practices aimed at dealing fairly with individuals will have less effect if employees, as a whole, do not believe they are treated fairly. Especially because of the increasing relevance of teams in the structuring of today's organizations, the notion that injustices directed at co-workers may influence other individuals' justice judgments is well worth noting. Further research should be conducted on the effect co-workers' injustice experiences have on employees' justice perceptions. Results indicate that a greater effort should be made towards a finer integration of conceptual models of justice, which frame the development and functioning of organizational justice perceptions in a socially contextualized perspective.

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