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THE IMPACT OF DIVERSITY AND TEAM CULTURE ON THE EFFECTIVENESS OF WORKGROUPS

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Resumo

O presente estudo tem como objetivo central contribuir para a clarificação das condições necessárias ao sucesso das equipas de trabalho. Para atingir o objetivo proposto, foram analisados, num estudo de natureza não experimental, os efeitos diretos e interativos da diversidade e da orientação cultural para a aprendizagem nos resultados grupais (desempenho grupal, satisfação grupal, qualidade de vida no trabalho). A amostra era composta por 73 grupos de trabalho de diferentes organizações dos sectores industrial e dos serviços, cujas tarefas apresentavam uma natureza complexa e não rotineira. Os resultados foram analisados através da condução de regressões múltiplas e revelaram que a orientação das equipas para a aprendizagem aumenta os níveis de satisfação grupal e de qualidade de vida no trabalho dos membros do grupo. A diversidade apresentou, igualmente, um impacto positivo, embora apenas marginalmente significativo, na satisfação dos membros com o grupo e na qualidade de vida no trabalho. Não foram identificados efeitos interativos. Este estudo sugere que os gestores que pretendam criar equipas de sucesso devem aumentar os níveis de orientação para a aprendizagem dos grupos, criando condições capazes de promover e sustentar a aquisição de conhecimento. O impacto positivo da cultura na eficácia organizacional está já bem estabelecido na literatura. Contudo, este é um dos primeiros estudos que fornece evidência para o impacto deste tipo de cultura no nível grupal.

Abstract

The central aim of the present research is to contribute to the clarification of the conditions under which teams can be successful. To attain our goal, the direct and interactive effects of diversity and of the team's cultural orientation towards learning on team outcomes (team performance, team members' satisfaction, team members' quality of life) were analysed in a study with a non-experimental design. Seventy-three workgroups from different industrial and services companies, that perform complex and non-routine tasks, were surveyed. Multiple regression analyses were conducted and results revealed that the team orientation towards learning improves team members' satisfaction and team members' quality of life. Diversity presented, as well, a positive impact on team member satisfaction and on team members' quality of life, but the effect was just marginally significant. No interactive effects were identified. This study suggests that managers who want to create successful teams may be advised to enhance the levels of the team orientation towards learning, creating conditions in the team to promote and support the acquisition of knowledge. The positive impact of a learning culture on organizational effectiveness is already well established in the literature. However, this is one of the first studies that provides evidence of the impact of this kind of culture at the team level.

Palavras-chave: grupos de trabalho; diversidade; cultura grupal; eficácia grupal
Keywords: workgroups; diversity; team culture; team effectiveness

1. Introduction

Today, more than at any other time in history, organizations rely on groups as a way of structuring their activities. Despite all the difficulties that working in groups involves, this way of working seems to be superior in many situations, namely when the tasks and the problems are complex. In fact teamwork, in addition to being potentially more creative, tends to result in a greater ability to manage new information and new challenges (Jehn & Bezrukova, 2004; Lau & Murnighan, 1998). Moreover, the transfer of more responsibilities to working groups enables more efficient management of the different skills and knowledge, which enhances group performance and, consequently, organizational effectiveness (Saji, 2004).

The central aim of the present research is to contribute to the clarification of the conditions under which teams can be successful. In particular, the effects of diversity and of the team's cultural orientation towards learning on team effectiveness are analysed.

Research developed on the way group composition affects group performance, cohesion, group members' commitment, satisfaction and other indicators of effectiveness is abundant but not conclusive. In fact, whereas some studies pointed to the existence of a significant effect of diversity on team results (Bantel & Jackson, 1989; Webber & Donahue, 2001) others found no significant, or even negative, relationships (Bowers, Pharmer, & Salas, 2000). Some scholars have argued the need to consider specific contextual variables when modelling the relationship between diversity and performance (Bowers et al., 2000; Williams & O'Reilly, 1998). The basic idea underlying this current of research is that diversity may be associated with differences in information and knowledge, thus leading, under some conditions, to an improvement in team processes and, consequently, in team performance. Mediators like communication (Earley & Mosakowski, 2000), team reflexivity (Schippers, Hartog, Koopman, & Wienk, 2003) and team learning behaviour (Gibson & Vermeulen, 2003; Van der Vegt & Bunderson, 2005) and moderators like team culture (Jehn & Bezrukova, 2004) and team tenure (Chatman & Flynn, 2001) have been studied and results tend to support this perspective.

Nevertheless, the understanding of the processes that influence the relationship between diversity and group performance is far from complete. In order to better understand how diversity might translate into team effectiveness, in the present study the moderator role of a contextual variable that is significantly related to the way the group deals with knowledge and learning is considered: the team's cultural orientation towards learning.

A learning culture can be defined as an orientation towards the promotion, facilitation, sharing and dissemination of individual learning (Rebelo & Gomes, 2011a). Openness, experimentation and error acceptance are some of the characteristics that are present in a team with this type of culture. The positive effect of a learning culture at the organizational level is already well established in the literature (Egan, Yang, & Bartlett, 2004; López, Péon, & Órdas, 2004). However, despite some evidence that a team's orientation towards learning can have positive consequences on the effectiveness of workgroups (e.g., Bunderson & Sutcliffe, 2003) there is a lack of studies concerning the team level. In this way, we intend to analyse the direct relationships between the team's orientation towards learning and team effectiveness.

Moreover, as has been stated above, we intend to analyse the moderator role played by the team's orientation towards learning on the relationship between diversity and team effectiveness. Hence, we argue that teams with a culture oriented towards learning are more able than teams less oriented towards learning to process different kinds of information, ideas and knowledge that emerge as a result of the presence of different kinds of people. Thus, it is expected that in a context of higher levels of team learning culture, diversity will promote effectiveness.

In this article, we begin with an examination of the relationships between diversity and team effectiveness. We then explore the concept of the team's cultural orientation towards learning. Finally, the results of our study are presented and discussed.

2. Diversity

As organizations become more and more team-based, dealing with diversity constitutes a major challenge for management. As noted by Christian, Porter and Moffitt (2006) "one of the most challenging issues facing organizations today is that of dealing with workgroup diversity" (p. 459). Additionally to the increased use of groups as a work unit, organizations have become more diverse in terms of demographic differences between people (e.g., in terms of gender and age) (Mohammed & Angell, 2004). Despite the strong interest that diversity has received in recent years, findings are far from conclusive in terms of the positive or negative effects of team composition on team processes and outcomes. In fact, there is still much to know about which individual differences relate to group dynamics and under what conditions (Van der Vegt & Bunderson, 2005).

Diversity has been generally conceptualized as referring to differences between individuals in any attribute that may lead to the perception that another person is different from self (Jackson, 1992). Van Knippenberg and Schippers (2007) noted that group members are not always conscious of the existing differences and they define diversity as a "characteristic of social grouping that reflects the degree to which objective or subjective differences exist between group members" (p. 516).

Two fundamental theoretical frameworks have guided diversity research: the social categorization theory and the information/decision-making perspective (Williams & O'Reilly, 1998).

According to the social categorization theory, individuals possess a natural tendency to use social categories to simplify reality (Turner, 1982). In this process of simplification, the differences between team members form the basis for categorizing self and others as ingroup and outgroup (Christian et al, 2006). Due to its essence, the social categorization theory envisions the development of biases and stereotypes that may be pernicious when diversity empowers. Consequently, and in accordance with this approach, homogeneous workgroups will be more effective than heterogeneous workgroups (Kulik, 2004).

In the opposite position we find the information/decision-making perspective. This framework proposes that diverse groups of individuals should be expected to have a broader range of knowledge, expertise, opinions and perspectives than homogeneous groups of individuals. As a result, the more diverse a group is, the greater the resources available to deal with arising challenges and barriers and, consequently, the greater team effectiveness will be (Bantel & Jackson, 1989).

These theories lead to different hypotheses regarding the effects of diversity on group processes and performance: although the first one points to the negative effects of diversity on team processes and results, the latter emphasizes the positive effects of diversity in the group dynamic. In reality, results show that both analyses are not totally supported. Hence, while some studies show positive effects, others show a negative or a null relationship between diversity and performance (e.g., Bantel & Jackson, 1989; Simons, Pelled & Smith, 1999; Williams & O'Reilly, 1998).

The motivating premise underlying the use of groups as a key approach to organizing work is that when different perspectives, knowledge and functional backgrounds are brought together, performance can be maximized because it is expected that "*two heads think better than one*" (Van der Vegt & Bunderson, 2005). Consequently, one can ask: if all members are equal, if they think and act the same way, where is the advantage of working in teams?

However, by itself, probably, diversity isn't good or bad for team performance. The inconsistency between the results may be due to the fact that diversity seems to interact with a variety of other group and

organizational factors (Jehn & Bezrukova, 2004). Quoting Van Knippenberg and Schippers (2007) “it seems time to declare the bankruptcy of the main effects approach and to argue for models that are more complex and that consider moderating variables in explaining the effects of diversity” (pp. 518-519).

In support of this proposition, some studies found that diversity is more likely to yield performance benefits in non-routine task environments (Hambrick, Cho & Chen, 1996). Jehn, Northcraft and Neale (1999) found that intra-team conflict mediates the relationship between informational diversity and team performance. In line with this analysis, Van der Vegt and Bunderson (2003) found that team learning behaviour acts as a (partial) mediator between expertise diversity and team performance. Other potential moderators and mediators were analysed, like reflexivity (Schippers et al., 2003) or external communication (Ancona & Caldwell, 1992) and the results found provided some further support to a contingency perspective of diversity.

In the present study we will consider diversity across two demographic dimensions that are relevant for team functioning: tenure in the team and tenure in the function. Because those variables are significantly related to the task (Jackson, May & Whitney, 1995) and we are considering teams that perform complex tasks, we expect to find a positive, although – as a result of previous studies – weak, effect of diversity on team outcomes. Thus, we predict that:

H1: Diversity will have a positive significant effect, although weak, on team performance, team members’ satisfaction and team members’ quality of life.

3. Group Culture

In line with Stott and Walker (1995), we consider organizational culture as one of the most powerful determinants of performance. As a set of meanings or understandings shared by individuals that integrate organizations and groups, establishing the way the things are done, organizational culture will necessarily influence the way teams achieve their goals (Schein, 1996).

Analysing culture at the group level, and not only at the organizational level, is important because within organizations, different group cultures could subsist. In fact, it is very difficult that an organization will be as homogeneous to the point of conveying, strengthening and maintaining a single culture. As noted by Van Maanen and Barley (1985) “*unitary organizational cultures evolve when all members of an organization face roughly the same problems, when everyone communicates with almost everyone else, and when each member adopts a common set of understandings for enacting proper and consensually approved behaviour*” (p. 37). Thus, the workgroup can be considered a subculture of a broader culture that is the organization (Adkins & Caldwell, 2004; McAleese & Hargie 2004; Palthe & Kossek, 2003; Sackman 1992).

Elements of group cultures include shared values and knowledge, standard operating procedures and norms about patterns of group members’ behaviours (Jehn & Bezrukova, 2004). It is culture that dictates the norms and values adopted by the group and that differentiates one group from another.

In this paper, in particular, we will focus our analysis specifically on the cultural orientation towards learning. Learning can be defined as a change in the range of an entity’s potential behaviours through the processing of information (Huber, 1991). Just like individual learners, teams also have to receive, manage and retrieve information to meet the standards and the demands of an increasingly turbulent market (Van Woerkom & Van Engen, 2009). Hence, as people learn by modifying their behaviour and attitudes to meet external requirements, teams also learn by adapting their strategies and modes of operating to internal and external demands. The team ability to learn is, thus, a crucial element of adaptation and competitive advantage, with significant effects on team effectiveness (Berends, Boersma & Weggeman, 2003; Edmondson, Dillon & Roloff, 2007; Fiol & Lyles, 1985; Khandekar & Sharma, 2006; Oliver & Kandadi, 2006; Lines, 2005; Murray & Carter, 2005).

A learning culture can be conceived of as an orientation towards the promotion, facilitation, sharing and dissemination of individual learning in order to contribute to the organization's development. This type of culture must, therefore, promote a culture of openness, where people are not afraid of experimentation and where mistakes are seen as a way to improve (Rebelo & Gomes, 2011a).

Different authors have attempted to clarify the different characteristics and properties that define the culture of learning as a particular kind of organizational culture (e.g., Hill, 1996; Marsick & Watkins, 2003; Schein, 1992). Nonetheless, as noted by Rebelo and Gomes (2011a), there are various points of convergence between the different approaches, such as: learning as one of the organization's core values; orientation towards people; concern for all stakeholders; tolerance of the diversity of opinions and people; encouragement of experimentation and of attitudes of responsible risk; tolerance of mistakes and the ability to learn with them; commitment and support for leadership; promotion of an intense and open communication. Similarly, a team's orientation towards learning is guided by some specific behaviours, which include, among others, seeking feedback, sharing information, asking for help, speaking about the errors, and also experimentation (Bunderson & Sutcliffe, 2003; Edmonson, 1999, 2002).

Rebelo and Gomes (2011a) distinguish two dimensions of a learning culture: internal integration and external adaptation. These two dimensions are related to two fundamental problems that workgroups and organizations have to face to be effective: the integration of the internal processes and the adaptation to the external environment (Schein, 1992). Thus, management policies, rewards, training, leadership, common goals and valorisation of action will be associated with internal integration, whereas characteristics such as error tolerance, valorisation of risk, orientation for the future, openness, autonomy and orientation to the external environment are inherent to external adaptation.

The positive impact of a learning culture on organizational performance is already well established in the literature (e.g., Egan et al. 2004; López et al., 2004). What interests us now is to try and figure out whether a team culture that encourages proactive learning and the development of competencies among their members will foster team performance and satisfaction. In the literature, there is some evidence that a team's orientation towards learning can have positive consequences on team effectiveness (e.g., Bunderson & Sutcliffe, 2003). Therefore, we predict that:

Hypothesis 2: A team cultural orientation towards learning (internal integration and external adaptation) will have a positive effect on team performance, team members' satisfaction and team members' quality of life.

Moreover, we will consider the effect of the team cultural orientation towards learning on the relationship between diversity and team effectiveness. We argue that diversity in terms of knowledge and expertise will foster effectiveness when the group is highly oriented to the promotion and sharing of learning. Therefore, we predict that:

Hypothesis 3: A team cultural orientation towards learning (internal integration and external adaptation) will moderate the relationship between team diversity and team effectiveness, such that members of groups with a culture highly oriented towards learning will benefit more from diversity than teams with a culture that is less oriented towards learning.

The conceptual model upon which this study is based is depicted in Figure 1.

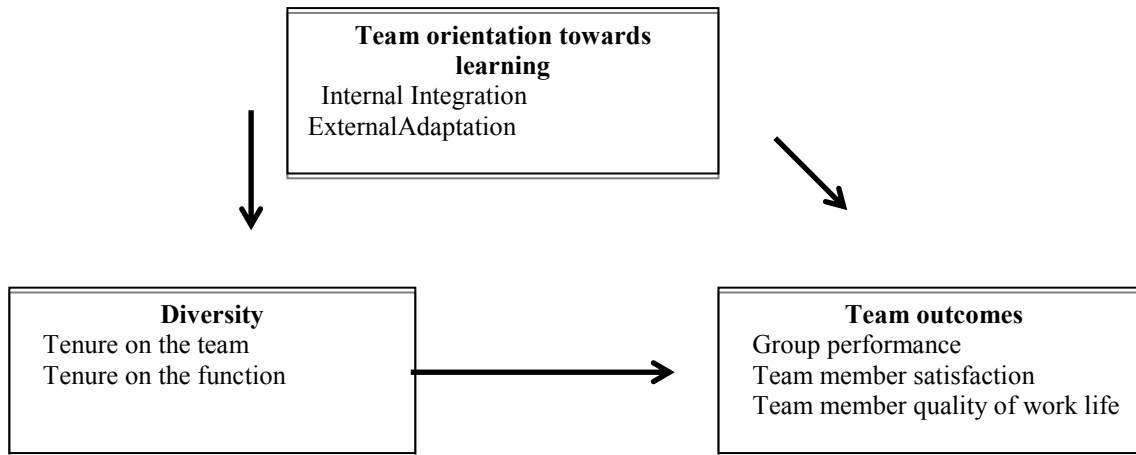


Figure 1. Conceptual model

4. Method

4.1 Participants and Procedure

The sample of the present study is composed of workgroups from industrial and services companies. Because the nature of the tasks performed by the teams is one of the variables that can affect the way culture and diversity influence team effectiveness (e.g., Hambrick et al., 1996; Murray, 1989), we decided to survey just teams that perform complex tasks.

A database of the 500 largest companies active in Portugal, published in a national magazine, as well as searches on the internet, were used to identify the companies for our research. In the first step of the data collection, we sent a letter explaining the purpose of our study and informing that all companies would receive a feedback report on their company's group dynamics, as well as a report containing the results of the global study. To the companies that returned the contact asking for more information, we sent the research project where we explained, in detail, our goals and what we intended with the collaboration. Twenty-four companies agreed to participate in this study. Meetings with a member of the company's top management team (in general, the human resources manager) allowed us to identify the teams to survey, which have to meet the following criteria: teams must be constituted at least by 3 members (1), who are perceived by themselves and others as a team (2), and who interacted regularly, in an interdependent way, to accomplish a common goal (3).

In each company, we had to collect two kinds of information: the team members' questionnaires and the team leaders' questionnaires. Team members were surveyed about demographic data, group learning culture, team members' satisfaction and team members' quality of work life; team leaders were asked to evaluate the team through a set of performance indicators.

The data was collected in the organization by a member of the research team. Individual anonymity was ensured and it was emphasized that the data would be aggregated before feedback would be provided.

Surveys were administered to 549 members of 73 workgroups. 414 members returned their surveys but 11 were excluded from our sample because at least 10% of the answers were missing (Bryman & Cramer, 2004). After these initial procedures, the remaining sample had a total of 403 participants, members of 73 teams (in all teams at least 60% of the team members completed the questionnaire). Teams were composed of 12 members on average ($SD = 7.34$).

With respect to the leaders' surveys, 70 questionnaires were returned and considered valid.

4.2 Measures

Diversity

Since the diversity dimensions considered in the present study – tenure on the function and tenure on the team – were continuous, the coefficient of variation was used to determine the extent to which team members differed from each other (Allison, 1978).

Team Cultural Orientation Towards Learning

To measure the team orientation towards learning we used the OCA scale (Escala de Orientação Cultural para a Aprendizagem) developed by Rebelo (2001). This is a 5-point Lickert scale (ranging from 1- almost never applies to 5- applies almost ever) that measures through 20 items the organizational orientation towards learning. The several studies conducted on this scale supported its good psychometric qualities (e.g., Rebelo & Almeida, 2008; Rebelo & Gomes, 2011; Rebelo, Gomes & Cardoso, 2003; Rebelo, Gomes & Cardoso, 2005) and pointed to the existence of two factors or dimensions: the first dimension, Internal Integration (12 items), is related to the way internal processes, such as communication and leadership, are managed in the organization; the second dimension, External Adaptation (8 items), is related to the orientation of the organization to the environment, i.e., the organization ability to learn with the outside and to correspond to its demands.

Since this scale evaluates culture on the organizational level, and in this study we intend to measure culture on the team level, all items were reworded to reflect the group, rather than the organization, as the referent. Although the changes that were introduced were not significant, consisting almost exclusively in replacing “organization” by “group” or “employees” by “members”, we decided to present the group version of OCA scale to a panel of experts and to conduct a pre-test with 20 participants. No question arose regarding the need to change the items.

A sample item for Internal Integration is “The failures are seen as an opportunity to try new ways of working” and a sample item for External Adaptation is “The criticisms that are made to the group are carefully examined in order to improve”.

Team members' satisfaction

To measure group satisfaction, we used ESAG (Escala de Satisfação Grupal) developed by Dimas (2007). This scale is composed of 7 items that measures members' satisfaction with different aspects related to the task and the affective system of the team. Statements are evaluated in 7-point Likert scales from 1 “totally dissatisfied” to 7 “totally satisfied”. Sample items are “The way the leader organizes and coordinates the team activities; Relationships between team members”.

Team members' quality of work life

To measure team members' quality of life we used Cardoso's adaptation (2003) of the scale *Calidad de Vida Profesional* created by Quijano et al. (1997). This scale is composed of 9 items that measure the quality of work life through two dimensions: *motivation and support* (5 items; a sample item is “I feel motivated (I want to push myself) in my work”) and *task characteristics and role clarity* (4 items; a sample item is “I know clearly what is expected of me in this work”). Statements are evaluated in 5-point Likert scales from 1 “I disagree a lot” to 5 “I agree a lot”.

Team Performance

Team performance was assessed with EADG (Escala de Avaliação do Desempenho Grupal) developed by Dimas (2007). This scale is composed of 10 items that measure the leaders' perception regarding different issues related to the quality and quantity of work produced by the team. Statements are evaluated in a 10-point Likert scale from 1 "bad" to 10 "excellent" and sample items are "Ability to develop strategies to achieve the goals" and "Quality of the work produced".

5. Results

Group members' responses were aggregated to the team level for further analysis. To justify aggregation we computed the Average Deviation Index (AD) developed by Burke and Dunlap (2002). Results for all variables revealed that the level of within-team agreement in our sample of work teams was sufficient to aggregate team members' scores.

Additionally, to check whether aggregation was justified we also computed the intraclass coefficients ICC(1) and ICC(2) (Bliese, 2000). ICC(1) for internal integration, external adaptation, satisfaction, motivation and support and task characteristics and role clarity was .14, .12, .18, .13 and .08, respectively. ICC(2) for the same variables was .49, .45, .58, .48, .35, respectively. Although ICC(2) for task characteristics and role clarity was below the recommended values (Klein & Kozlowski, 2000), overall the statistics computed tend to support aggregation of the data to the team level.

Table 1 gives the means, standard deviations and inter-correlations for all variables, as well as scale reliabilities (Cronbach's alpha). As can be seen, all measures presented good levels of internal consistency, with the exception of both dimensions of quality of work life, in which internal consistency values were slightly below the conventional references.

Table 1. Means, standard deviations, scale reliabilities, and correlations for all study variables

	<i>M</i>	<i>SD</i>	<i>α</i>	1	2	3	4	5	6	7	8
1. Function tenure diversity	.62	.33	--	--							
2. Team tenure diversity	.77	.43	--	.41**	--						
3. Internal Integration	3.69	.42	.90	.37**	.09	--					
4. External Adaptation	3.85	.43	.89	.32**	-.10	.81**	--				
5. Team members' satisfaction	5.37	.54	.92	.24*	.11	.66**	.62**	--			
6. Motivation and support	3.84	.36	.69	.24*	-.05	.76**	.68**	.61**	--		
7. Task characteristics and role clarity	4.08	.34	.68	.21*	-.12	.56**	.63**	.60**	.69**	--	
8. Performance	7.35	1.07	.93	-.07	.06	.18†	.24*	.23*	.13	.26*	--

* $p < .05$; ** $p < .01$

As we expected, and with the exception of diversity concerning the tenure in the team (which was excluded from further analysis), all predictors considered in the present study were positively correlated with team members' satisfaction, with motivation and support and with task characteristics and role clarity. Concerning group performance, no significant relationship was found with diversity.

In order to correct the multicollinearity that can arise when testing moderated relationships, the independent variables were centred before the interaction terms were generated, following a procedure proposed by Cohen, Cohen, West and Aiken (2003).

To test our hypothesis we conducted 3 hierarchical regression analyses, with team satisfaction, motivation and support and task characteristics and role clarity as the dependent variables, respectively. In the first step we entered diversity, in the second step we entered team culture and, finally, in the third step we entered the interaction terms. In this way, the impact of team diversity on team results (hypothesis 1) was analysed using step one, and the direct effect of team orientation towards learning on team results (hypothesis 2) was analysed using step two. The joint impact of team diversity and team orientation towards learning (hypothesis 3) was examined using step three results. Results are presented in table 2.

Concerning performance, because no significant relationship was found between this variable and diversity, we conducted only a multiple regression analysis with both dimensions of the team cultural orientation towards learning as the independent variables. Results are presented in table 3.

Table 2. Hierarchical regression analyses with diversity and team learning culture predicting team members' satisfaction and team members' quality of life

Variables	Team members' satisfaction				Team members' quality of work life							
					Motivation and support				Task characteristics and role clarity			
	<i>B</i>	<i>SE</i>	<i>R</i> ²	ΔR^2	<i>B</i>	<i>SE</i>	<i>R</i> ²	ΔR^2	<i>B</i>	<i>SE</i>	<i>R</i> ²	ΔR^2
Step 1.			.05†				.5†				.04	
Function tenure diversity	.38†	.20			.22†	.12			.20	.12		
Step 2.			.46**	.41**			.53**	.48**			.36**	.32**
Function tenure diversity	-.04	.16			-.06	.09			-.02	.11		
Internal Integration	.59**	.22			.60**	.13			.18	.15		
External Adaptation	.40†	.22			.04	.13			.36*	.15		
Step 3.			.46**	.00			.54**	.01			.39**	.03
Function tenure diversity	-.03	.17			-.04	.09			-.02	.11		
Internal Integration	.57*	.24			.57**	.13			.16	.15		
External Adaptation	.40†	.23			.06	.13			.33*	.15		
Diversity X Internal Integration	-.17	.64			.25	.36			-.66	.41		
Diversity X External Adaptation	-.03	.68			.32	.38			.35	.44		

** significant at the 0.01 level; * significant at the 0.05 level; †significant at the 0.10 level

Table 3. Multiple regression analysis with team cultural orientation towards learning predicting performance

Variables	Performance			
	<i>B</i>	<i>SE</i>	β	<i>R</i> ²
				.24
Internal Integration	-.13	.52	-.05	
External Adaptation	.69	.51	.28	

In our first hypothesis we predicted a positive significant effect of diversity on team effectiveness. Results partially supported this hypothesis. Indeed, the positive effect of diversity concerning tenure in the function on team member satisfaction ($B = .38$, $p < .10$) and on motivation and support ($B = .22$, $p < .10$) was significant at a less conservative level of significance. However, no significant effects were found on the other outcomes considered.

Hypothesis 2 concerned the direct effect of the team orientation towards learning on team effectiveness. As can be seen in Table 2, internal integration presented a positive significant effect on team members'

satisfaction ($B = .59, p < .01$) and on motivation and support ($B = .60, p < .01$); however, its effect on task characteristics and role clarity ($B = .18, ns$) and on group performance ($B = -.13, ns$) was not significant. Concerning external adaptation, results supported its positive effect on team members' satisfaction ($B = .40, p < .10$) and on task characteristics and role clarity ($B = .36, p < .05$), but no significant results were found respecting motivation and support ($B = .04, ns$) and group performance ($B = .69, ns$). In short, hypothesis 2 was partially supported.

Finally, in hypothesis 3 a moderating role of team learning culture on the relationships between diversity and team effectiveness was predicted. The analysis, in the third step of the interaction terms, showed, nonetheless, the inexistence of moderated effects. Thus no support was found for hypothesis 3.

6. Discussion and conclusions

The central aim of the present research was to contribute towards clarifying the role of diversity and of the team cultural orientation towards learning on the team success.

Results revealed that teams composed of people with different levels of experience on the function presented higher levels of satisfaction and of quality of work life. However, this positive effect was only significant considering a less conservative level of significance (i.e., .10). For that reason, when considered alone, diversity is not a powerful predictor of effectiveness. In fact, concerns about the management of diversity tend to weigh more in theory than in reality. These results are in line with most of the empirical studies developed in this area (e.g., Ely, 2004; Kienhuis, 2007) and demonstrate that the impact of diversity on team effectiveness is not significant and consistent. Thus, when we intend to create successful teams, diversity is not a variable to take into consideration. Moreover, even when moderated variables, like the team learning culture, are considered, results tend to show no significant effects.

Contrary to diversity, the team cultural orientation towards learning is a strong determinant of the affective dimension of effectiveness. Hence, when teams are oriented towards the acquisition and dissemination of knowledge, individuals are more satisfied and report higher levels of quality of work life. It is important, however, to mention that concerning the team members' quality of life, the effects of the two dimensions of the team orientation towards learning were not equal: whereas internal integration presented a positive effect on motivation and support and no significant effects on task characteristics and role clarity, external adaptation presented no significance effects on motivation and support and a positive significant effect on task characteristics and role clarity. The internal integration dimension of the team learning culture is related to the support given by the team to learn and develop the individual skills. Therefore, it is understandable that in a team with more internal integration, individuals will be more motivated and feel more supported. External adaptation, on the other hand, concerns the orientation of the team to the environment, its ability to take risks, to experiment new ways of working. When people are encouraged to experiment and to innovate, it is expected that they feel more identified with their function and that they recognize their work as important and as being valued by the team.

Although we have predicted a positive effect of the team learning culture on performance, results showed no significant effects. Probably, the existence of a team culture oriented towards learning is important to increase the quality and the quantity of the outputs produced by the teams, but it is not enough. In fact, probably the orientation towards learning must produce effective learning. This is a hint to explore in further studies.

As most studies, the current research has several shortcomings. Our studies relied upon self-report measures, and as a consequence, run the risk of potential common method variance. However, our results were aggregated to the team level, a procedure that can attenuate this threat (Conway, 2002; Spector, 1987). The

relatively small sample may also limit some analyses (particularly, the moderator analyses¹) and, also, the generalization of the results. And lastly, the cross-sectional and non-experimental nature of our research are barriers to state the causal direction of the hypothesised relationships.

6. References

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¹ Beyond the small sample, and according to Lubinski and Humphreys (1990) and also Evans (1985), the existence of moderator effects is often harder to demonstrate in a field context than in a laboratory setting.

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