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Work stressors and creativity

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Abstract

Work stressors, conflict asymmetries and dissatisfaction with the status quo are all negative factors which workers today are subjected to. Unfortunately, these situations occur more often than companies would want. However, negative results, despite what might be expected, do not always follow in the performances of affected employees. In this paper, through a theoretical review, it is shown under what circumstances these stressors can actually increase creative performance. Additionally, the moderation role carried out by emotional intelligence and job control is analyzed. Conclusions and future research lines are presented.

Key words: Work stressors; conflicts asymmetries; job dissatisfaction; creativity; emotional intelligence.

INTRODUCTION

Organizations today face a turbulent environment and increasing uncertainty. Responsiveness and adaptability have become key elements to the success and survival of businesses. In fact, as indicated by Bolwijn and Kumpe (1990), the competitive environment requires methods of organizing complex dimensions of performance, such as innovation, in order to push employees to develop high levels of creativity.

Creativity is widely studied in the literature of organizational behavior (Amabile, 1979, 1982, 1983, 1985 and 1988, Baer and Oldham, 2006; Carnevale and Probst, 1998, Cummings and Oldham, 1997, George, 2008; Jing -Zhou and George, 2001; Kurtzberg, 2000; Shalley et al., 2004, Woodman et al., 1993). It can promote dissatisfaction and stress and these, in turn, can influence the results of socialization (Saks, Uggerslev and Fassina, 2007). After all, companies are the places where workers spend most of their time, interacting with each other. The importance of creativity lies mainly in its influence on the generation of new products, services and procedures (Amabile, 1996; George, 2008). This is a key factor in innovation, effectiveness and survival, especially in organizations that must adapt to rapid changes in the environment to take advantage of emerging opportunities (Oldham, 2003; Shalley, Zhou & Oldham, 2004).

The study of creativity has focused on an organizational and group perspective. However, and although there are some exceptions (Amabile et al., 2005), literature that analyzes creativity from the perspective of the individual is still scarce. It seems problematic, however, to assume that all members of an organization and the groups formed within it develop the same levels of creativity.

This organizational and group approach represents one of the main limitations of research in the field of conflicts developed so far. It ignores the fact that different people may perceive differently the quantity and intensity of conflicts existing in their group or organization (Jehn, Rispens & Tatcher, 2010). This uncertainty multiplies moments of conflict, stress and dissatisfaction among employees. All conflicts at work are, in theory, related and this can have harmful results for organizations. However, there is a lack of studies linking these conflicts with the individual creative performance or exploring how it is possible to obtain positive results from them. In fact, despite what one might intuitively expect, there is scientific evidence that such situations can offer beneficial effects to companies (Binnewies & Wörlein, 2011). The idea of such a relationship between these negative factors and creativity is patently controversial. The present paper aims to increase the existing theoretical body on this topic.

Some of the negative factors that have been mentioned can be analyzed. Firstly, it is possible to examine work stressors and their influences on creativity. However, a consensus has not yet been reached in the relevant literature on how to manage this relationship. In some cases, positive results have been generated (Zhou and George, 2001), while in other cases the results have been negative or insignificant (Binnewies and Wörnlein, 2011). The literature encourages the idea of searching for ways in which to generate variations in creativity (Frohman, 1998).

Secondly, other variables, such as conflict asymmetries, have not been studied enough. Studying a conflict from an individual's perspective is a recent and surprising (although necessary) concept and its theoretical body of work is very meager. There are practically no studies involving the effects of conflict asymmetries on creativity and there are even fewer that use the individual perspective.

Thirdly, dissatisfaction has been strongly associated in the literature with positive results (Binnewies and Wörnlein, 2011; Chen, 2006: Sonnentag, 2011 and Zhou and George, 2001), on the basis of the use of voice (Hirscham, 1980) to explain this increase in creativity. Nevertheless, it is necessary to take into account that this result depends on how motivated workers are (Aguiar do Monte, 2010). This research aims to contribute to the clarification of the results obtained by authors regarding types of intrinsic motivation, including several moderating variables. The reason for their inclusion is that not all individuals react in the same way. This dissatisfaction can be seen equally as a challenge or as an obstacle. Therefore, clarifying studies are required (Vandenberghe et al, 2011).

The aim of this research is to add to the knowledge about the three variables that have been mentioned. It also seeks to delve deeper into their role in influencing creativity. Since organizations increasingly face radical changes, like those brought on by hostile environments, the study of these variables is justified. Environmental influences, specifically hostile ones, increase creativity when a supportive climate is provided (Hunter et al, 2007).

In order to achieve the aforesaid objective, the moderating effects of the variable "Emotional Intelligence" are introduced. By understanding that individuals may differently perceive negative factors in their companies, it can be seen that not all individuals react in the same way to adversity in the workplace. It seems clear, therefore, that differences in perceptions can also be caused by the different cognitive characteristics of individuals. An emotionally intelligent worker, who relates to others, may not be affected so markedly by pressures to which his department or even his company are subjected (Illies et al, 2007; Judge, Woolf and Hurst, 2009; Rodell and Judge, 2009).

This study intends to delve deeper into these relations at an individual level and therefore add to the extant literature. By doing so, it aims to explore the influence on creativity of work stressors, conflict asymmetries and dissatisfaction with the status quo. To help understand this, the study also proposes to look at the moderating role of Emotional Intelligence and investigate how the characteristics of a job, in relation to an employee's control capability (Zhou & George, 2001), can act as catalysts for these proactive situations. The inclusion of these variables allows us to identify what kinds of person and what kinds of job are related to the development of such situations. The study of the variables will help to clarify the inconsistencies in research on creativity and will allow us to visualize how certain contextual circumstances explain creative behavior. At the same time, at a practical level, the contributions of this work will improve the efficiency of people management and innovation. It further aims to provide methods for Human Resources Divisions to encourage this type of behavior, create the most conducive conditions to enhance creativity and select employees for each type of position.

It seems that it is possible to obtain greater creativity from stress and job dissatisfaction situations. However it must be established whether it is possible to, at the same time, minimize the asymmetries of conflict perception within the company as well as the moderating role of emotional intelligence and job control.

To achieve the above objective, this paper makes a theoretical review. The following section defines the concepts as they have been treated in the literature so far. Following this conceptualization, it raises the theoretical propositions and describes the proposed model for developing research. Finally, it presents both the academic and practical implications of the contribution of labor and suggests future lines for research.

CREATIVITY AND ITS DETERMINANTS

CREATIVITY AT THE INDIVIDUAL LEVEL

Creativity is a concept critical to the survival and competitiveness of organizations (George and Zhou, 2002; Oldham and Cummings, 1996; Zhou, 1998). If we rely on this assumption, employee creativity is beneficial for the results of work (Gong et al., 2009). For this reason, recent research has focused on identifying the background, determinants and consequences of creativity (Zhou & Shalley, 2008).

Creativity is a necessary condition for innovation but is not alone sufficient for it. In the field of organizational behavior, creativity refers to the creation of useful new products, practices, services and procedures (Amabile, 1996, George, 2008). Ideas are new when they are "unique in relation to other ideas currently available in the organization" (Shalley et al., 2004:934), and are useful when they "directly or indirectly represent a potential value for the organization, both short and long term" (Shalley et al., 2004:934). Creativity is necessary for the survival of organizations, especially in a rapidly changing environment (Oldham, 2003), where innovation is becoming more and more necessary to ensure the continuity of business projects (Clitheroe, Stokols & Zmuidzinas, 2002).

The level and frequency of successful creative behaviors depend on many factors: the motivation that an organization has for innovation, the resources that it is willing to contribute (Amabile, 1988), the influence of job characteristics on the type of tasks being performed (Shalley, 2002) and the management practices being used (Amabile, 1988) are just some examples.

Within the intermediate variables between the creativity contexts, we also found transformational leadership and good use of human resources (Scott, 1994; Shalley, 2004, Oldham, 1996). Even in jobs with ideal characteristics, in which complex and challenging work is performed, creativity is greatly increased under conditions of supportive and non-controlling supervision (Oldham, 1996). Some seminal studies (Siegel & Kaemmer, 1978; among others) have already included assessments given by workers of their perceptions of leadership, ownership, property, continuous development and consistency.

Regarding intraorganizational influences, the characteristics of teams and organizations can be discussed (Woodman, Sawyer & Griffin; 1993). The design of a group has a direct influence on its creative performance. Other

studies suggest that external demands, the integration of group processes and security within organizations all also act as direct influences (Shalley, 2002).

The inclusion of personal variables at the individual level is a real milestone for the advancement of knowledge in the study of creativity. Except for a few studies, such as those carried out by Shin and Zhou (2003), not many take into account the individual characteristics that encourage creative behavior. Some authors, like Tierney and Farmer (2002), include, for their part, intrinsic variables such as motivation in the fostering of creativity.

Organizations are, after all, groups of people. Creativity often arises from the interaction of people and the situations they are in (Hunter, 2007). For heterogeneous teams, it has been demonstrated that high levels of interdependence are related strongly and positively to innovative behaviors. However, this relationship is not agreed on by those writers who perceive low levels of interdependence in the workplace (Van der Vegt & Janssen, 2003). Surprisingly, the existence of weak ties among group members is generally beneficial for creativity. However, the existence of strong ties has shown neutral effects (Perry-Smith, 2006). In more heterogeneous teams, a greater diversity of opinions is produced. Creativity therefore depends on a variety of situations and individual attributes. It will be necessary, then, to have different varieties of knowledge, skills and talents (George, 2002).

Conflicts are, in most cases, a cause of stress for workers, so one might think that work stressors affect creativity. In fact, numerous studies have considered the measures of stress at work to observe the influence on creativity, for example the one recently developed by Binnewies (2010) and the studies conducted by Beal et al. (2006), Fisher (2000) and Fuller et al. (2003) previously. It seems clear that a relationship does exist between conflict and creativity. Different perceptions of a conflict within a team could undermine its ability to generate inventive behaviors and be detrimental to creativity (Jehn, 2010).

The existence of a relationship between negative factors and creativity has already been outlined. Some studies include dissatisfaction with the status quo as an influential factor in creativity (Zhou, 2010). These studies, surprisingly, do not always generate negative implications. It is clear that there must have been further circumstances alongside this dissatisfaction to lead to the emergence of a creative idea.

In this paper we propose three important predictors of creativity: dissatisfaction with the status quo, work stressors and conflict asymmetries. Although there have only been a few studies into these concepts, these clearly demonstrate the possibility of their beneficial influences (Chen, 2006; Zhou et al., 2001; Binnewies, 2011). It is therefore an aim of this study to determine when and under what conditions these negative situations could be exploited as drivers of positive and creative results to help organizations to continue in an increasingly changing environment. By shedding light on the role of intermediate variables, it may be possible to broaden the understanding of why, in some cases, inconsistencies in the results exist (Gong et al., 2009).

WORK STRESSORS AND CREATIVITY

Two "work stressors" have been most studied in past years: "time pressure" and "the limitations of the situation". We define "time pressure" as the extent of an employee's feelings when he or she has an inadequate amount of time to do his or her job (Baer and Oldham, 2006; Kinicki and Vecchio , 1994). The "limitations of the situation" are the (Kane, 1997) obstacles (Frese and Zapf, 1994) which inhibit workers from doing their jobs. (Greiner et al., 2004). Examples would include shortages of tools, inappropriately organized teams or shortages of required information.

The literature suggests that it is necessary to study the framework that favors an increase in creativity, analyzing its relationship with work stressors. Although a certain level of pressure at a specific time can lead to an activation and increase of creativity, it seems likely that an experience of constant pressure at work would decrease creativity (Binnewies and Wörnlein, 2011).

The work stressor and predictor of creativity that has been studied most to date is time pressure. The results of these studies, in the field of interpersonal relationships, have been inconsistent (studies by Amabile et al. (2002), Baer and Oldham (2006) or Ohly, Sonnentag and Pluntke (2006)). Studies in this area tend to be very general and ignore the internal changes that take place in people in the short moments between work stressors and creativity.

The effects of the limitations of everyday life on creativity have also been analyzed. The studies showed inconsistent results. However, they demonstrated that the presence of an active mood in people is more related to creativity (e.g. Binnewies and Wörlein 2011, De Dreu 2003; Sonnentag 2011; Zhao and Humanyun 2010, Zhou and George, 2001) than an "off" or passive mood. Different theoretical models have been created of the intrapersonal positive relationship between positive moods and creativity (Binnewies, 2011).

Stress can be positively related to performance because employees sometimes work better with time pressure. An employee may believe that he can work better with a certain level of time pressure, knowing it drives him to work harder, faster and longer (Binnewies et al., 2011). In contrast, according to the relationship of stress with creativity, research based on the Theory of Activation (Gardner, 1990) and the Theory of Evaluation of Stress (Lazarus and Folkman, 1984) reveals that a worker is properly stimulated and fully engaged at medium levels of activation (Baer and Oldham, 2006; Gardner, 1990). The moderating role of a continued link between work stressors and creativity has already been demonstrated (Baer & Oldham, 2006). In short, when workers are optimally stimulated, challenged and engaged, work stressors can promote the generation of creative ideas at work (Baer & Oldham, 2006).

Given the above, we propose that:

P1. Work stressors are positively related to creativity.

CONFLICT ASYMMETRIES AND CREATIVITY

The "asymmetry of conflicts", at an individual level, refers to how a team member perceives a conflict as being greater or smaller than his fellows do (Jehn, 2010). It therefore does not give a sense of direction or intensity of perception but provides information related to the perception of individuals within the group.

In general, the literature related to conflicts assumes that all members of a group perceive conflicts identically (Amason, 1996; among others). The idea that different persons may have different perceptions of reality is based on Social Cognitive Theory (Bandura, 2001). Along this line, Jehn, Rispens and Thatcher (2010) studied some elements that mediate between conflict asymmetries and creativity. The mediators they analyzed were "group atmosphere" and "social processes". "Group atmosphere" is the term used to describe the attitude that members have about the working environment (Jehn & Mannix, 2001). "Social processes", meanwhile, reflect the interactions between members regarding the group atmosphere. The group atmosphere refers to the degree to which group members compete or co-operate with their companions and the levels of respect or commitment they feel to each other (Mannix & Jehn, 2004).

Working teams are prone to the development of conflicts that can affect their performance. Conflicts in teams take the form of concerns among parties such as discrepancies or inconsistent and irreconcilable desires (Boulding, 1963). These controversies can be categorized into three types. The first are "relational conflicts", relational incompatibilities that can cause tensions or frictions. They can also include feelings such as disappointment, frustration or anger with other group members (Amason, 1996; Pinkley, 1990). The second category is formed of "tasks conflicts", which arise due to differing points of view and opinions during team tasks (Amason and Sapienza, 1997). These conflicts consist of lively discussions and exchanges of points of view and, by definition, are not associated with negative interpersonal emotions (Jehn and Mannix, 2001). A third category has been identified more recently in the literature: "processes conflicts" (Jehn, 1997; Jehn, Northcraft and Neale, 1999). These kind of conflicts are caused by concerns related to how workers think they should proceed in order to accomplish their tasks (Jehn and Mannix, 2001)

Today, teams face ever greater challenges due to the changing environments of the workplace. Solving the stresses associated with the three categories of conflict discussed above, whether they have occurred on account of real or merely perceived differences, is a challenge .(De Dreu, Hanrick, & Van Vianen, 1999; Thomas, 1992; Wall & Callister, 1995). Different perspectives on conflicts are critical to studying teams' performances and, by extension, to studying creativity. Conflict asymmetries affect personal relationships, creating tensions that make the relationship between conflicts and creativity an interesting one to study. However, scientific contributions on this topic so far have been largely anecdotal, with the exception of the study by De Dreu (2006). It seems that an individual's perspective on a conflict could influence individual creativity in a negative way, which would mean that a direct negative relationship could exist between individual conflict asymmetry and creativity. However, once again, the lack of a theoretical framework for this topic is clear.

A significant volume of the literature on shared mental models, consensus in groups and collective cognition suggests that the asymmetries of conflicts

have a negative influence on employee performance and creativity (Jehn et al., 2011, among others). This is because asymmetries in how conflicts are viewed can make team discussions unproductive, since team members who do not believe some problems exist are not able to discuss topics in relation to them (Jehn et al., 2010). The exchange of information necessary for the development of creativity is then destroyed.

Team members who perceive less conflict feel more identified with the group and more committed to the team, which increases their general satisfaction (Jehn et al., 2010). This motivates them to engage with the generation of ideas and share them with the group. However, team members who perceive more conflict have higher levels of distrust and believe that their colleagues have bad intentions. This makes them waste time and extra energy in protecting themselves, which reduces their performance and interferes with communication and the proper functioning of the team. When higher levels of conflicts are perceived, the team's effectiveness is inhibited. In such circumstances, the group's cooperation and communication capabilities are impaired. They are not facilitated through the sharing of mental models and members are thus not allowed to function effectively (Cannon-Bowers et al., 1993, Mason, 2006, Salas et al., 1992).

Relational conflicts increase stress and anxiety and decrease productivity and the generation of ideas, as they cause an inhibition of peoples' cognitive functions (Staw et al., 1981; Roseman et al., 1994). They form a distraction for employees from their tasks which consequently reduces their productivity (Argyris, 1962; Kelley, 1979 Wilson et al.. 1986).

In contrast, it has been shown that, with moderated levels of task conflicts, when performing certain types of more complex work, non-routine and uncertain environments (Jehn and Mannix, 2001) may be beneficial to the performance of workers (Jehn, 1995). In complex tasks, teams may benefit from differences in opinion on how the tasks should be done (Burgeois, 1985; Jehn, 1995), thus generating new ideas and improving the quality of the decisions made jointly. The opposite is displayed by those workers who adapt to a more individual way of working (Mason and Mitroff, 1981; Schweiger, Sandberg and Rechner, 1989; Schwenk, 1990). With a higher level of task conflicts, cognitive systems decrease, information processes are hindered and creativity and performance suffer (De Dreu and Weingart, 2003).

Meanwhile, conflicting processes are also associated with low levels of productivity (Jehn, 1992). Continuous disagreements over the allocation of tasks diminish the effectiveness and performance of workers (Jehn, 1999). In such circumstances, the focus tends to shift to unproductive discussions about the skills of the members (Jehn, 1997).

In summary, the literature shows the functionality of task conflicts in team relationships and processes (McShane and Von Glinow, 2000; Robbins, 2000; Rollinson, 2002). Some researchers, however, such as De Dreu (2003), believe that there are no significant differences in terms of influence on performance between different levels of task conflict. In fact, Dreu's study shows a negative correlation between job satisfaction and experiences of both kinds of conflict.

In spite of the above, the opposite may also apply: badly performing teams may feel concerned, stressed and frustrated, increasing their relational conflicts. This revealing data shows that certain levels of conflict could be beneficial or have positive effects on elements like creativity and divergent

thinking (Carnevale and Probst, 1998, Van Dyne and Saavedra, 1996;). Thus, if we study the effects of both types of conflict on decision making teams, the trend shows a positive effect on the quality of decisions (Hollenbeck et al., 1995, Schulz-Hardt et al., 2002). Finally, we note that certain circumstances of openness, sincerity and psychological health can make a positive impact on employee performance (De Dreu and Weingart, 2003).

From the discussion in the preceding paragraphs, we suggest that:

P2. Asymmetries of conflict are negatively related to creativity.

DISSATISFACTION WITH THE STATUS QUO AND CREATIVITY

Another construct studied that has an influence on creativity is "dissatisfaction with the status quo". Under certain conditions, this may, according to recent studies (Zhou et al., 2001), increase the creativity of workers. In past studies, dissatisfaction has usually been measured by "absenteeism", "turnover" and "behavior". Recently, however, a current of study has emerged, aiming to determine whether this dissatisfaction with the status quo is detrimental to employees' effectiveness in all cases. These studies have revealed that discontentment with the situation in which a person is working can be an incentive for change (Zhou et al., 2001; Janssen et al., 2010).

Job dissatisfaction is an important motivator. It can make people change, be concerned about changes (Farr and Ford, 1990) and assess the introduction of new ideas (Yuan and Woodman, 2010). The literature on the topic has positively associated job dissatisfaction and creativity (Zhou et al., 2001), to the extent that people with certain characteristics may create a constructive response to job dissatisfaction and use creativity to express their position. However, a worker needs to feel that his creative output is effective in the company and know that he has the support and feedback of his colleagues and organization. Feedback from companions increases the level of attention given to tasks, fosters interest and increases orientation towards learning, all of which leads to creativity. Under these conditions, the worker is able to see things from different perspectives and is stimulated to find new ways of doing things (Cummings and Oldham, 1997). A constructive response by workers is needed, as they get results by adopting a cognitive perspective on negative situations. It is necessary for individuals to perceive that their ideas are useful for their organization and to believe that they will produce a change, so that they will continue to take an active response when facing dissatisfaction. Considering the above as a starting point, we propose that:

P3. Dissatisfaction with the status quo is positively related to creativity.

THE MODERATING EFFECT OF EMOTIONAL INTELLIGENCE AND JOB CONTROL

Salovey and Mayer (1990) define emotional intelligence (EI) as the ability of an individual to control their emotions and those of others, distinguishing between negative and positive effects and using them to guide their thoughts and their actions. "Proactivity" is the word used to describe how workers are able to direct their actions to anticipate or initiate changes in their systems of work or their roles in the workplace (Griffin, Neal & Parker, 2007) and to support their effectiveness and the organization (Watson & Clark, 1992). Scientific literature indicates that high levels of personal initiative are associated with the generation of creative ideas (Binnewies, Ohly & Sonnetag, in press; Frese, Teng, & Wijnen, 1999). Organizations therefore need proactive workers with change-oriented behaviors to enable creative changes in their jobs and companies. To find out which factors would predict creativity, it is necessary to study what causes proactive and productive reactions. Therefore, the moderating role of EI in the model is proposed.

EI, WORK STRESSORS AND CREATIVITY

Most authors writing on the topic have associated stressors linked to the overcoming of obstacles with lower creative performance. When such stressors are present, workers spend more time and effort at work and yet do not, in return, get closer to fulfilling their objectives. This is discouraging and undermines creativity.

Nevertheless, recent studies have shown that two types of stressors at work increase proactive reactions (Fritz and Sonnentag, 2011). Proactive attitudes or behaviors are described as mechanisms to ensure the achievement of goals when there are obstacles in the path to doing so (Fritz & Sonnentag, 2011). However, these results occur in the immediate future, and no long term studies have yet been carried out. Time pressure makes workers work faster and harder and the limitations of a situation make employees work harder to achieve their goals (Frese and Zapf, 1994:311).

However, work stressors are related to conflicts between work and leisure that arise in people (Lin Zhao and Humanyun, 2010). If employees are not able to find a 'way out' of stress at work, then it is unlikely that they will be able to find a way to keeping performing and much less find ways to improve their job or be more creative. Hence, great importance lies in a worker's ability to minimize the impact of work stressors (Lin Zhao and Humanyun, 2010), which again is a feature of Emotional Intelligence.

Furthermore, minimal levels of conflict between leisure and work must be maintained, especially in places where other stressors are elevated.

However, implicit or individual measures still have not been used to investigate the effects of stressors on creativity. Studies conducted so far have not delved into positions with low creative requirements, so that no final conclusion can be drawn as to the relationship between work stressors and creativity.

We therefore propose the following:

P4. EI moderates the relationship between work stressors and creativity, as the relationship is more positive the higher the EI is.

EI, CONFLICT ASYMMETRIES AND CREATIVITY

There are additional sets of predictors of everyday creativity that remain unexplored, including conflicts with colleagues or customers. Cognitively, employees could "force" certain moods to increase their creativity. They could thus switch off from work during breaks and avoid the negative effects of conflict. This would require training by the Human Resources Department.

Studies have been done, for example that of Scott and Bruce (1994), on how contextual and individual characteristics influence innovative behavior through perceptions of how innovative a company is. Theories of cognitive processing demonstrate that not all group members have the same perceptions and therefore they do not all perform or react in the same manner. More optimistic people perceive there as being fewer conflicts or interpret conflicts more positively. These people are more contained and have a greater capacity for productivity at work (Taylor & Brown, 1988). They often feel over-worked but less frustrated. By contrast, people without these characteristics are less responsive, communicate less easily and cooperate less. These elements converge in a decrease of creativity (Pelled, 1996).

It can be seen that task conflicts have a positive influence and that, in conflicts, tasks and relationships, no significant differences were found. This shows evidence that conflicts can have, in their three modalities, positive effects on creativity, if appropriate use is made of them. It is necessary to observe and analyze the way people react to two separate conflicts and determine under what circumstances a positive impact could be made on the generation of new ideas and, therefore, on creativity. The literature highlights the need to clarify these effects in conflict processes as well. "Cognitive diversity" is the word used to describe the potential for quality decisions to be made through interaction, where each member identifies, extracts and summarizes his views. However, making decisions requires an active action by the members of the group and consensus does not always ensure quality decisions.

A fruitful area of study in this area is the detection of differences between types of tasks and how they would affect the creativity in standardized and less complex tasks, as well as in longer projects. The findings of Jehn and Mannix (2001) are starting points for this research. Their study showed that in high yield teams, moderate levels of conflict were observed in teamwork tasks of intermediate difficulty. In regard to the conflicts of relationships and processes the levels appear low. However, the levels rise, especially on dates near the deadlines of project presentation or task completion. However, the absence of significant differences between the levels of the three types of conflict underlies the need for further research to clarify these issues. One problem that can occur in such groups, which opens a line for a possible explanation, is employees' misinterpretation of a task conflict as a personal one (Amason, 1996; Brehmer, 1976; Deutsch, 1969).

One explanation for the differences between the outcomes of conflicts is based on the nature of different reactions to conflicts: reactions can be productive and destructive. Some conflict sources are more beneficial than others (Amason, 1992). There are also functional and dysfunctional conflicts. Functional conflicts orient differences to achieve the aims and are called cognitive conflicts. Productive results can include the learning, setting or adjustment of a disagreement (Oluremi, 2008). Filley and Robbins (2000) emphasize

the importance of assertiveness in obtaining the results of creativity and innovation. The solutions of problems and disputes fall under two categories of assertiveness, as a lack of assertiveness or accommodative behavior generates negative consequences of stress. A "good loser" would have more ability to innovate. The literature on the topic has focused on conflicts as sources of idea generation and has not thoroughly analyzed the influence of their asymmetry on innovation.

Meanwhile, there is evidence that the way individuals react to a certain event is a critical predictor of the consequences of such event (Felstiner, Abel and Sarat, 1981). The team members who deal with a conflict cooperatively have greater exchanges in points of view, leading to improved understanding of the key elements of a task and a better understanding of the perspectives of other individuals (Tjosvold, 1998). By contrast, people who see conflicts in a competitive manner have a greater propensity to close their minds and avoid conflict by rejecting ideas that are opposed to theirs (Tjosvold, 1998). By establishing rules to govern conflicts (organizing the way members interact with each other), it would be possible to influence the reactions of individuals facing the conflict so that they come together productively and so that understanding, cooperation and positive perception are increased. Positive results could thus be obtained.

As has been extensively studied, the construct of conflict asymmetries in groups (Amason, 1996; De Dreu & Weingart, 2003; Jehn, 1995) can be useful to delve deeper into the psychological characteristics of people who perceive less amount of conflict in order to study what influence they have on individual creativity. It is time to try and discover how results can be generated in the presence of conflicts. One method might involve encouraging productive reactions in the face of these conflicts, while reducing asymmetries in the perceptions of workers, which seems possible by way of Emotional Intelligence. A promising line of research in this area is thus opened into the study of the kind of tasks that develop workers' best skills and individual characteristics. This may help shed light on the role of conflict and its influence on performance and creativity.

Based on the above considerations, we propose that:

P5. EI moderates the relationship between conflict asymmetries and creativity and the ratio is less negative the higher the EI is.

EI, DISSATISFACTION WITH THE STATUS QUO AND CREATIVITY

A dissatisfied worker might try to change his situation, finding new ways to improve performance (March and Simon, 1958; Staw, 1984; Van Gundy, 1987). The literature suggests four ways to measure dissatisfaction with the status quo: exit, voice, loyalty and negligence (Farrell, 1983; Hirschman, 1970, Rusbult et al., 1988, Whitey and Cooper, 1989). Workers might leave the company ("exit") or might stay in the organization, actively improving conditions, seeking new ways of doing things and advocating for changes ("voice"). As a third possible response, workers might adopt a passive approach to their dissatisfaction, objecting to nothing as a sign of "loyalty". Finally, they might even stay with the company but make no effort in their work ("negligence").

The only constructive response is using one's "voice" to try to correct problems. This would not only benefit the individual, but also the organization. Intrapersonal feelings are important, as several studies have suggested. This reveals the intrinsic interest workers have towards their tasks and could help develop positive relationships between individual creativities (Amabile, 1996, Woodman et al., 1993). Since the generation of creative ideas is a component of innovative behavior, the intrinsic factors would be useful to explain innovation in employees (Yuan and Woodman, 2010).
The following proposition is thus suggested:

P6. EI moderates the relationship between dissatisfaction with the status quo and creativity, while the relationship becomes more positive the higher the EI is.

Since the complexity of a task has been strongly associated in the literature with high levels of creativity (Treiman, 1980), it is necessary to introduce this variable into the model. External analysts have assessed the complexity of the tasks of various jobs on the basis of how abstract or creative the tasks are. This measure was used by Roos and Treiman (1980) in the fourth edition of the Dictionary of Occupational Titles (DOT). In this publication, the "DOT complexity" was, among other variables, proposed as a measure of creativity at work.
A review of the literature concludes that there is a total lack of current studies regarding the three variables (work stressors, conflict asymmetries and dissatisfaction with the status quo) or relating them to the complexity of jobs, the types of tasks being performed or the control exercised by workers over them. The literature suggests an interesting relationship between intelligence and job satisfaction and concludes that for highly complex jobs this relationship is positive.

JOB CONTROL, WORK STRESSORS AND CREATIVITY

Regarding work stressors, in jobs subject to high levels of control, Binnewies' studies (2011) show that the constraints of a situation are negatively related to creativity and that time pressures and creativity have a curvilinear relationship. However, at low levels of control, neither limitations nor time pressure are significantly related. It seems clear that knowledge of the type of control in place in a position is needed to determine the results. As for the relationship between work stressors and creativity, it would be beneficial for daily creativity at work to strengthen control and limit the pressure of time at intermediate levels (Binnewies and Wörnlein, 2011). Since work stressors cause dissatisfaction with the status quo, it is suggested in the literature that a positive relationship can be caused by the increased cognitive capacity and ability typically found in more complex jobs (Ganzach, 1998).
After these considerations, we propose that:

P7. The level of control at work moderates the relationship between work stressors and creativity and the relationship is more positive the greater the complexity of work and the higher the level of control are.

JOB CONTROL, CONFLICT ASYMMETRIES AND CREATIVITY

Most studies about conflicts and their asymmetries have been conducted while participants were solving cognitive tasks. There is a clear lack of studies on the resolution of production or routine tasks. Complex and less routine jobs require, in most cases, greater interaction with others. These relationships can involve both development in work teams and interaction with lower positions in the hierarchical chain. An ideal level of union between members has to be found and this can be handled through established rules. An ideal level in the use of rules must be found in order for emotions to minimize the impact of conflict on yields (Oluremi, 2008).

The final effect in the literature of task conflicts has not been made clear. To Jehn (1997), it is a positive effect but for De Dreu (2003), it is negative. One possible explanation may be that teams with lower standards and more task conflict become unproductive, which explains the negative results studied by De Dreu (2003). It seems that conflict asymmetries have less negative results on the creativity of more emotionally intelligent people. It is also interesting to discover during what type of jobs (or types of tasks carried out in those jobs) these differences are more or less revealing. These findings might encourage workers' creativity and act as a first step towards innovation in a company.

It is therefore proposed that:

P8. Job control moderates the relationship between conflict asymmetries and creativity and the relationship is more negative the greater the complexity of the work and control on it is.

WORK CONTROL, DISSATISFACTION WITH THE STATUS QUO AND CREATIVITY

Work stressors cause dissatisfaction with the status quo. However the literature on the topic suggests that a positive relationship is caused by increased cognitive capacity and ability which are more typically found in complex jobs (Ganzach, 1998). According to the literature and theories of goal selection (Locke & Latham, 1990) and level of aspiration (Lewin, 1936; Gopala, 1977) the most intelligent people are those that want and seek more complex positions and objectives. To Ganzach (1998), intelligence is negatively related to job satisfaction when job complexity remains constant. In studies, tasks considered by workers as unchallenging or uninteresting caused dissatisfaction. This dissatisfaction was found to be more pronounced in more intelligent people.

Likewise, for the study of dissatisfaction with the status quo it is necessary to consider the differences caused by the characteristics of the job. People with lower performance in their departments, provided they are proactive, have higher levels of motivation to introduce change. This is because they have a greater appreciation of their innovative ideas, even though the application of these ideas will depend largely on their ability at their jobs. Ganzach studied the relationship in which the dependent variable was satisfaction and the independent one was intelligence, moderated by the complexity of the job. He himself said in his study "that this relationship is mathematically equivalent to a model in which intelligence moderates the relationship between job complexity and job satisfaction" (Ganzach, 1998).

Given the above, we could establish that:

P9. Job control moderates the relationship between job dissatisfaction with the status quo and creativity, while the relationship is more positive the greater the complexity and control at work is.

INITIAL MODEL PROPOSAL

PROPOSED RELATIONSHIPS MODEL

Figure 1 shows the dependence model of relationships between the independent variables, work stressors, conflict asymmetries and dissatisfaction with the status quo, and the dependant variable, creativity. Also shown are the moderating variables: Emotional Intelligence and job control.

Figure 1. Model of relations between job stressors, conflict asymmetries, dissatisfaction with the status quo and creativity moderated by emotional intelligence and job control
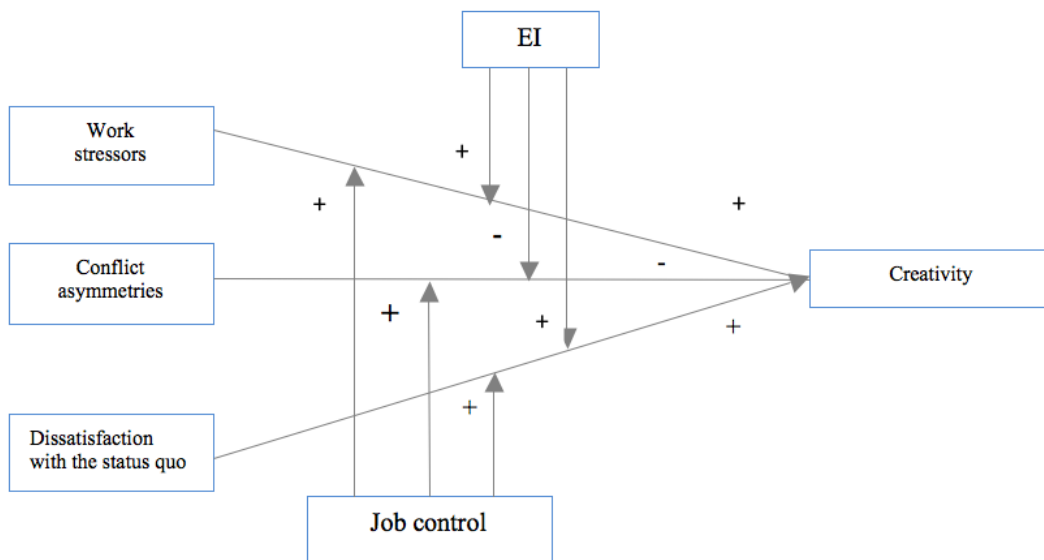
After reviewing the literature, it is clear there is a lack of preliminary studies in this field. The variables that positively influence creativity have been studied, but the negative variables have not. Work stressors, conflict asymmetries and dissatisfaction with the status quo are negative concepts, but the aim of this paper is to analyze whether it would be possible to obtain, in some cases, benefits from them. Emotional intelligence is closely related to the perceptions of individuals about how to face situations. However it is yet to be determined whether this makes them more proactive and thus able to obtain beneficial results from these situations.

Similarly, as demonstrated above, a review of the literature the literature review invites an investigation into the differences inherent to various types of jobs. For this study, the job control variable has been included in the models. The goal is therefore to show whether there really are such differences in terms of jobs.

CONCLUSIONS

MAIN CONTRIBUTIONS AND IMPLICATIONS

The concept of creativity has been widely studied and it is an important variable for companies to consider when they come to managing their innovation. It should not be forgotten that it is people who innovate and create. The objective of this study is to get closer to determining which of the mentioned factors have an influence on creativity that is important for organizations. The aim is to analyze how the circumstances that exist in the company on a daily basis have an influence on creativity. It seems that adverse situations that a worker might face do not always need to have a negative impact. Or at least, it appears that they can bring something positive to the persons who experience them or to their organization.

Preliminary studies confirm that perceptions differ between individuals of the factors studied. It is demonstrated that this difference is caused by different individual cognitive characteristics. One of the influences on how people react is the type of positions in which they perform their work. Creativity is not only innate but also has components of learning. It is possible, therefore, to induce in a worker the ability to be creative. In this sense, the present study increases the understanding of how companies can manage future adversity in a positive way and, above all, fosters innovation in organizations.

If people are more emotionally intelligent, they are more proactive, are capable of managing their perceptions in a better way and are more able to learn from adversity. Furthermore, they are also more capable of reducing negative effects that could cause, among other things, conflict asymmetries to impact on creativity. As Oluremi et al, 2008, propose, emotional intelligence can be considered an influence on conflicts among workers and their reactions to those conflicts.

The aim is to analyze how creativity is influenced by circumstances that exist in companies on a daily basis. It seems that adverse situations that a worker might face in the workplace do not need to be always negative. Or at least, there is no reason why they may not create positives for workers or their organizations. Through the different perceptions of individuals facing these situations, different results can be obtained. More emotionally intelligent people are more proactive and able to better manage their perceptions and to learn from adversity.

As Oluremi et al. (2008) proposed, emotional intelligence is examined as a moderator for workers and their reactions to conflicts. It is important to know what type of work people with different skill sets perform, as it should influence the way in which people develop their skills and put them into practice (Binnewies, 2011, De Dreu, 2003; Jehn, 2001; Jehn, 2010; Yuan, 2010, Zhou, 2001).

This paper has delved deeper into the individual-level relationships between determinants and creativity. The role of these determinants as catalysts in proactive situations has been analyzed, but authors like Binnewies et al. (2011) call for more research into them. The paper has analyzed the effect of conflict asymmetries, as Jehn did in his work of 2010. It has gone deeper into the impact of dissatisfaction with the status quo on creativity, resolving whether the presence of this situation really ensures a positive performance (Zhou et al., 2001).

On a practical level, many implications have been raised for the professional world. Progress has been made in terms of managing innovation, increasing creativity and even minimizing the negative situations in the company, provided that the behavior of people managing groups and facing the relevant situations is known. There are theories that support the relationship between diversity, members' attitudes and conflicts (Jehn & Mannix, 2001). Knowing the cognitive differences between members of teams and their idiosyncratic characteristics, more efficient teams could be formed. This would solve if diversity in teams really generates more productive or more destructive results. A second practical implication arising could be the formation of teams that will increase effectiveness while reducing negative conflicts. These trained people could create value for their organizations by identifying and separating unproductive conflicts and not directly relating them to relationships. Additionally, managers could have a greater amount of information with which to manage their human resources. These are the key to determining the rules of communication, behavior and relationships. They could create work environments that encourage performance and creative behavior, promoting constructive discussions. They could minimize absenteeism and worker's sick-leave due to medical problems, as these are often generated by work stressors. This would justify an investment by companies that, in the long-term, would be less than the costs caused by not managing these problems.

Managers can reap the benefits from employee creativity, selecting or developing creative individuals. They must be aware that selecting employees based solely on their educational orientation does not guarantee creativity. Managers are fundamental to generating environments that encourage self-efficacy, through, for example, applying the principles of transformational leadership (Gong et al, 2009).

Regarding the academic implications, the way to the study of conflict asymmetries has been opened. Inconsistencies can be clarified about the true influence of these factors as we have studied creativity from an introspective and individual point of view. We have thus taken a step in the investigation to determine the psychological context of creativity. It can be shown that the perception of the environment influences organizational behavior. Early and rapid generation of ideas for new products, processes and learning could be influenced. These advances play an important role in the generation of creative behavior in organizations and suggest aids to this end such as challenges, determination of the most appropriate organizational forms, support for the working teams, monitoring management and organizational impediments. Through the study, the functionality of work stressors on more emotionally advanced people can be seen. Differences caused by varying types of job and companies could be obtained. The results, in this case, would diagnose how these differences could interfere with the environment to generate an idea conducive to creativity. However, this paper should avoid making conclusions regarding the desirability of increasing harmful environments for workers. One solution to this problem might be to provide psychologically stronger people for positions subjected to unstable or uncertain environments and keep the weaker employees concentrated in other occupations in which creativity is not so needed.

Through the application of the results, Human Resource Departments are encouraged to focus on stress management for workers, as these departments play an important role not only in influencing higher worker welfare but also in increasing their creativity. By developing appropriate work environments, with the right people, human resource practices could promote creativity, which, as discussed, is very important for business nowadays. With this study we can conclude that if these situations really influence the variations of creativity, business performance can be increased by managing properly the type of people occupying each position and directing each group.

WORK CONSTRAINTS AND FUTURE RESEARCH LINES

Like any theoretical analysis, this study is not exempt of limitations. Further studies should be performed to corroborate the empirical propositions. Single and internal variables are always subjective and this includes cognitive biases difficult to avoid. Still, future research could use appropriate methods to minimize these problems, such as surveying supervisors and other appropriate statistical methods. Having made a relatively recent theoretical analysis and having analyzed publications from several areas, it should be mentioned that studies would be able to go deeper into the relevant issues if there were a greater number of publications.

Most studies in which researchers have referred to proactive behaviors have relied solely on self-reports to assess the variables of interest. This represents a risk of subjectivity on the part of those surveyed. We propose the use of new lines of investigation that take a more objective viewpoint. Some of the respondents should therefore be supervisors of workers. This is not easy because supervisors must be found who work closely with the workers who are the focus of the study.

The issue of perception is another constraint that could represent a potential problem in the measurement of a creativity variable. If one is used to having new ideas regularly, having a single new one will not seem especially creative. However, if new ideas are not common, then a worker arriving upon one will seem an achievement.

Studies have used a minimal number of cases so as to be rigorous in their measurements. Still, the fact of performing the study only in one or two companies represents a limitation.

A third limitation appears in that most studies poll workers almost simultaneously, meaning that results are in some way static. A long term view point is therefore recommended for interpreting interviewees' answers so as to get an idea of what they are like (both personally and in general) and how they think. In the absence of sufficient dynamic studies, the results should not be generalized.

Individual level variables show the influences in people's moods which interfere in their creativity. Further studies would be desirable to find out what other variables influence the creativity of people. Examples might include observing changes in people's creative moods based on their capacity to disconnect during break times, whether their managers or directors have been nice to them, whether they have had a good start to the day or what their home-life is like (particularly right before starting their workday).

The use of a job control variable makes the analysis of a hierarchical level necessary because this variable it extends between more independent and

dependent jobs and some job control variables are developed within the hierarchy of companies. We propose a dynamic study over time, which allows the investigations to complement data with an idea of what happens to workers over time, based on the changing circumstances of the company. Companies today operate in constantly changing environments. The changing circumstances of workers should therefore be considered. This involves constant modification and the study of how employees act upon their creative ideas.

Further research would also be recommended on the intelligence of work team supervisors. Are supervisors able to motivate their employees to be more creative? What are these supervisors like? Are they able to foster creativity in people as an escape from conflicts or problems in the company? These questions open new research lines that could help companies to select people who avoid the problems within teams and are able to take advantage of them. There are two other important factors related to this. The first is to consider how the leadership of people in charge of groups is influenced when pressure is increased. The second is to consider how to modify leadership based on the environment in which the company is operating. The person responsible for a team has a great ability to influence its components. Future study of relationships between, for example, transformational leadership and motivation could be possible Leaders can have a positive effect on others and thus influence their behavior. The point at which this positive affect becomes useful (even though growth in previous months is often ignored in the literature) can be a very effective tool to promote creativity in workers.

We also suggest further study into psychological environmental influences on creativity. The purpose of this would not so much be to study what environments would favor creative behavior but more to ascertain what perceptions certain types of individuals have when facing the same environment or different environments. We therefore propose a crossover study, investigating how similar people perceive different environments and different people perceive similar environments.

Future studies are also necessary to focus on people's personal characteristics. The current trend of studies revolves around focusing primarily on the working context of employees. Future researchers should not forget that these employees are people and therefore have private lives that can influence them when performing their tasks. We must consider how family and professional life can be reconciled because not all employees have a similar home life or the same amounts of spare time. A variable worth studying is how workers are able to detach from work when they arrive home and how they can sleep better and longer and therefore be more productive when they return to work.

More factors that are worthy of study in this area include finding out how to develop ways to allow employees to take breaks in their working hours that fit with the positions they hold

In conclusion, a more humane study of the peculiarities of every job, every company and every position must be carried out, one that all companies and their employees can benefit from, in order that unnecessary costs and conflicts can be avoided entirely

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