

Abstract Number: 007-0251

Abstract Title: THE EFFECT OF EXTERNALIZATION OF EMPLOYMENT ON ORIENTATION TO INNOVATION IN ORGANIZATIONS.

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POMS 18th Annual Conference  
Dallas, Texas, U.S.A.  
May 4 to May 7, 2007

# **THE EFFECT OF EMPLOYMENT EXTERNALIZATION ON ORIENTATION TO INNOVATION IN ORGANIZATIONS**

## *Abstract:*

This paper studies how the use of externalization influences the workforce in creating a work context that supports innovation and how this relationship is moderated by different contextual variables. To confirm the hypotheses, we used a sample of 184 workers from five firms. The results indicate that externalization has negative repercussions on the internal worker's orientation to innovation. They also indicate that this relation is moderated by contextual variables like group potency and monitoring.

*Key words:* externalization, orientation to innovation, perception of security, supervisory responsibility, monitoring, communication, group potency.

## **INTRODUCTION**

Recent analyses of employment trends show that there was a gradual movement from full-time employees to part-time or temporary agreements, or temporary work contracts in the 1990s. Similar developments seem to occur in the advanced industrial economies of Europe, the United States and other Pacific rim countries (Bergström, 2001). Temporary work is a concept used to describe any employment relationship that differs from salaried, full-time or permanent work in a firm. The broadest understanding of the term includes not only jobs available through Temporary Agencies (TAs), but forms of employment such as part-time work, direct temporary hiring (without recourse to TAs), and contracts and subcontracts for goods

and services (Conelly, 2004; Kunda *et al.*, 2002; Walsh & Deery, 2006). The authors use the term “externalization” to describe this kind of practice (e.g., Davis-Blake & Uzzi, 1993). Pfeffer & Baron (1988) distinguish between three kinds of externalization: externalization through reduction of length of employment (temporary employment), externalization of management control (independent contracts/outsourcing) and externalization from the workplace (e.g., e-work).

This process may be related to the change in the way the labour market functions and may have considerable consequences at the individual and organizational level. Specifically, internalization facilitates control of the organization, whereas externalization reduces many administrative and labour costs (Frierman, 1994; Voudouris, 2004). Externalization increases a firm’s flexibility in confronting the conditions of a changing market and the needs of the organization (Davis-Blake & Uzzi, 1993; Storey *et al.*, 2002). Temporary workers can also make it easier for a firm to access highly specialized abilities needed only for a brief time period (Davis-Blake & Uzzi, 1993; Houseman, 1997; Kalleberg, 2000). We should also point out that externalization can save the organization from having to manage the selection and hiring of workers. For many firms, temporary hiring serves as a source of candidates for positions of indefinite duration. The intermediary’s provision of employees constitutes a test period for the user firm, after which the firm decides whether to incorporate the worker into its stable staff.

Despite these advantages, the employment of a temporary workforce can have negative consequences that both researchers and managers fail to recognize

(Broschak & Davis-Blake, 2006; Cardon, 2004; George, 2003). Vlasic (1996) observes that the use of practices like externalization involves stable reactions against these practices in the employees. Likewise, Geary (1992) observes that organizations' use of the temporary workforce involves an increase in the tension between internal and external workers. Other authors have focused research on the resentment of internal workers toward the changes that externalization has created in their work (Smith, 1994). Pearce (1993) finds that stable workers linked to firms with a larger number of independent contracts and subcontracts have less confidence in their organizations. Davis-Blake et al. (2003) find that stable employees who work with a large number of temporary employees show lower levels of loyalty and intent to stay in their organizations, as well as higher intention to form unions. Along the same lines, George (2003) concludes that the scope and dimension of externalization is negatively related to the attitudes of internal workers, especially those with fewer supervisory responsibilities.

The creation of new products, ideas or processes is also a subject of vital importance in organizations, since it enables them to respond and adapt to environmental changes (Dougherty, 1992; Brown & Eisenhardt, 1995). Thus, phenomena such as the intensification of international competition, rapid technological changes, and the maturity of clients' needs involve considering innovation as a fundamental way of adapting to these changes (Eisenhardt & Tabrizi, 1995), since innovation can give the organization the ability to lead the competition and to some extent guide the competition in the direction chosen, providing a competitive advantage and above-average results (Robinson, 1988; Lieberman &

Montgomery, 1988). Because of this, much prior research has studied the influences of structural and contextual variables on organizational innovation.

Nevertheless, authors like Russell (1990) and Craig (1995) emphasize the need not only for organizational systems, structures and agreements for the implementation of organizational innovation but also for certain kinds of positive attitudes and behaviours toward innovation in the whole company. Authors like Zaltman *et al.* (1973) suggest two different phases in the innovation process: initiation and implementation. A critical part of the initiation phase is “openness to innovation” (Zaltman *et al.*, 1973, p. 64), that is, whether the organization’s members are willing to consider innovation or resist it. Hurley and Hult (1998) call this concept “innovativeness”. “Innovativeness” is the notion of openness to new ideas as an aspect of the firm’s culture. “Innovativeness” as firm culture is a measure of the orientation to innovation of the organization’s members. In our research, we introduce the variable of orientation to innovation defined as a culture of the organization which, when the right resources are present, facilitates the process of implementing innovation.

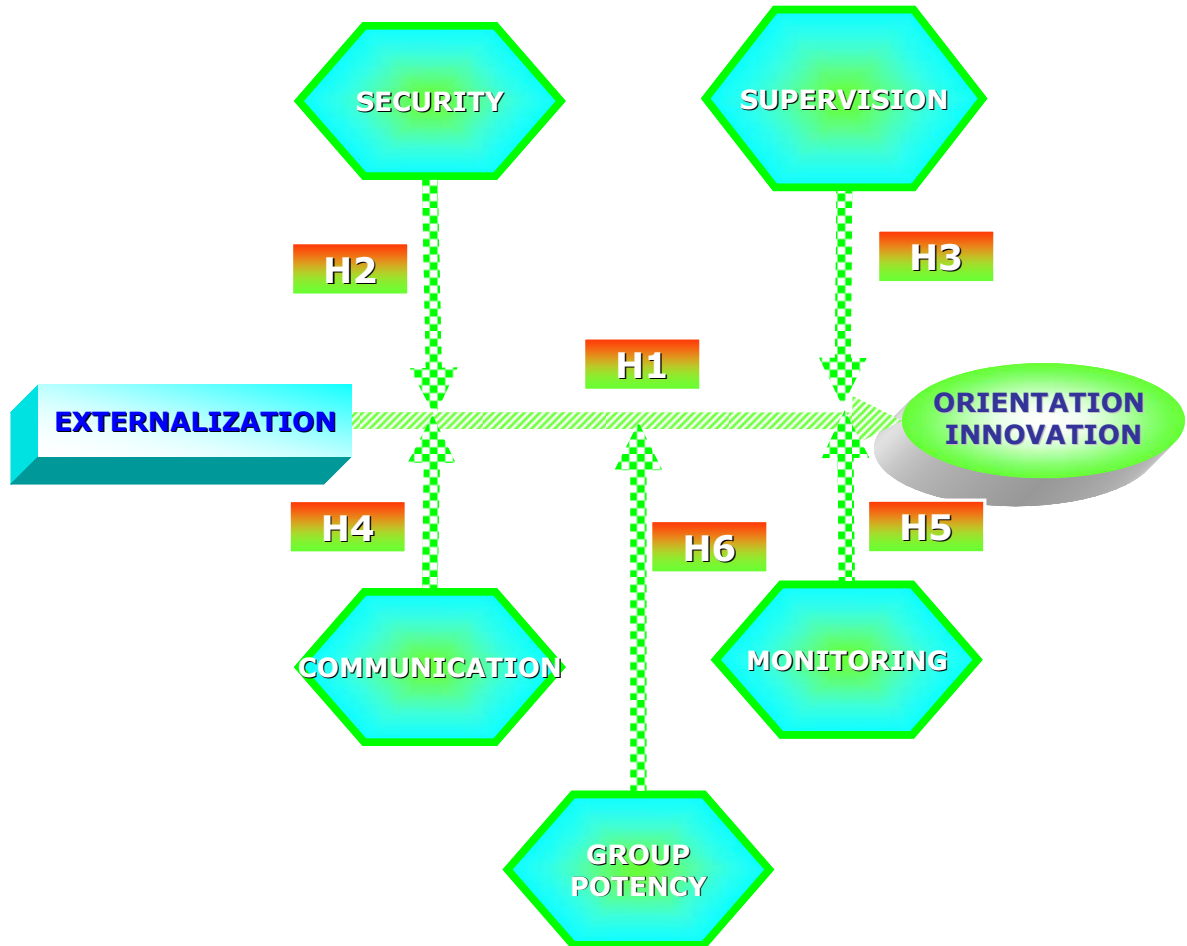
In spite of preliminary evidence that externalization can have negative effects on internal workers, research on the consequences of externalization has focused mainly on the differences in attitudes and behaviours between internal and external workers. However, such research suggests that externalization can undermine the relationship among internal workers. We also argue intuitively that specific structural and contextual factors of an organization can interact in complex ways to influence

orientation to innovation. The facts show that a change is taking place in the model of the labour market, with an increase in the use of externalization of labour. During this period there has also been great emphasis on the importance of innovation as a means of maintaining competitive advantage in the increasing turbulence of the environment (Baden-Fuller & Pitt, 1996; Christesen & Overdorf, 2000). A first question that we propose in this study is whether externalization can have a positive or negative impact, not on innovation but on the internal employees' orientation to innovation.

The goal of this article is to examine the consequences of externalization from the perspective of employees. Our study seeks to contribute additional empirical evidence to this line of research in two ways. First, it examines explicitly how the dimension and scope of externalization are related to orientation to innovation in organizations. Second, it examines how the relationship between employee externalization and orientation to innovation is moderated by contextual variables such as job security, supervisory responsibility, communication, monitoring and group potency. These variables represent alternative ways organizations use to construct relations with their internal workers (Ashford et al., 1989) and can influence the degree to which these workers perceive externalization negatively (Geary, 1992; Smith, 1994). To fulfil our goals, we first analyse how externalization is related to orientation to innovation. Second, we study how these relationships are moderated by contextual variables: supervision, security, monitoring, group potency and communication. Finally, we present the contributions of this research. The relationships proposed between these variables are presented in Figure 1.

**FIGURE 1**

**The effect of employment externalization on orientation to innovation**



## **LITERATURE REVIEW AND HYPOTHESES**

### **Externalization and Orientation to Innovation**

Analysis of the organizational culture can help us to understand better how a specific organization functions and thus to enable the adoption of measures for improvement or change through appropriate programs. Today we know that organizational culture exercises a regulating influence on the individual behaviour of

the organization's members. It affects the way the organization socializes its members, filters the way situations are perceived, and modulates satisfaction and the conception of interpersonal relationships, as well as the definition and methodology for solving problems. It graduates the involvement in and commitment to general goals and determines the strategy and procedures of the organization. Despite general agreement on the theoretical-practical importance of culture and climate, there is a significant lack of explanatory models to aid our understanding of the phenomenon. It is not easy to explain the mechanisms by which people come to share norms, values and similar behaviour. A first step is thus to analyse the attitudinal and behavioural referents that underlie the norms, values and perceptions of the organization's culture. Among those most often cited, we find (Kilman & Saxton, 1983): orientation to the client, orientation to personnel, orientation to the organization's results and capacity for contributions, orientation to innovation, orientation to costs, and orientation to innovation.

This research focuses on orientation to innovation. Our idea is that the more employees discuss and share their beliefs about management, the more these beliefs will come to be characteristic qualities of the organization itself. And it is on this level of unity or integration that culture can be elevated to the category of "social energy" that directs the group toward action. We propose that this social energy is either functional and congruent with organizational objectives or dysfunctional, encouraging norms of conduct such as deliberate resistance to adopting changes.

We define orientation to innovation as “a cultural characteristic that includes the perception that change and creativity are supported and stimulated, as well as risk-taking in new areas where the members have little experience.” Research has shown a large number of variables that act as antecedents to innovation. In general, studies of innovation have focused on three main groups of antecedents to innovation: individual, environmental and organizational determinants (King, 1989). However, more recently, another area of interest that has been considered an antecedent of orientation to innovation is organizational culture. Here, we would emphasize various dimensions, such as emphasis on learning, teamwork, participation, support for creativity, orientation to flexibility, and emphasis on externalization. All of these affect the degree to which the organization is oriented to innovation.

Based on the literature on organizational culture, we suggest that the deepest manifestations of orientation to flexibility are found at the cultural level, where the passage of time, histories, reinforcement of behaviours and the creation of organizational processes generate the basic assumption among the employees that innovation is important. A culture oriented to innovation requires leadership that defines clearly all of the processes that affect the development of beliefs and assumptions about the real importance of innovation as a critical axis in the organization (Russell, 1990; Schneider & Guzzo, 1996; Judge et al., 1997; Filipczak, 1997; Tesluk et al., 1997; Hurley & Hult, 1998; Wan et al., 2003).

Previous studies suggest that permanent employees can react positively or negatively to externalization processes. In the literature review, we see relatively few

studies that analyse the influence of externalization processes on orientation to innovation in permanent employees.

However, there is disagreement in the strategic and economics literature concerning the nature of the association between employee relations and capacity to innovate. For example, some models of firm strategy emphasise the need to construct and maintain human resources capable of carrying out innovation processes (Grant, 1991; Barney, 1995). By extension, the erosion of these conditions through the use of externalization can deteriorate the organization's capacity to innovate in its products or services, even when the organization can gain some short-term cost advantages through such temporary contracts.

The theory of firm resources and capacities (Grant, 1991; Barney, 1995) proposes that organizations should construct and maintain resources to compete. According to this theory, innovation in products or processes are consequences or manifestations of the organization's capacities and resources (Prahalad & Hamel, 1990). This position is complemented by the view that innovation capacity is acquired cumulatively through a trajectory (Pavitt, 1991). From this theoretical perspective, we can expect that the strategy of human resources that emphasizes employment policies based on security and high and long-term commitment should be conducive to innovation. In contrast, the use of less secure and short-term employment policies like externalization should damage innovation performance.

The literature on human resources also suggests that security and permanent employment contracts generate a high commitment in employees that is necessary, or

at least advantageous, in cases where the organization hopes to implement innovations (e.g., Schuler & Jackson, 1987). Since the capacity of an organization to innovate depends greatly on the knowledge and abilities that the personnel possess, practices like externalization that maintain the worker temporarily can damage this capacity.

Schneider (1973) was the first to develop a work plan to understand the base of perceptions of the organization's members. Research shows that various individuals can observe the same thing but perceive it differently. Therefore, internal and external workers can be immersed in the same organizational culture from the objective point of view but understand how this culture affects their work differently, depending on the worker's situation.

The fact that people can perceive something different may be due to a series of factors that influence the form of their perception. These factors can be found in people who perceive it, in the objectives, or in the context of the situation where the perception takes place. Factors like security and temporariness, which are characteristics of externalization, can affect the way in which the culture (in this case support for innovation) is perceived by the members of the organization. Authors like Pfeffer (1995) stress that many academics agree with the idea that firm performance can be improved through different human resources practices. These policies and practices have an impact on the perception of the organization's culture (Eberhardt & Shani, 1984; Bowen & Schneider, 1988; Ferris *et al.*, 1996).

Likewise, authors like George (2003) find that the dimension and scope of externalization can have negative repercussions on employees' attitudes. In such cases, as for example when the firm eliminates one part of the permanent staff or undertakes organizational restructuring, internal problems of morale will arise—problems associated with the perception of internal equity and problems of intrinsic motivation of personnel (Blank, 1998). These processes will create resistance to modifying accepted patterns of interaction, values, customs and norms, in this case those associated with innovation.

Authors like Chatman (1989) focus on the importance of the system/person fit as a function of the congruence between the cultural norms and values of an organization and the relative norms and values of the people who compose it. She argues that individuals who do not share the organization's values are less likely to contribute constructively to the firm (Chatman, 1989). This conclusion is consistent with some cultural resistance to the phenomenon of externalization and the lower orientation of the worker to adopting practices related to innovation.

There is no magic formula or best way of creating and sustaining a culture for innovation, but management knows that it faces an important challenge: to avoid inconsistency between the values it advocates and the actions it undertakes in the organization. Employees believe that their organization is an innovative organization when they see that innovation is the management's priority and that management shows this through deeds—whom they hire, whom they reward, how the organization is structured, what procedures and resources are available, etc. Thus, a

positive reaction comes from upper management's providing clear signs to the entire organization concerning its open and deliberate commitment to achieving higher levels of innovation through externalization. Through the actions of upper management, the beliefs, values and behaviour of the employees with orientation to innovation will be visible.

Authors like Adams and Brock (1996) argue that externalization can be beneficial for innovation from two quite different perspectives. One is that the diversity of contracts enables constant renovation through new ideas entering the organization. From the other perspective, flexible employment policies neutralize self-satisfaction and rigidity.

We can thus see that the literature is ambiguous and does not agree concerning the influence of externalization. However, the theory of resources and capacities suggests that the extensive use of practices of employment externalization can be completely incompatible with the adoption of innovation. Further, we indicated above, people's perception of the culture of support for innovation varies due to a series of factors, one of which is externalization. Therefore, temporary work can be used as a means to access knowledge favourable for innovation, while in other circumstances, if cost reduction is the fundamental reason, it can work to the detriment of innovation. Currently, labour externalization is still used predominantly to reduce costs and absorb fluctuations in demand (Storey et al., 2002).

It is clear that externalization worsens the work climate and thus worsens certain dimensions of the organizational culture, such as orientation to innovation

(Hirschman, 1970; Rousseau, 1995; Rusbult et al., 1998; Davis-Blake et al., 2003).

Therefore, we propose the following hypothesis:

*Hypothesis 1: Externalization is negatively related to internal workers' orientation to innovation.*

### **Contextual factors**

The arguments presented above suggest a direct effect of externalization on orientation to innovation. However, this effect may vary if we consider the contextual conditions in which externalization is developed. In this research, we suggest that different aspects of context can intervene, such as perceived job security, perceived organizational support and collective perception of efficacy.

Thus, we see that many characteristics of the relationship between the organization and internal workers can mitigate the negative effects of externalization on orientation to innovation. According to research by Eisenberger, et al. (1986), people's perception that the organization takes an interest in them, seeks their well-being and offers them help with personal problems when necessary will yield very favourable results for employment and permanence in the organization. Social exchange theory (Blau, 1964) also suggests that employees adopt a transactional perspective in their relations with the organization. This means that the employees' obligations are temporary, that is, that they depend on the benefits granted by others and the tangible and intangible benefits that they expect to receive.

This research analyses five contextual factors that can moderate the relation of externalization to the dependent variable of this study, orientation to innovation: job security, as related to job protection; communication-cooperation, monitoring and supervisory responsibility, linked more to support; and finally, group potency or beliefs shared by members of the group concerning their capacity to achieve specific goals or perform predetermined activities.

### **Perception of job security as a moderating variable**

Only recently, in response to phenomena such as reduction of staff, lay-offs, and mergers, have researchers begun to take interest in the idea of job insecurity. The nature, causes and consequences of job security have been studied by Greenhalgh & Rosenblatt (1984), who define the phenomenon as “the worker’s perception of his or her impotence to maintain the desired continuity in a threatened work situation”.

Different studies have shown that the organizational conditions that protect job security and mobility can help to construct strong relations with internal workers, to establish unifying links between the organization and the internal workers (Bills, 1987; Finlay, 1988; Kalleberg et al., 1996). Such relations will lead employees united with the organization through a perception of high job security to work more for the benefit of the organization. In contrast, insecurity is interpreted as a stress factor that introduces a threat. The individual interprets this threat and responds to it. Interpretation and response can take various forms: reduced effort to perform, feeling sick or discouraged, looking for another job, trying to face the threat or seeking greater interaction with colleagues to cushion feelings of insecurity.

Thus, authors like Kanter (1983) argue that organizations' managers impede innovation and the generation of new ideas when they express their criticism openly and fail to praise and when they inform employees that they can be fired at any moment. For this author, individuals respond to lack of job security with less orientation to developing innovation. Authors like Van Gundy (1985) analyse the factors that form organizational climate and that are related to innovation. They determine that the climate is composed of ten factors that affect innovation, including job security.

Other authors argue that flexibilization and externalization of relations with employees represent a return to the preindustrial era, with drastic consequences for employees' well-being and job security (Sennet, 1998). However, internal workers who perceive job security do not interpret the organization's use of externalization practices as a threat to them. This leads us to propose that internal workers who are secure in their positions are less likely to have negative attitudes toward the organization that uses externalization than internal workers who perceive more risks to the permanence of their jobs. Secure internal workers do not interpret externalization as a threat. They feel less negatively affected than workers who perceive that their work is at risk.

These arguments enable us to establish the following hypothesis:

*Hypothesis 2: The greater the internal workers' perception of the security of their jobs, the less negative the relation between externalization and orientation to innovation.*

### **Perception of supervisory responsibility as a moderating variable**

Assigning permanent workers supervisory responsibility involves a creative distribution of authority. This management practice is typical of the effort many organizations are currently making to give their employees a larger leading role, capacity for influence, visibility and ultimately power.

Research based on employees' confidence in the organization suggests that employees feel more valued by the organization when managers trust and rely on them and when they are assigned responsibility over other members of the organization, that is, when they are granted some individual autonomy in performing their tasks (Pierce et al., 1989). This is the case because believing that one is effective is important. We can consider it a necessary but not a sufficient condition. Part of the secret of effective people is that they focus on activities over which they can exercise effective control. This situation of greater supervisory responsibility at work enables a greater number of new, creative ideas to be initiated and put into practice, giving rise ultimately to a greater number of innovations in the organization (Kanter, 1983; Sciulli, 1998), since employees fulfil their personality and confidence in themselves and confront any challenge positively.

In a context of externalization where permanent workers acquire the role and responsibility of supervising and training their temporary colleagues, permanent workers can feel that they are a more important part of the organization, more valued and more essential to the organization and not marginal or dispensable (George,

2003). Acquiring the role of supervisor can mitigate the perceived threat that processes of externalization could create, as the processes come to be seen as more controllable (Thomas et al., 1993). The role of supervisor can also facilitate easier access to information about the temporary workers, which can also reduce the perception of risk (George, 2003). According to the previous arguments, we propose the following hypothesis:

*Hypothesis 3: The greater the supervisory responsibility among internal workers, the less negative the relation between externalization and orientation to innovation.*

### **Communication as a moderating variable**

From the literature review, we obtain a large number of factors that can determine the success of the innovation process: the interdependence of the components of the system, diversity, the formal nature of the management system, external conditions. Although these factors are all important, communication is considered to be a key element for the success of innovation, as it enables determination of the degree of assimilation of the different ideas concerning innovation and facilitates information flows among the different levels of the organization. Communication is also the main tool for ensuring the participation of the organization's members in the process of generating innovation (Kanter, 1983; Johnson, 1990).

Different studies have verified that the quality and kind of communication is repeatedly mentioned as a critical factor for innovation (Tjosuold & Mcneely, 1988; Bouwen & Fry, 1991). The pattern of communication needed for innovation is characterized by open communication, communication that enables the expression of all points of view and considers and tries to understand others' opinions and combine and integrate ideas (Tjosuold & Mcneely, 1988). Internal communication seeks to disseminate to the workers what the organization itself is doing, to transmit the firm's culture—its mission, vision, values, objectives, etc.—so as to achieve a climate of involvement and integration and improving cohesion among its personnel.

On the other hand, innovation involves change, and communication about the nature and extent of the change with those affected by it will make them more receptive. It is important to transmit information about the need for the change and its consequences. This will avoid misunderstandings, false rumours and resentment, which generate a climate of mistrust in the organization that leads to resistance to change. The unknown tends to be seen as a threat. Only open and believable communication provides the opportunity to explain, present the steps and adopt the actions to minimize the adverse consequences that change can generate. In such actions, of course, social responsibility should be assumed for providing appropriate help to those who may be hurt by the change. Believable information will also enable the reduction of resistance to change.

Lack of necessary information is one of the most significant elements that causes resistance to externalization processes, since information is crucial for softening the

process parallel to any change, such as the substitution of the unknown for the known. Effective dissemination of the externalization process is important, taking into account that it can provide a shared base for the establishment of cooperation mechanisms in the organization.

According to these arguments, we suggest that, in a context of communication and cooperation, internal workers will tend to have a less negative attitude to the organization's intent to use external workers who somehow imply a change in the current hiring practices. This hypothesis is analogous to arguments by other researchers who analyse that the effect of the firm's upper management on employees' way of acting occurs in two ways. First, upper management can influence employees' interpretation of the organizational climate (Kopelman et al., 1990). Employees interpret their work environment, and these perceptions influence their behaviour and orientation in the organization. Second, upper management can influence attitudes and behaviours directly through its influence on people's knowledge and abilities, as for example in communication, cooperation and teamwork. Therefore, when managers maintain open communication and explain the motives and reasons for the use of a temporary workforce, internal workers will not interpret it as a threat to themselves. Based on the foregoing, we establish the following hypothesis:

*Hypothesis 4: The greater the internal workers' communication, the less negative the relation between externalization and orientation to innovation.*

### **Monitoring as a moderating variable**

Another variable we can consider to be a moderating variable of the relation we are analysing is monitoring, which is defined as the control and knowledge of the different activities that the organization's members perform. Monitoring defines the degree of verification of the work done by the organization's members, knowledge of their obligations and their meeting of deadlines, so that they do not hinder the work of the other members in the organization.

Based on the model of characteristics in research by Hackman & Oldman (1976), individual autonomy has a positive effect on performance. Numerous studies of self-esteem suggest that employees who have autonomy in their work are likely to feel more valued by their organizations (Pierce et al., 1989). However, Langfred (2004) suggests that this positive relationship depends on the level of monitoring and that the autonomy-performance relationship can become negative if monitoring is insufficient.

Different studies of innovation have shown that the members of the organization need autonomy and self-direction for the development of innovation in the organization (Thompson, 1980). The most autonomous employees are the most receptive to change. They are more accustomed to exercising initiative and can better order the resources and motivation needed to implement innovation (Beyer & Trice, 1978). In contrast, less autonomous employees limit their work to the minimum required and do not bother to seek new information sources that could show a gap between what the organization does and what it could do. Nor are they motivated to

seek and propose alternatives that could overcome this gap if the norms and procedures restrict their liberty. However, this relation is conditioned by the kind of monitoring that is used. The firm's use of permissive monitoring, where the employees improve and direct their own tasks or functions, would facilitate innovation. Coercive monitoring where the administration tries to achieve the effort and submission of the employees strangles innovation.

Thus, the different contributions in the literature indicate that, although there is agreement that innovation cannot be standardised, we need discipline and some degree of monitoring in the performance of the tasks assigned to workers. For some authors, initiation of innovation requires a single purpose. Thus, responsibility, authority, discipline and internal limits of communication should be well-defined, etc. (Shepard, 1980). Other authors indicate that the discipline that organizational dispositions and procedures provide is as important as newness in guiding and facilitating the organization's efficient use of the idea or its commercialisation on the market (Craig, 1995). All of this helps to prevent innovation from becoming chaos. Successful innovation requires systematic rational work, as well as good organization and administration to obtain results (Drucker, 1986). Other research argues that with greater individual autonomy in a team, the team members will work more independently of each other and that therefore more monitoring and communication will be necessary to avoid loss of coordination in processes (Orton & Weick, 1990; Langfred, 2004). We can conclude that monitoring is necessary in the employee-manager relationship. Although some evidence indicates that vigilance affects

individual motivation negatively, much research supports the benefits of monitoring (Larson & Callahan, 1990).

This research suggests that when internal workers are monitored more, they probably perceive the use of external workers more negatively. This is due to the fact that the workers' work climate is characterised not by confidence but rather by control. Therefore, in a context of externalization, the organization's decision for monitoring will transmit insecurity and will cause them to mitigate the personal risk that externalization could involve. Taking these considerations into account, we formulate the following hypothesis:

*Hypothesis 5: The greater the monitoring of the internal workers, the more negative the relation between externalization and orientation to innovation.*

### **Group potency as a moderating variable**

Teamwork has been very popular in the past decade, and many organizations have restructured their procedures to accommodate teams or working groups (Cohen & Bailey, 1997). One construct that has attracted researchers' attention is group potency or shared belief among the members of a group concerning its capacity to achieve specific goals or realize predetermined activities (Shea & Guzzo, 1987; Guzzo & Shea, 1992; Lester et al., 2002). This construct is related to that of Byura (1982), who defines it in his cognitive social theory as the self-perception of one's own competence.

Studies have found that groups with a high level of potency perform their activities more effectively (Campion et al., 1993; 1996; Shea & Guzzo, 1987). This suggests that organizations can improve the performance of their work teams by increasing levels of potency. Authors like Lovelace et al., (2001) observe that lack of cohesion interferes with individuals' ability to find innovative solutions together. Lack of agreement among the members of an organization means that the individuals are more committed to their own individual positions, such that it is more difficult to achieve consensus (Dougherty, 1992).

These feelings of group potency could cause permanent workers to increase their motivation within the organization, making it less likely that they interpret externalization negatively. A greater feeling of self-efficacy among the group of permanent workers can mitigate the threat of externalization, since the situation is perceived as more controllable and less damaging. Greater group potency also implies greater unity among the members of the organization in seeking objectives, values, and common beliefs—in this case, those related to innovation—instead of maximising individual goals. This cohesion and unity among the organization's members can mean that internal workers consider external workers competent in the performance of their activities (Smith, 1998) and thus experience less negative behaviour toward the use of practices like externalization. We therefore propose that the level of group potency of permanent workers will reduce the negative relation between externalization and orientation to innovation.

*Hypothesis 6: The greater the group potency, the less negative the relation between externalization and orientation to innovation.*

## **METHODOLOGY**

### **Data and sample**

#### **Sample**

To contrast the different hypotheses, we performed an empirical study from a selection of five firms. The firms that participated in the study had different kinds and degrees of externalization. The five organizations belonged to the following sectors: facilities, water management, integral management of administrative processes, transport and auto mechanics. The first organization studied was a firm for the integration of systems handling the full water cycle, meteorology and environment. This firm was a model in automatic information systems for water quality and systems for the control of water resources. It had a multi-disciplinary staff of over 240 professionals, of whom more than half were technicians with secondary school or university degrees. Most of the firm's professionals specialized in systems, telecommunications and computer science. The firm employed 142 permanent workers.

The second firm analysed worked in the management of public services included in the full water cycle, such as supply of drinking water, the sewer system, and customer management. The organization had a team of 102 workers to deliver its services, of whom 76 had permanent connection with the firm. The employees were primarily engineers, technicians and administrative personnel. The third organization

had, since its beginning, performed various tasks related to large-scale data collection and analysis of documentation, particularly for credit-related organizations. This firm delivered technical support services with human resources specialized according to the needs of the different departments. It employed over 400 workers, of which 238 were permanent. The stable workers were mainly involved in the automation of processes through platforms based on new technologies, optical character recognition and image management. Most of the external workers were directed to technical support or administrative work. The fourth firm was dedicated essentially to ocean transportation and the export and import business. It had a multi-national dimension and participated in sectors such as transport, information technologies, and the commercialisation and distribution of industrial products and raw materials. Its staff was over 500 employees, of whom somewhat more than half had a temporary relationship. The fifth firm offered integrated solutions for tires for all kinds of vehicles, as well as complete mechanical and maintenance services. It had a staff of over 100 employees, of whom only 30 had a permanent relation to the organization.

The firms invited to participate in the research were not involved in processes of suspension of payment, regularization, lay-offs or any other situation that could affect their structural work conditions. In choosing these firms, we considered the presence of the following essential motives for using externalization: flexibility with contracts, possible cost reduction, and the task of pre-selection that the intermediate firms perform. Some of the firms analysed used externalization as a source of candidates for positions of indefinite duration. Although this personnel policy was not declared explicitly, the employees provided by the intermediary considered the

session a trial period in the user firm that would end in the firm's deciding whether to hire them as part of its permanent staff. In some cases, one of the main reasons that these firms contracted temporary services was that they provided a relatively cheap and low-risk procedure for the job selection process. In all five firms, permanent and temporary employees usually worked together, even if there were no formally established human resources policies for their integration.

The data were gathered through the distribution of questionnaires to the 313 permanent workers of three organizational units in each participating organization. We explain how these units were selected in the next section. Due to the common problem of the low response rate to questionnaires on strategic issues in the firm, we were especially careful to maximize the response rate. To do this, we first performed a pre-test of the questionnaire through a series of in-depth interviews with workers at the five firms. We sent a second questionnaire to workers who had not answered by approximately one month after the first mailing. We obtained 184 valid responses, for a response rate of 58.78 %. Of the workers surveyed, 135 (73%) were men and 49 women; 63 (34%) had studied at the university; 8 (4.3%) were managers, 33 (17.9%) professionals, 47 (25.5%), 52 technicians (28.2%) and 44 operators (23.9%). Finally, we analysed the possible risk of bias between non-respondent and respondent firms. The database provided secondary information on the number of employees and billing of all sample firms that did not respond. We used the Kolmogorov-Smirnov test and did not find significant differences in occupation ( $p=0.496$ ) or gender ( $p=0.633$ ) Nor did we find any other evidence of bias in the sample.

## Measurements

### *Externalization.*

The study measured externalization with the procedures used by George (2003). We obtained data that indicated the scope and duration of these firms' externalization. To measure scope, the employees responsible for human resources in the five firms participated actively as key informants in the research, following the methodology suggested by Seidler (1974) and George (2003). Each classified his or her organizational units into the three following groups: low, medium and high scope of externalization. This division is based on the subjective perception that each held of the organizations. To collect the data, we then randomly chose one organizational unit per category. Questionnaires were sent to all permanent employees in these organizational units. To confirm the information provided by the people in charge for human resources, we analysed whether the current number of temporary workers in each organizational unit corresponded to the subjective classification of the human resources directors. The data were adjusted to the categories of the managers. In the organizational units with high externalization, temporary workers represented on average 42% of the labour; in units with moderate externalization, 24%; and in units with low externalization, 11% of the personnel. We applied ANOVAs to analyse whether, within each organization, the three organizational units differed significantly in distribution of external workers. The differences were significant for all of the organizations. According to the arguments of Lawrence (1988) and George (2003) and to the results of the ANOVAs, which indicate that the categories

themselves differ, we codified scope of externalization as a categorical variable. The value one represented low scope of externalization, the value three moderate scope, and five high scope.

To measure the duration of externalization, we also requested the participation of the people responsible for human resources in these five organizations. Each classified the organizational units chosen previously into the three following groups: low, medium or high duration of externalization. This division is also based on the participants' subjective perception of their organizations. To confirm the information given by the people responsible for human resources, we gathered data from records on the first time that they used temporary workers in each of the units studied. For each unit, we chose the position occupied for most time by temporary workers. Its duration provided the measure the duration of externalization in this unit. The data obtained from the records agreed with that provided by the people responsible for human resources. We then codified duration as a categorical variable. The value one represented low duration of externalization; the value three, medium duration; and five, high duration.

Finally, for each unit, we calculated the average value of the scope and duration, which generated an index that approximated the degree of externalization of each unit in each of the organizations.

### ***Orientation to innovation.***

Orientation to innovation was measured using a scale of five items proposed by Koys & DeCotiis (1991), one very similar to that subsequently used by Chyler et al.

(2000). This scale includes the perception that change and creativity are supported and stimulated, as well as risk-taking in new areas in which the members have little experience. The scale's internal consistency was studied using the Cronbach's alpha, and the value of the statistic was much higher than the limit of 0.7 usually considered acceptable ( $\alpha = 0.908$ ). Exploratory factor analysis also confirmed that the indicators yielded a single factor.

### ***Perception of job security***

This variable was measured by the 10-item scale developed by Oldham, Kulik, Ambrose, Stepina & Brand (1986) to evaluate the workers' belief that their jobs were stable in their current firm ( $\alpha = 0.873$ ).

### ***Supervisory responsibility***

To determine perception of the degree of supervisory responsibility that permanent workers had in their firm, we used a scale based on four items that enabled us to determine whether the workers used part of their time supervising and training their colleagues. This scale was proposed by George (2003). The scale used was a 5-point Likert-type scale. We analysed internal consistency with the Cronbach's alpha, and its value was higher than the limit usually considered acceptable, 0.7 ( $\alpha = 0.845$ ).

### ***Monitoring***

To determine the degree of monitoring, we used the four-item scale of Cummings & Bromiley (1996). The scale used was a 5-point Likert-type scale, and the value obtained for reliability was high ( $\alpha=0.911$ ).

### ***Group potency***

This variable was measured by a 5-point Likert scale composed of eight items from the scale of Guzzo, Yost, Campbell & Shea (1993). Internal consistency of the scale was measured by the Cronbach's alpha, and the statistical value is higher than the limit usually considered acceptable, 0.7 ( $\alpha= 0.863$ )

### ***Communication-Cooperation***

To determine the degree of communication, we used a measurement instrument with eight items adapted from Lester *et al.* (2002). Two of the three items came from the scale developed by Campion, Medster & Higgs (1993), which measures communication and cooperation. Three items came from the scale proposed by O'Reilly & Robert (1976), which includes clarity and precision of communication. Finally, we incorporated three items added by Lester *et al.* (2002) to their measurement instrument to evaluate the abilities of members of an organization to work together in order to solve problems and make decisions. All items were averaged in a global index, which showed good internal consistency ( $\alpha= 0.891$ ).

### ***Other variables***

The questionnaire measured age (in years), sex, academic level (primary school, secondary school, university study), professional occupation (managers,

professionals, technicians and operators) and length of time with the organization (in years). Time with each of the five organizations studied was codified by five binary variables.

## **Analysis**

To contrast the hypotheses, we used hierarchical regression analysis. In a preliminary stage, we performed a regression among the dependent and moderating variables. The next phase included the independent variable. Finally, we added five terms that represented the interactions between the independent variable and each of the moderators.

To complete the contrast of the hypotheses on moderation, we confirmed that there was a significant moderating effect and then analysed the sign and significance of the slope of the relation between externalization and the dependent variables, as argued by Jaccard, Turrisi & Wan (1990), as a function of the values taken by the moderating variable. To do this, we performed an additional analysis, in which we evaluated the effect of the independent variable on the dependent variable, while distinguishing between different levels of the moderating variable. Following the recommendations of Jaccard *et al.*, we classified values of an above-average standard deviation in the high level and values below the average standard deviation in the low level.

## RESULTS

The descriptive analysis and the correlation matrix are shown in Table 1, which also provides the reliability of the different scales. As can be seen, the values of the correlation coefficients for the independent and dependent variables confirm good aggregation of the different variables. To ensure that the results are not affected by problems of multicollinearity, we calculated the tolerance indexes and inflation factors of the variance for each regression model. All cases maintained levels well below the recommended levels, indicating that the results are not affected by possible multicollinearity.

Table 2 shows the results of the hierarchical regression analysis performed. Hypothesis 1 suggests that the greater externalization, the lower the internal workers' orientation to developing innovation in the organization. As shown in Model 2, which incorporates the independent variable of externalization, this variable has a significant and negative effect on orientation to innovation ( $p < 0.001$ ). In Model 2, this is highly significant ( $F = 16.72$ ;  $p < 0.001$ ), as the increase in  $R^2$  is ( $\Delta R^2 = 0.038$   $p < 0.001$ ). These results confirm the validity of Hypothesis 1.

Hypothesis 2 suggests that internal workers' perception of the level of job security moderates the relation between externalization and orientation to innovation. As Model 3 shows, the term that represents the product of externalization and internal workers' perception of security is not significant for predicting the dependent variable. Thus, the data do not support Hypothesis 2. Model 3 is also significant ( $F = 10.88$   $p < 0.001$ ), as the increase in  $R^2$  is ( $\Delta R^2 = 0.05$ ;  $p < 0.01$ ).

**TABLE 1****Mean, Standard deviation, reliability and correlations<sup>a</sup>**

<b>Variable</b>	<b>Mean</b>	<b>S.d</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Orientation innovation	3.73	1.01						<b>0.908<sup>b</sup></b>
Externalization	3.31	1.32	- 0.37**					<b>0.713</b>
Supervisory responsibility	2.76	1.23	0.45**	- 0.43 **				<b>0.845</b>
Job security	3.41	0.98	0.14	- 0.35	0.356**			<b>0.873</b>

				**					
				-					
Monitoring	3.69	0.98	0.28**	0.09	0.10	0.17*			<b>0.911</b>
Group potency	3.79	0.67	-0.08	0.08	-0.16*	0.20**	0.08		<b>0.863</b>
								0-	
								3	
Communication	3.91	0.75	0.35**	0.03	0.12	0.08	0.21**	2	<b>0.891</b>
								*	
								*	

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<sup>a</sup> n=184

<sup>b</sup> Cronbach's alpha

\* p < .05

\*\* p < .01

Another effect of analysing Hypothesis 3 is the relation between externalization and orientation to innovation moderated by supervisory responsibility. As Model 3 shows, the relation between externalization and orientation to innovation is not moderated by the level of supervisory responsibility. However, Model 3 shows that supervisory responsibility influences internal workers' orientation to innovation positively and significantly ( $p < 0.001$ ). Thus, we did not verify the moderating effect of this variable, but did confirm that supervisory responsibility influences internal workers' development of orientation to innovation directly.

Hypothesis 4 suggests that communication moderates the relation between externalization and orientation to innovation. As Model 3 shows, the relation between externalization and orientation to innovation is not moderated by communication. However, as Model 3 shows, communication influences internal workers' orientation to innovation positively and significantly ( $p < 0.001$ ). Again, although the moderating effect is not verified, the data provide support for the direct effect of communication on orientation to innovation.

Likewise, for Hypothesis 5, we analysed the relation between externalization and orientation to innovation moderated by monitoring. Model 3 indicates that monitoring moderates the relation between externalization and orientation to innovation ( $p < 0.01$ ).

**TABLE 2****Effect of externalization on orientation to innovation**

	<b>ORIENTATION INNOVATION</b>		
	<b>MODEL 1</b>	<b>MODEL 2</b>	<b>MODEL 3</b>
<b>SUPERVISORY</b>	0.379***	0.299***	0.236***
<b>RESPONSIBILITY</b>	(5.335)	(4.064)	(3.125)
<b>JOB SECURITY</b>	-0.023	-0.076	-0.041
	(-0.327)	(-1.067)	(-0.531)
<b>MONITORING</b>	0.195***	0.187***	0.227***
	(2.956)	(2,910)	(3.436)
<b>GROUP POTENCY</b>	-0.136	-0.124	-0.087
	(-1.908)	(-1.788)	(-1.200)
<b>COMMUNICATION</b>	0.311***	0.334***	0.300***
	(4.477)	(4.911)	(4.309)
<b>EXTERNALIZATION</b>		-0.226***	-0.239***
		(-3.184)	(-3.280)
<b>EXTER * SECURITY</b>			-0.045

			(-0.614)
			-0.063
<b>EXTER * AUTONOMY</b>			(-0.923)
			-0.165**
<b>EXTER * MONITORING</b>			(-2.537)
<b>EXTER</b>	*		-0.100
<b>COMMUNICATION</b>			(-1.517)
<b>EXTER * GROUP</b>			0.143**
<b>POTENCY</b>			(2.085)
R <sup>2</sup>	0.343	0.381	0.431
ADJUSTED R <sup>2</sup>	0.323	0.358	0.391
F	17.095***	16.728***	10.880***
CHANGE IN R <sup>2</sup>		0.038	0.050
F		10.136***	2.772**

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\*\* p< .01; \*\*\* p< .001

We then confirmed the strength and nature of this effect, as shown in Table 3. To do this, we performed an additional regression analysis, in which we confirm the effects of externalization on orientation to innovation, this time distinguishing

between high and low levels of monitoring. As mentioned above, the high level includes observations whose point value for the degree of monitoring is above the mean. The low level of this variable is composed of values whose point value is lower than the mean. Detailed examination of the interaction term shows that, when we establish the condition of high monitoring, externalization is negatively related to orientation to innovation ( $\beta=-0.45$ ,  $p<0.01$ ). This effect is not significant when we establish the condition of low monitoring. Thus, both the significant interaction term in the regression analysis and the investigation of the nature of the interaction term support Hypothesis 5.

**TABLE 3**  
**Effect of externalization on orientation to innovation for different levels of monitoring**

	ORIENTATION INNOVATION	
	MODEL 1 <sup>a</sup>	MODEL 2 <sup>b</sup>
	HIGH MONITORING	LOW MONITORING
<b>EXTERNALIZATION</b>	-0.45*** (-5.541)	-0.142
R <sup>2</sup>	0.211	0.020
ADJUSTED R <sup>2</sup>	0.204	0.004

F	30.701***	1.240
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\*\* p< .01; \*\*\* p< .001

<sup>a</sup>n=118

<sup>b</sup>n=66

Finally, Hypothesis 6 suggests that group potency moderates the relation between externalization and orientation to innovation. As Model 3 shows, the interaction between externalization and group potency predicts the orientation to innovation significantly. Therefore, we must again verify the nature and strength of the moderating effect. To do this, we perform another regression analysis, which enables us to confirm the effect of externalization on orientation to innovation, distinguishing between high and low levels of group potency. The analysis of the interaction term shows that the condition of low group potency means that externalization is negatively related to orientation to innovation ( $\beta = -0.56$ ,  $p < 0.01$ ), as Table 4 shows. Further, this effect is not significant when we establish the condition of high group potency. Therefore, we have verified that the multiplicative term is significant in the multiple regression analysis. Together with the analysis of the nature of this term, this provides support for Hypothesis 6.

**TABLE 4**

**Effect of externalization on orientation to innovation for different levels of group potency**

<b>ORIENTATION INNOVATION</b>		
	<b>MODEL 1<sup>a</sup></b>	<b>MODEL 2<sup>b</sup></b>
	<b>HIGH GROUP</b>	<b>LOW GROUP</b>
	<b>POTENCY</b>	<b>POTENCY</b>
<b>EXTERNALIZATION</b>	-0.16	-0.56***
	(-1.561)	(-6.305)
R <sup>2</sup>	0.026	0.324
ADJUSTED R <sup>2</sup>	0.015	0.316
F	2.439	39.748***

\*\* p< .01; \*\*\* p< .001

<sup>a</sup>n=98

<sup>b</sup>n=86

## **DISCUSSION**

Our study has analysed whether externalization influences the perceptions and attitudes of internal employees toward innovation. More specifically, we have examined its relation to internal workers' orientation to innovation. The results indicate that externalization has a significant and negative influence on orientation to innovation for internal workers. However, these effects are moderated by monitoring and group potency. Next, we will discuss the implication of the results obtained in the research.

## **Negative implications of employment externalization**

The results obtained add evidence to the small theoretical body of literature that analyses the negative effects of externalization on employees' attitudes and perceptions (Schuler & Jackson, 1987; Pavitt, 1991; Grant, 1991; Barney, 1995, Chattopadhyay & George, 2001). The data support the argument that the use of external workers is associated with a lack of beliefs and values and, generally, a weak culture for innovation. More specifically, the analysis indicates that permanent employees react negatively to the adoption of innovative behaviours when facing processes of externalization. This can weaken employee involvement in the long run, depending on the management policies and practices used by the managers to elevate the levels of externalization, as employees' negative interpretations will influence their behaviour.

These results are particularly interesting because, as we observed, the use of externalization is increasingly frequent in organizations for different reasons, such as increasing flexibility (Davis-Blake & Uzzi, 1993), cost reduction, acquisition of specific knowledge or abilities (Matusik & Hill, 1998), adjusting personnel levels in response to fluctuating market demand, reconfiguring the deployment of resources and reducing the time taken in responding to significant changes in the environment. However, one must also consider the social costs associated with this entrepreneurial practice. Specifically, internal workers are less open to perceiving that change and creativity are supported and stimulated and less open to taking risks in new areas in which members have little experience. We would emphasize that creating and

sustaining a culture of support for innovation is necessary to fostering innovation. It is not enough to talk about and believe in innovation; one must take it seriously and make it happen. To do this, one must create a culture of support for innovation, where management's values become employee practices (Hofstede, 1994). Studies like those by like Russell (1990) and Russell & Russell (1992) find that a culture that supports innovation is a necessary and sufficient explanation for the success of the strategy of innovation. This as an expression of the organizational values and beliefs related to innovation plays a fundamental role in providing the motivation and management necessary for following up on innovation. Craig (1995) argues that the organization must have not only systems, structures and organizational agreements directly related to innovation, but also certain kinds of attitudes in the company as a whole. Among these attitudes, a work climate open to innovation and change is significant.

All we have said so far leads us to conclude that scenarios of externalization are not favourable to orientation to innovation, insofar as they condition negatively both people's way of working and behaviour and their own development of processes through which they raise levels of innovation. This problem is worse in dynamic environments like contemporary ones, where organizations increasingly use externalization (Matusik & Hill, 1998) and innovation as a means of improving the organization and making it more competitive and of obtaining competitive advantages in global and international markets (Hitt et al., 1997; Tidd, 2001). Finally, we would argue that, since the organizations chosen for the research are not undergoing suspension of payment, regularization, lay-offs, or any other

circumstance that could affect their structural conditions of employment, we are led to think that externalization has a negative influence even in situations of growth or stability .

### **Moderators of the effects of externalization**

The results indicate that the negative relation between externalization and internal workers' orientation to innovation is encouraged by employees with high monitoring. Therefore, managers should be careful in using this kind of practice. As the results on monitoring show, it enables the development of values and principles related to innovation. However, in a context of externalization, monitoring involves a follow-up and vigilance that affects orientation to innovation negatively.

The conclusions obtained support the results that the relation between innovation and monitoring depends on the intensity of the latter and that a certain amount of monitoring is necessary for innovation to succeed. The results show that, in this case, permissive monitoring is being used to enable employees to improve and direct their tasks as a function of facilitating innovation through the creation of a work climate that supports it.

In contrast, in a context of externalization, the manager should be careful, as the employees who are controlled or watched perceive the influence of externalization more negatively in the creation of an environment that supports and encourages innovation. Thus the manager can use monitoring to create a positive orientation to

innovation among the employees of the organization. However, as a moderating variable in the relation between externalization and orientation to innovation, monitoring shows a more negative relationship. This can be due to the fact that monitoring creates an atmosphere of lack of confidence in the organization, as it means control of the performance of activities of the organization's members. It can also cause the internal workers to perceive externalization as a greater threat or risk.

Second, the results indicate that the negative relation between externalization and orientation to innovation is smaller between permanent employees who share greater group potency. Workers who share a greater sense of self-efficacy as an organization can mitigate the negative perceptions that produce externalization, as the situation is perceived as more controllable and less damaging. These feelings can increase their commitment in the organization and lead them to interpret externalization less negatively. Thus, in a context characterized by externalization, managers should create a collective belief that group work can be effective, since it affects the positive relation between externalization and orientation to innovation. Cohesion and union among the members of the organization mean that the internal workers consider external workers to be competent in performing their activities (Smith, 1998) and thus do not show negative behaviour toward the use of practices like externalization. The results also confirm that lack of cohesion interferes in the ability of individual to find innovative solutions.

Against all expectations, the effects of externalization are not significant on the orientation to innovation in the case of employees who perceive that their jobs are

secure. The results of this research show that the perception of job security for internal workers does not influence the creation of values toward innovation. Nor can managers use this variable as a tool to mitigate the negative effects of using practices like externalization on orientation to innovation. One factor that can explain the results obtained is the changes in regulation of the labour market. The market tends toward the flexibilization of relations to adapt to the dynamic process of technological and economic development. This means that the employees are increasingly accustomed to less job security, making job security a factor does not condition the employee's relations with the organization. Thus, managers cannot use this factor as a tool for improving relations between organization and employees.

The results also indicate that the negative relation between externalization and orientation to innovation is not moderated by the perception of supervisory responsibility in one's work. Therefore, in a context of externalization, the internal workers who have a supervisory role and who train the work of their colleagues have greater autonomy and feel like an essential part of the organization. However, this does not lead to a more positive interpretation of the use of externalization.

Managers should take into account that granting responsibility does not mitigate the negative affects of externalization on orientation to innovation. This means that, although internal employees feel more valued or essential in the organization, they continue to perceive externalization as a threat for the creation of a culture that supports and stimulates innovation.

However, the results show that employees with supervisory responsibilities are more willing to create a work climate that encourages innovation. In other words, managers can use the granting of responsibility to foster orientation to innovation. These results are consistent with those developed in the work of Burns & Stalker (1961), which suggests that the delegation of power to members of the organization and decentralized structures are more effective in the rapidly changing conditions that often accompany attempts at innovation. According to the results we have just verified, they also help employees to perceive and to participate more positively in the creation of a context that supports and stimulates innovation.

Combining these results with those obtained in prior research on monitoring supports the results of research performed by Langfred (2004), which suggest that high levels of individual autonomy should be accompanied by relatively high levels of monitoring, since insufficient monitoring could lead to lower performance, in this case, in the relation of norms, values and beliefs in the support of innovation. Nevertheless, in a context of externalization, we argue that the employees who are supervised have a more negative attitude to the relation between externalization and orientation to innovation. They perceive externalization as a threat to the creation of a culture that supports and stimulates innovation.

A context characterized by communication and cooperation between employees of the organization does not moderate the negative effects of externalization on orientation to innovation. However, it helps the development of a work environment that supports innovation. These results support the studies that communication is the

main tool for ensuring the participation of employees in the processes of generating innovation (Kanter, 1983; Johnson, 1990). It is also the mechanism that enables assimilation of the changes involved in innovation. Further, we contribute evidence that can be used as a tool by managers in the creation of work environments that foster innovation. In contrast, the use of this technique does not imply that the negative affects of externalization on orientation to innovation decrease. Future research should verify whether the information communicated to internal workers on externalization is sufficient or whether the information needed is not being supplied, with the result that externalization is seen as a change that implies a threat to internal workers, which would explain the results obtained.

### **Limitations and directions for future research**

All research has a series of limitations, and our work is no exception. The following presents some of the limitations.

The emphasis that this study places on firms that are not undergoing processes of suspension of payments, regularization, lay-offs, or any other circumstance that could affect their structural conditions of employment can be both an advantage and a limitation. We are studying firms in a phase of stability or growth. Situations of expansion or seasonality can justify the hiring of temporary workers. The foregoing leads us to ask what happens in scenarios of crisis or restructuring.

Our arguments are based on permanent workers' interpretations of externalization. However, the data were not obtained by asking them explicitly about their perceptions and interpretations, but rather from independent sources and not directly from the workers on which this study focuses. This is also a limitation in the study by George (George (2003). ). Previous research has shown that permanent workers changed their interpretations of externalization. Future research could explore the perceptions and interpretations of permanent workers in greater depth. Specifically, these studies could analyse the repercussions on stable workers of the kind and content of the information and monitoring received prior to the strategy of externalization that is being pursued or that the organization is planning to pursue.

Our research does not differentiate between different kinds of temporary work. Essentially, there are four differences that enable us to distinguish standard from atypical forms of employment. First, some atypical relations of employment do not provide a direct relation between the employee and the formal employer. Second, the workday can be shorter than that in relations of traditional employment. Third, it is very common not to ensure continuity either implicitly or explicitly in non-standard relations of employment. Finally, in some kinds of atypical hiring, there is no employer as such. Future studies could examine whether different kinds of externalization, such as temporary employees, independent contracts, outsourcing, or e-work, generate different perceptions and attitudes toward flexibility in permanent employees.

Finally, this study used a convenience sample of five organizations. The non-random nature of choosing the firms in the sample as well as their cross-sectional character may limit the generalization of the results. Longitudinal studies should be developed to extend this line of research in order to determine the long-term implications of externalization policies and their long-term consequences.

## **CONCLUSION**

The goals of this study are, first, to analyse how the use of workforce externalization influences the creation of a work context that supports innovation. Second, we seek to analyse how this relation is moderated by different contextual variables. Specifically, we analysed how perception of job security, communication, supervisory responsibility, monitoring and group potency influence the relation between externalization and orientation to innovation.

The results of this study indicate that externalization has negative and significant effects on internal workers' orientation to innovation. The results also indicate that the effects are more negative when internal workers perceive high monitoring. In contrast, the effects are less negative when internal workers perceive high group potency of cohesion among different members of the organization. This study adds empirical evidence to previous work on the effects of workforce externalization on the organization (Pearce, 1991; Geary, 1992; Smith, 1994; Chattopadhyay & George, 2001; George, 2003). Specifically, it extends the previous tendencies emphasizing

the conditions under which externalization affects employees' orientation to innovation.

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