European Master on Work, Organizational,

and Personnel Psychology (WOP-P)

Organizational climate and team effectiveness: The mediating role of team learning behaviors

m a s t e r t h e s i s

Pedro Almeida Maia

Faculdade de Psicologia e de Ciências da Educação

Universidade de Coimbra

Home tutor:

Teresa Rebelo, PhD

Faculdade de Psicologia e de Ciências da Educação

Universidade de Coimbra

Host tutor:

Rita Berger, PhD

Facultat de Psicologia

Universitat de Barcelona

Barcelona, 4th July, 2016
Coimbra, 7th July, 2017

Title of the research project:

Organizational climate and team effectiveness:
The mediating role of team learning behaviors

Keywords:

Teams; Organizational climate; Team effectiveness; Team learning behaviors.

Student:

Pedro Almeida Maia

Faculdade de Psicologia e de Ciências da Educação

Universidade de Coimbra

uc2015262368@student.uc.pt

Home tutor:

Teresa Rebelo, PhD

Faculdade de Psicologia e de Ciências da Educação

Universidade de Coimbra

terebelo@fpce.uc.pt

Host tutor:

Rita Berger, PhD

Facultat de Psicologia

Universitat de Barcelona

ritaberger@ub.edu

INDEX

Abstract

Climate is one of the most studied topics in the organizational sciences. Extensive research on this subject has shown that organizational climate has an impact on a wide range of individual, group or organizational outcomes. The current research aims to be a contribution to further understanding the influence of organizational climate on team effectiveness, because there is a gap in studying this phenomenon considering mediator variables such as team learning behaviors. Considering the *Input–Process–Output* approach and the *Input-Mediator-Outcome-Input* effectiveness model, organizational climate is seen as an antecedent (input) of effectiveness. The impact it has on team results is due to its relationship with mediating or intervening variables. In this study, the mediating role of team learning behaviors was studied, because organizational climate is seen as precedent of team learning, and a positive relation between team learning behaviors and team effectiveness has been found in previous research. In order to evaluate team effectiveness, the following criteria were considered: team performance, viability, quality of group experience, and team process improvement. The sample consists of 535 participants (445 team members and 90 team leaders) from 90 teams, working in 40 distinct Portuguese organizations from different sectors and areas of activity. The instruments for data collecting were the Portuguese versions of: the *CLIOR – Organizational Climate Scale*; the *Team Learning Behaviors' Instrument*; and the *Team Effectiveness Measures*. Data related to three of the four criteria of team effectiveness (namely, team performance, team viability, and team process improvement) were obtained from team leaders, while the fourth criterion (quality of group experience) and data related with organizational climate and team learning behaviors were from team members. For analyzing data, multiple regression analysis was mainly used. The results showed that organizational climate positively influences team learning behaviors. Team learning behaviors, on the other hand, are positively related to all four criteria of team effectiveness. In other words, a positive organizational climate allows team learning behaviors to arise, and these act as mediators between organizational climate and team effectiveness, in a total mediation manner.

State of the Art

Introduction

Since the studies of the Tavistock Institute of Human Relations, in the 1950s, when the small-scale work organization became a large-scaled extensive method for coal attainment (Trist & Bamforth, 1951), work teams became a major object of study (Rico, Hera, & Tabernero, 2011) and a very prominent subject nowadays (Ramírez Heller, Berger, & Brodbeck, 2014). Edmondson and Singer (2008) conjectured that team work, especially team learning behaviors, is "essential for sustained individual and organizational performance in a changing environment" (p. 2). This emphasizes their importance for modern organizations and fast-paced environments, where learning is key for achieving productivity and innovation in continuously changing settings.

Many taxonomies and definitions of groups or teams[1] have been employed over the past years, with subtle differences, but with consistent common aspects. Because our focus is on teams in work environments, social groups, amateur sports teams and other collectives in different contexts are not to be considered for this paper. Therefore, and following previous criteria in this research line, a team can be defined as a set of individuals organized in a social system who have regular interactions, exhibit task interdependency and one or more perceived common goals (Cohen & Bailey, 1997; Lourenço, 2002, Mathieu, Maynard, Rapp, & Gilson, 2008). They provide knowledge diversity, attitudes, skills and experience, "whose integration makes it possible to offer rapid, flexible and innovative responses to problems and challenges, promoting performance and improving the satisfaction of those making up the team" (Rico et al., 2011, p. 57).

The goal of this study was to test if *organizational climate* influences *team effectiveness* through the mediation of *team learning behaviors*. Whilst organizational climate is defined as a set of shared perceptions of organizational norms and attitudes, to be addressed again further, suggestion of its influence over team learning behaviors has already been studied (e.g., Baer & Frese, 2003; Edmondson, 1999; West, 1990). In the scope of team learning literature, organizational climate is also compared to *psychological safety*, defined as "a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves" (Edmondson, 1999, p. 354).

[1] Following Allen and Hecht (2004) we use the words *group* and *team* interchangeably.

Psychological safety is, consequently, seen as another kind of climate. It can be defined as a team climate where workers trust themselves and are confident about their own capabilities.

So, when team members encounter empathy, support and understanding through regular communication, well defined goals, and equality, team learning behaviors are more likely to occur. Another reason why team learning behaviors are considered mediators in this *input-process-output* relationship is that teams need to have the most promising conditions for effective and efficient learning and knowledge sharing (Edmonson, 1999) and that it is essential for reaching high-quality results and surviving in fluctuating business contexts (Kozlowski & Bell, 2013). In other words, the distinctiveness of this study relates not with the variables under scope, but in the way they relate, namely through a mediation model, now to be addressed.

Theoretical Framework

Team Effectiveness models

In general, effectiveness in work teams is described as the consequence of fulfilled members, working in healthy environments with a sense of continuity and innovation towards positive results (Kozlowski & Ilgen, 2006), which also triggers additional investigation in this field. Team effectiveness has shown to have many precedent factors, such as behavioral integration, transactive memory, team autonomy, team processes, and team learning behaviors (e.g., Mathieu et al., 2008; Ramírez Heller et al., 2014).

For explaining the mechanisms in the relationships between our variables, different theoretical models can be found in the literature (Hackman, 1987). In the I-P-O approach, *input–process–output* (I-P-O) approach (McGrath, 1964), *inputs* are determinants. According to Kozlowski and Bell (2013, p. 29), they represent team resources that can be both internal (e.g., personalities, demographics; group structure, team design) and external (e.g., rewards, training; organizational climate), and operate at distinct levels (e.g., individual, group, organization). *Processes* are "mechanisms that inhibit or enable the ability of team members to combine their capabilities and behavior" (e.g., communication, conflicts, decision-making processes). Finally, *outputs* (or outcomes) stand for "criteria to assess the effectiveness of team actions" (e.g., productivity, satisfaction, group sustainability). This model incorporates a great number of determinant variables, besides identifying associations between groups of other variables, in a

directional and weight-free logic, despite the criticism about its generalized range, the fact that it does not consider team temporality nor emergent states, and that it represents a single cycle (Kozlowski & Bell, 2013; Lourenço, 2002).

More recent team effectiveness models include Ilgen, Hollenbeck, Johnson, and Jundt's (2005) *Input-Mediator-Outcome-Input* effectiveness model (IMOI), which is considered to be an upgrade of the I-P-O model. The IMOI model also accepts variables at the organizational level of analysis as *inputs* and considers team effectiveness as a multidimensional concept. According to some authors (e.g., Cohen & Bailey, 1997; Mathieu et al., 2008; Rico et al., 2011), the tendency in research in this area is to abandon the *input–process–output* approach and to adopt Ilgen et al. (2005) *Input-Mediator-Outcome-Input* effectiveness model (IMOI). Therefore, the IMOI model act as basis for this research, especially because it represents an evolution of the I–P–O model.

Team Effectiveness criteria

Within the scientific community, different approaches to team effectiveness co-exist, using specific concepts and methodologies as well as their authors' particular terminologies (Lourenço, Miguez, Gomes, & Carvalho, 2004). Their viewpoints can focus dissimilarly, with four main different perspectives (Dimas, Alves, Lourenço, & Rebelo, 2016; Hackman, 1987; Kolodny & Kiggundu, 1980; Lourenço et al., 2004; Shea & Guzzo, 1987). The *rational perspective* focuses on results and achievements measured by productivity, performance or efficacy. The *internal processes perspective* aims at team members' satisfaction or at quality of group experience. The *systemic perspective* targets team viability. Finally, the *political perspective* takes into consideration team requirements' satisfaction and costumers' satisfaction.

Team effectiveness lacks the strictness of a theoretical concept. We need to look to its specifications for individual types of teams to find its grounded meaning (Goodman, Ravlin, & Schminke, 1987). This also suggests the existence of multiple types of effectiveness (Beaudin & Savoie, 1995; Lourenço, Miguez, Gomes, & Freire, 2000; Savoie, Larivière, & Brunet, 2006). Team effectiveness models should be able to describe and explain effectiveness as well as to specify its variables and measuring criteria (Hackman, 1987; Kolodny & Kiggundu, 1980;).

According to Aubé and Rousseau (2005) and Rousseau and Aubé (2010), effectiveness can be assessed by multiple criteria. It is also considered "not context-free", depending on situational or environmental factors, such as an evaluation bias, when

effectiveness may be considered a different thing for individuals with different values, expectancies and representations (Lourenço, 2002). Other authors, such as Beaudin and Savoie (1995) and Savoie and Beaudin (1995), consider effectiveness to assume four scopes: social, economical, political and systemic (perennial). Later on, Savoie et al. (2006) added the *innovation* scope / innovative dimension.

In order to evaluate team effectiveness, this research will consider some of their relevant assets, specifically: for the social dimension, *quality of group experience*; for the economical dimension, *team performance*; for the systemic (perennial) dimension, *team viability*; and for the innovative dimension, *team process improvement*. For this study, the political dimension has not been considered, because evaluations made by other stakeholders are not to be included (e.g., internal or external clients, other teams).

Hence, team effectiveness embraces multiple dimensions, related with a multiple constituency approach (Aubé & Rousseau, 2005), for it can be "assessed by different constituencies, such as supervisors and team members" (p. 191). It is also seen as a multidimensional construct (Hackman, 1987), as already stated, and takes into account recognized and documented criteria, such as: quality of group experience, team performance, team viability and team process improvement (Aubé & Rousseau, 2011; Kozlowski & Ilgen, 2006; Mathieu et al., 2008). *Quality of group experience* is related to member satisfaction, in a way that it supports the global positive feeling and personal growth. *Team performance* is described as the level to which the team's outputs regard the criteria set by the organization, regarding quantity and quality of work (Hackman, 1987) and reflecting how team members have accomplished their given tasks. *Team viability* is the team's capacity to adapt to the changes and difficulties that intrude on their work (Aubé & Rousseau, 2005; Hackman, 1987), so a "high level of team viability means that the team members have the capability to continue working together over time" (Aubé & Rousseau, 2011, p. 567). Finally, *team process improvement* stands for a set of changes that can occur inside work teams, and through their team leaders.

Organizational Climate

Over the last four decades, the concept of organizational climate has been studied with particular interest from organizational psychologists. Denison (1996) compared the use of the terminology *climate* and *culture* in previous studies, sustaining that the main difference is unrelated to the *phenomenon* under study, but rather the *perspective* taken to study it. While *organizational culture* refers to the deep structure of organiza-

tions (values, beliefs, assumptions), *organizational climate*, although also rooted in the organization's value system, focuses on the relatively temporary individual perceptions of the social and organizational environment.

Pirola-Merlo, Härtel, Mann and Hirst (2002) have defined climate as the "set of perceived norms, attitudes and expectations operating in a given social context" (p. 65). According to Anderson and West (1998), climate is difficult to define, due to different points of view, especially between the *cognitive schema approach* and the *shared perceptions approach*. The first one, also entitled as *psychological climate*, is at the individual level of analysis and considers organizational climate as the "individual's constructive representations of their work environments" (Glisson & James, 2002; James & James, 1989; James, James, & Ashe, 1990; James & Jones, 1974), while the second one is at the organizational level of analysis and is defined as the "shared perceptions of organizational policies, practices and procedures" (Anderson & West, 1998, p. 236), an interactive construct of organizational nature (Schneider, 1985). The latter approach will be adopted in this study. The perceptions of organizational climate are determinants of how individuals behave in organizations, while mediating the relationship between objective characteristics of the work environment and the individuals' responses (Campbell, Dunnette, Lawler, & Weick, 1970). In other words, "individuals do not respond to the work environment directly, but must first perceive and interpret their environment" (Carr, Schmidt, Ford, & DeShon, 2003, p. 605). While before climate was seen as a molar concept (e.g., Hershberger, Lichtenstein, & Knox, 1994), the construct was later extended to emphasize certain referents (e.g., climate for safety) (Schneider, 2000).

According to Peña-Suárez Muñiz, Campillo-Álvarez, Fonseca-Pedrero and García-Cueto (2013), there are ten predominantly measured aspects in the construct of organizational climate, classified in three different dimensions. In the *affective dimension*: attachment to the job, cooperation, and relationships with co-workers and bosses; in the *cognitive dimension*: innovation, autonomy, and participation; and in the *instrumental dimension*: the organization, the reward system, physical conditions and schedules. These measured aspects are linked to other dimensions of a working organization. For example, organizational climate is perceived as a predecessor of effectiveness, and the impact it produces on teams is related to its relationship with mediating variables.

Mediators are defined as a "set of psychosocial mechanisms that permit team members to combine the available resources for performing the work assigned by the organiza-

tion, overcoming the difficulties involved in the coordination and motivation of their members" (Rico et al., 2011, p. 64). As an input, organizational climate is considered to have multiple outputs (Patterson et al., 2005) at individual, group or organizational levels, such as "leader behavior" (Rousseau, 1988), "turnover intentions" (Rentsch, 1990), "job satisfaction" (Mathieu, Hoffman, & Farr, 1993), "individual job performance" (Brown & Leigh, 1996), "organizational performance" (Lawler, Hall, & Oldham, 1974), and "team learning behaviors" (Mathieu et al., 2008).

Team Learning Behaviors: towards a mediation model of organizational climate and team effectiveness

Understanding climate for learning is of crucial importance for managers. It allows them to foster applicable strategies to improve knowledge sharing inside their teams and to promote innovation and effective performances (Ramírez Heller et al., 2014). According to the same authors, "a team climate conductive to learning has been proved to be a significant predictor of group performance, support for innovation and team effectiveness" (p. 548). It is also characterized by the existence of: *empathy* (support and common understanding); *regular contact* (through formal and informal communication); a *general agreement* (on clearly defined realistic and achievable goals and objectives); a *notion of equality* (with no particular domination); and *individual perception, contribution and support* (towards other team members during group creativity enhancement periods) (Brodbeck, 2003).

Edmondson (1999) defined team learning as a continuous process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results and discussing errors or unexpected outcomes of actions, and was one of the first authors to classify it as an "active set of team processes" (Argote & Olivera, 1999; Kozlowski & Ilgen, 2006). But team learning is vaster than a mere sum of behaviors, also rising from interactions amongst team members (Dimas et al., 2016).

Therefore, team learning can be considered both a *process* — as already described previously, when citing Edmondson (1999) —, and a *result* of those team members' interactions (Argote, Gruenfeld, & Naquin, 2001). As a process, it can be directly associated with behaviors; as a result, it rises from communication and coordination activities which build the shared knowledge of the team (Edmondson, Dillon, & Roloff, 2007). In this study, team learning will be studied as a behavioral *process*, resulting in the "team learning behaviors" terminology. As a mediator variable, team learning pro-

cesses can emerge from the *inside* — from the whole group, a group minority or from a team's more competent member (Ilgen et al., 2005) — and from the *outside*, but both are related to effectiveness (Mathieu et al., 2008).

Edmondson (1999) has substantialized that team learning is also a mediator between psychological safety, defined as a "shared belief held by members of a team that the team is safe for interpersonal risk taking" (p. 350), and performance. Psychological safety, organizational culture and leadership are also inputs for team learning (Dimas et al., 2016), but the most important conclusions for this study is that organizational climate is a precedent of team learning (Baer & Frese, 2003; Edmondson, 1999; West, 1990), and also a direct contributor to team effectiveness (e.g., Baer & Frese, 2003; Kopelman, Brief, & Guzzo, 1990; Kozlowski & Bell, 2013; Ramírez Heller et al., 2014).

Even if assuming that team learning doesn't always lead to effectiveness, because of leaders and individuals' influence, for example, by reporting errors exaggeratedly or by trying to solve problems by trial and error (Dimas et al., 2016), a clear positive relation between team learning behaviors and team effectiveness was found in previous research (Chan, Pearson, & Entrekin, 2003; Edmondson, 1999, 2002; Flood, McCurtain, & West, 2001; Katzenbach & Smith, 1993; Mathieu et al., 2008; Rico et al., 2011; Zellmer-Bruhn & Gibson, 2006). Together with previous research that support a positive impact of organizational climate on team learning behaviors — as aforesaid —, this rationale leads us to consider that team learning behaviors could play a mediating role on the relationship between organizational climate and team effectiveness. Accordingly, this study aims to test the following hypotheses, graphically represented in Fig. 1:

H_1: *Organizational climate (OC) is positively related to team learning behaviors (TLB).*

H_2: *TLB are positively related to team effectiveness:*

- *H_{2A}: TLB are positively related to quality of group experience;*
- *H_{2B}: TLB are positively related to team performance;*
- *H_{2C}: TLB are positively related to team viability;*
- *H_{2D}: TLB are positively related to team process improvement.*

H_3: *TLB mediate the relationship between OC and team effectiveness:*

- *H_{3A}: TLB mediate the relationship between OC and quality of group experience;*
- *H_{3B}: TLB mediate the relationship between OC and team performance;*
- *H_{3C}: TLB mediate the relationship between OC and team viability;*
- *H_{3D}: TLB mediate the relationship between OC and team process improvement.*

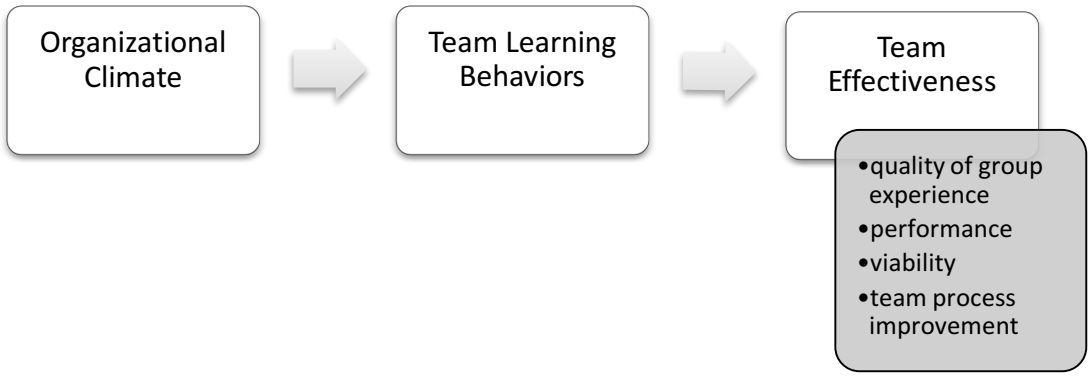

Fig. 1: Mediation model under analysis.

Method

Sample

The sample consists of 535 participants (445 team members and 90 team leaders) from 90 teams working in 40 distinct Portuguese organizations from different sectors and areas of activity. The inclusion criteria were: a minimum of three members per team; the existence of common objectives; and interaction for their achievement (Cohen & Bailey, 1997). Leaders would have to be formally recognized.

The majority of organizations is medium-sized (42.2%), or with under 250 workers[2]; small (less than 50 workers) and big companies (250 or more workers) are equally represented (16.7% each); and micro-sized organizations (less than 10 workers) are the least represented (14.4%). Nine team leaders (10.0%) didn't provide answer for their company size, but the average number of workers is 287.93 (Median = 60; min = 4; max = 8000; *SD* = 943.38). Regarding their market sectors, the two main areas of activity are the civil protection (e.g., fire department) (22.2%) and the industrial sector (15.6%), with eight missing values (8.9%) regarding this information.

Most teams work in production (12.6%), in technical areas (11.9%) or related to sales (11.2%). On average, teams have been formed 9.22 years ago (min = 0.5; max = 26; *SD* = 6.78). Their present configuration is working together for 7.94 years (*SD* = 6.96). Each team has an average of 6.66 members (min = 3; max = 27; *SD* = 5.16).

[2] EU legislation website: http://eur-lex.europa.eu/legal-content/PT/TXT/?uri=LEGISSUM:n26026

Sociodemographic data showed that 50.8% of team members are female (4.0% did not answer to gender), and the average age is 35.49 years old (min = 18; max = 67; *SD* = 10.03). 36.2% have finished high-school, and 23.4% have a university degree (1.1% did not answer to academic qualifications). Team members have been working for their organization for 8.79 years (min = 0.5; max = 43; *SD* = 8.46). As for the face-to-face daily interaction with other members, the average is 5.17 hours (*SD* = 2.82).

Our sample is also made up of 90 team leaders. Sociodemographic analysis show that the majority of leaders are male (61.1%), and their average age is 39.38 years old (min = 18; max = 67; *SD* = 9.91). The majority has finished high-school (44.4%) or higher education (27.8%), with 8.9% of missing answers. 23.3% of the leaders are in charge of supervision, 14.4% are department directors and 13.3% are managers. Team leaders have been working for their organization for 13.71 years (min = 0.7; max = 34; *SD* = 7.76) and leading their teams for 7.94 years (min = 0.5; max = 34; *SD* = 6.96). There was a total of 7 missing answers (7.8%).

Data Collection Procedures

Firstly, organizations were contacted directly, by phone and/or by e-mail, when an explanation about the investigation was provided. Secondly, the institutional presentation letter (cf. Appendix A)[3] and the informed consent (cf. Appendix B) were supplied, including a general explanation about the following procedures and the feedback they would get[4]. After the ethical procedures regarding confidentiality and the informed consent, and meetings with the board of directors (when requested), the data collection was scheduled. Follow-up contacts were made to ensure every detail was clear.

Using paper and online surveys, data were collected by the research team[5] between November 2014 and April 2016. The Portuguese version of the instrument was used to design the questionnaire in the new Lime-Survey online platform. The survey designed for team members had a completion time of 20 to 25 minutes, while the one for team leaders was of about 10 minutes. Data related to three of the four criteria of team effectiveness (namely, team performance, team viability, and team process improvement) were obtained from team leaders, while the fourth criterion (quality of

[3] The document is part of a wider investigation about "Leadership, Team Processes and Effectiveness".
[4] All participating organizations were assured a copy of the research report, after its completion, as well as specific feedback on their teams, if and when requested.
[5] Patrícia van Beveren, Lucas Albuquerque, Carina Pessoa, Daniela Aniceto, Ana Raquel Martins, Josef Bader, Nicola Paolucci and Pedro Almeida Maia.

group experience) and data related with organizational climate and team learning behaviors were from team members.

Preliminary statistical procedures

The first step was to look at missing values and to study their distribution pattern. According to Bryman and Cramer (2004), cases of a scale with more than 10% of non-answers should be eliminated. From our sample, no cases were rejected, because the largest percentage found in team members' database was 1.1% (5 missing values), and for team leaders there was zero missing values. Little's Missing Completely At Random test was used to analyze the distribution pattern of non-answers. When the correspondent distribution is random, the missing values replacement is made using the average of that respective item. When the distribution is not random ($p \leq .05$), the EM algorithm (*expectation maximization*) should be used. In the team members' database, missing values for *team learning behaviors*, *quality of group experience* and *organizational climate* had non-random distributions, so the replacement was made by the EM method, using IBM SPSS 22 software.

Measures

The variables under study are *organizational climate*, *team learning behaviors* and *team effectiveness*. Therefore, the corresponding instruments are Portuguese adapted versions of: the *CLIOR – Organizational Climate Scale* (Peña-Suárez Muñiz et al., 2013); the *Team Learning Behaviors' Instrument* (Savelsbergh, van der Heijden, & Poell, 2009); and *Team Effectiveness Measures* proposed by Aubé and Rousseau (2005) and Rousseau and Aubé (2010). Because the Portuguese versions of team learning behaviors and team effectiveness scales have already validity studies conducted by Aniceto (2016), Dimas et al. (2016) and Albuquerque (2016), respectively, and with similar samples, only[6] the Cronbach's alpha value was used to estimate internal consistency in the present sample. Data related to the three criteria of team effectiveness (namely *performance*, *viability*, and *team process improvement*) were collected from team leaders, because they are those responsible for evaluating their teams on the field, whereas data related to *organizational climate*, *team learning behaviors*, and *quality of group experi-*

[6] The sample used in this study was built over time and collected by several members of the research team, resulting in being very similar to the previous one (only 4 companies were added), so analyzes regarding construct validity were not necessary.

ence were obtained from team members. In the first part of both questionnaires (leaders and employees) demographic data were queried (age, gender, academic level, size and number of workers in the organization, market sector, main activity, team size and tenure).

For *team learning behaviors* and *team effectiveness*, *teams* are the level of analysis, while for *organizational climate*, the *organization* was the initial level of analysis, brought to the team's level afterwards as explained later. In order to examine whether the data justified aggregation of team-level constructs, the Average Deviation index (*AD*) developed by Burke, Finkelstein and Dusig (1999) was used.

Organizational Climate

The instrument is the Portuguese adapted short-version of *CLIOR – Organizational Climate Scale* (Peña-Suárez Muñiz et al., 2013). Its objective is to measure organizational climate through individuals, with use of 15 items (e.g., "The relationships with my bosses are good", or "If I need help because of a heavy workload, I am given the necessary means") (cf. Appendix C) with 3 reverse items (13, 14 and 15). All items use a five-point Likert scale, in which the lowest value (1) corresponds to "totally disagree" and the highest value (5) corresponds to "totally agree".

This short version is adapted by the same authors (Peña-Suárez Muñiz et al., 2013) from their original 50-items scale, and encompasses the items with the highest loadings on the factors. Besides also being one-dimensional, it comprises a global measure for organizational climate, made up of indicators of cooperation, work organization, relations, innovation, participation, and attachment to the job (the original version only adds autonomy, rewards, work hours and work-life balance). It "allows a rapid screening of the work environment" (Peña-Suarez Muñiz et al., 2013, p. 142).

Due to the absence of construct validity studies regarding this translated version, confirmatory factor analyses (CFA) were carried out along with the estimation of Cronbach's alpha. Considering the results from Peña-Suárez Muñiz et al. (2013), we used AMOS software to run a CFA with the 15 items, for testing the single-dimension structure of this scale. The fit indexes[7] were acceptable ($\chi^2(90) = 424.573$; $df = 90$; $p<.001$; $\chi^2/DF = 4.72$; CFI = .91; TLI = .90; RMSEA = .09). However, items 13, 14 and

[7] Values larger than .90 for CFI and lower than .10 for RMSEA indicate an acceptable model fit (Byrne, 2010). Regarding the χ2/df, various rules of thumb have been recommended; a value up to 2.0 is considered very good and between 2.0 and 5.0 acceptable (Hair et al., 2009).

15 showed low factor loadings (.45; .36; and .19 respectively). Furthermore, item 11 ("My work is adequately defined") was highly related with item 6 ("The goals of my work are clearly defined"); and item 14 ("My work is inadequately supervised") was highly related with item 7 ("The bosses are willing to listen to their employees").

Considering all of these issues, we decided to run a new CFA without items 11, 13, 14 and 15. This model showed a satisfactory fit to the data ($\chi^2(90) = 173.55$; $df = 44$; $p<.001$; $\chi^2/DF = 3.94$; CFI = .96; TLI = .96; RMSEA = .08) and all items had loadings ranging from .64 to .87. Thus, those items were dropped, ending up with a one-dimensional 11-items scale. Cronbach's alpha value for our 11-items Portuguese scale was of $\alpha = .93$.

Team Learning Behaviors

At use was the Portuguese version of the *Team Learning Behaviors' Instrument* (Savelsbergh et al., 2009), due to its strong theoretical anchors and psychometric qualities (Dimas et al., 2016). Its goal is to evaluate team learning behaviors through team members, with 25 out of the 28 original items (e.g., "Team members listen to each other carefully" or "If something is not clear, we ask each other") (cf. Appendix C), using a five-point Likert scale, in which the lowest value (1) corresponds to "almost not applicable" and the highest value (5) corresponds to "almost completely applicable". In the exploratory factor analysis, the five types of behaviors described by Edmondson (1999) emerged as factors (exploring and co-construction of meaning; feedback behavior; experimenting; collective reflection; and error management). Items loaded above .50 along with the respective factor, communalities were greater than .60 and this structure explains 77.47% of the total variance. Cronbach's alphas for each of the scale dimensions, ranging from $\alpha = .73$ and $\alpha = .95$, show good internal consistency (Dimas et al., 2016). A Confirmatory Factor Analysis based on this penta-dimensional structure was carried out by Aniceto (2016). This structure achieved a Chi-square test of $\chi^2(265) = 1218.45$, $p<.001$, a ratio of $\chi^2/gl.$ 4.60, a CFI of .94 and a RMSEA of .08. However, Aniceto (2016) found that the correlations between the five dimensions were of high magnitude (from .63 to .84), so a CFA with a second-order factor (team learning behaviors) considering the five team learning behaviors as first-order factors was tested. The adjustment indexes values were similar to the previous CFA [$\chi^2(270) = 1334.50$, $p<.001$, $\chi^2/gl. = 4.94$, CFI = .93, RMSEA = .08], all of the second-order factor dimensions' load-

ings were located above .79, and the five dimensions' alpha values were ranging from .88 to .95.

Thus, for testing our hypotheses, we will consider the overall score of all five team learning behaviors as a variable. For our sample, the global Cronbach's alpha[8] was the same as found by Aniceto (2016) (α = .97), showing good internal consistency.

Team Effectiveness

The instruments at use were proposed by Aubé and Rousseau (2005) and Rousseau and Aubé (2010), and adapted for Portuguese by Albuquerque (2015).

Quality of group experience: This three-item scale aims to evaluate the climate within the team through team members (e.g., "In our team, relationships are harmonious", or "In our team, we get along with each other"; cf. Appendix C), using a five-point Likert scale, in which the lowest value (1) corresponds to "I strongly disagree" and the highest value (5) corresponds to "I strongly agree". In the exploratory factor analysis made by Albuquerque (2015), all items saturated above .94 along with the factor, explaining 90.82% of the total variance. The communalities are greater than .88. The Cronbach's alpha (α = .94) shows a good internal consistency. Cronbach's alpha for our sample is the same (α = .94).

Team performance: this five-item scale aims to assess the team's performance in terms of objective achievement, productivity, quality of work and fulfillment of deadlines and costs, through team leaders (e.g., "Please evaluate your team regarding their productivity"; cf. Appendix D), using a five-point Likert scale, in which the lowest value (1) corresponds to "very low" and the highest value (5) to "very high". In the exploratory factor analysis made by Albuquerque (2015), all items loaded above .64 along with the factor, explaining 58.75% of the total variance, and communalities are greater than .40. Cronbach's alpha (α = .84) shows good internal consistency of the scale. For our sample, Cronbach's alpha is the same (α = .84).

Team process improvement: this five-item scale aims to evaluate the benefits of changes that occur within the teams through team leaders (e.g., "Members of this team have successfully implemented new work processes in order to produce high-quality results"; cf. Appendix D), using a five-point Likert scale, in which the highest value (1)

[8] Cronbach's alpha values found in our sample for the five dimensions of *team learning behaviors* are: exploring and co-construction of meaning (α = .92); error management (α = .95); collective reflection (α = .93); feedback behavior (α = .87); and experimenting (α = .94).

corresponds to "almost not applicable" and the highest (5) to "almost completely applicable". In the exploratory factor analysis (Albuquerque, 2015), all items loaded above .82 along with the factor, explaining 70.02% of the total variance, and communalities are greater than .66. Cronbach's alpha (α = .85) showed good internal consistency (same value for our sample).

Team viability: This four-item scale aims to measure the ability of the team to adapt to changes, to solve problems, to integrate new members and to remain together in the future, through team leaders (e.g., "New members are easily integrated in this team"; cf. Appendix D), using a five-point Likert scale, in which the lowest value (1) corresponds to "almost not applicable" and the highest value (5) to "almost completely applicable". In the exploratory factor analysis (Albuquerque, 2015), all items saturated above .68 along with the factor, explaining 56.72% of the total variance, and communalities are greater than .46. The Cronbach's alpha (α = .75) shows a good internal consistency of the scale. For our sample, the Cronbach's alpha (α = .75) also showed good internal consistency.

Multilevel analysis: checking conditions

Considering that organizations are multileveled systems, with each level interconnected to others (van Mierlo, Rutte, Kompier, & Doorewaard, 2005), effectiveness outcomes can manifest at the same level, but also across different levels (Argote & McGrath, 1993). Once we have an organizational level variable (organizational climate) along with team-level variables in this study, a multilevel approach for data analysis (hierarchical linear modeling – HLM) was considered at first.

Kozlowski and Klein (2000) defended that "the multilevel researcher (…) must sample many people in many units that are nested in many higher-level units" (p. 27). Multilevel analysis, then, would imply many higher-level units (organizations) with many lower-level units (teams). However, our sample includes 24 organizations with only one team each, out of a total of 40, which is a hindrance to carry out multilevel analysis. So, we used R software to estimate the Intraclass Correlation (ICC2) only for organizations with more than one team, in order to verify if groups pertaining to the same organization had sufficiently homogenous perceptions regarding their company's organizational climate. The results ranged from .69 to .93, all of them near or above the cut-off point of .70 (Bliese, 2013), indicating that the organization means are reliable enough, given that most of the variability observed is between and not within organiza-

tions. In order to further verify whether we had enough homogeneity between teams of the same organization, regarding their perception over organizational climate, we ran the Average Deviation indexes (*AD*) proposed by Burke et al. (1999). To interpret the index, the recommended criterion is $AD \leq c/6$, where c is the number of response alternatives. For a 5-point Likert scale, c/6 is equal to .83. Values were all below the cut-off point (M = 0.22; Min = 0.06; Max = 0.43), so teams had a homogeneous perception on their own company's organizational climate. Given that, our decision was of not adopting an HLM multilevel approach and to treat organizational climate's data at group level.

Group level data aggregation

Prior to aggregation, and in order to use team member's answers for the variables collected from them, *AD*'s (Burke et al., 1999) were checked from: *organizational climate* (M = 0.512; Min = 0.081; 3^{rd}Q = 0.629; Max = 0.955; *SD* = 0.181); *team learning behaviors* (M = 0.587; Min = 0.118; 3^{rd}Q = 0.688; Max = 1.240); *SD* = 0.208) and *quality of group experience* (M = 0.469; Min = 0.000; 3^{rd}Q = 0.593; Max = 1.111; *SD* = 0.224). The recommended criterion is the same as before ($AD \leq .83$). Only the *AD* maximum values for *team learning behaviors* and *quality of group experience* were higher than the cut-off point, so we checked for their 3^{rd} quartile also. Because they were below .83, we can say that 75% of the values comply. Nevertheless, using only the average values, all three variables have within-team agreement, because they are below the cut-off point of .83. Thus, we concluded that the within-team agreement was sufficient to aggregate individual scores of *organizational climate*, *team learning behaviors* and *quality of group experience* to the team's level of analysis.

Control variables

Team size was considered a control variable in this study, because it is seen as a key variable in the literature, influencing innovation, productivity and performance (e.g., Cohen & Bailey, 1997; Rico et al., 2011).

Results

Considering the latest criticisms of Baron and Kenny's (1986) procedure for testing mediation (James, Mulaik, & Brett, 2006; LeBreton, Wu, & Bing, 2009; Zhao, Lynch, & Chen, 2010), our mediation model was tested by the product of coefficients method (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), because it provides accurate Type I error rates and satisfactory statistical power (LeBreton et al., 2009).

Mediation implies a relationship where an independent variable (X) influences statistically significantly a mediator variable (M), which subsequently influences statistically significantly a dependent variable (Y) (Sobel, 1990). In our analysis, the first relationship (α) is between *organizational climate* (X) and *team learning behaviors* (M). The second one (β) is between *team learning behaviors* (M) and *team performance* (Y). For this, two regression models are needed: M is regressed on X; and Y is regressed on M. The mediated effect is given by the product αβ, while τ is the non-mediated or direct effect of X over Y. We can say that a relationship is mediated if: 1.) X is statistically significantly related to M; and 2.) M is significantly related to Y, after controlling for X (MacKinnon et al., 2002). In order to test the mediated effect through the product of coefficients method ($P = z_\alpha \cdot z_\beta$), the significance of P is calculated and compared with the critical values. "As a reference, the critical value to test $\alpha\beta = 0$ for the .05 significance level for the $P = z_\alpha \cdot z_\beta$ distribution is 2.18, instead of 1.96 for the normal distribution" (MacKinnon et al., 2002, p. 90). The regression models were estimated using IBM SPSS 22 software. Descriptive statistics and correlations among the study's team-level variables are displayed in Table 1.

Table 1. Descriptive statistics and correlations.

Variables	M	SD	1	2	3	4	5	6	7
1. Team Size	6.66	5.160	–						
2. Organizational Climate	3.87	.481	–.347**	–					
3. Team Learning Behaviors	3.54	.524	–.403***	.719***	–				
4. Quality of Group Experience	4.06	.558	–.353**	.555***	.671***	–			
5. Team Performance	4.05	.581	–.124	.347**	.490***	.372***	–		
6. Team Viability	4.05	.570	–.094	.340**	.452***	.347**	.609***	–	
7. Team Process Improvement	3.88	.631	–.175	.262*	.460***	.393***	.664***	.558***	–

Note: * $p<.05$; ** $p<.01$; *** $p<.001$ level, (2-tailed).

Considering that *team size* was statistically significantly related to *team learning behaviors* and *quality of group experience*, their effect was measured and controlled for. Team size was not statistically significantly related to *team performance*, *team viability*, nor *team process improvement*, so the control variable was dropped from those respective analyses.

The test of regression assumptions, namely absence of multicollinearity, linearity, normality and residuals' independence and homoscedasticity revealed satisfactory results (Tabachnick & Fidell, 2001).

Therefore, the results of the first hierarchical linear regression analysis, with *team size* and *organizational climate* as predictors of *team learning behaviors*, are displayed in Table 2.

Table 2. Hierarchical linear regression for *team size* and *organizational climate* as predictors of *team learning behaviors*.

Variables	*B*	*SE*	B[a]	R^2	ΔR^2
Step 1.				.162***	
Team Size	–.039	.010	–.403***		
Step 2.				.527***	.365***
Team Size	–.017	.008	–.179*		
Organizational Climate	.680	.087	.644***		

Note: * $p<.05$; *** $p<.001$ level. [a] standardized coefficients.

We can see that *organizational climate* (X) was related to *team learning behaviors* (M) ($\alpha = .644$, $SE = .087$, $p<.001$), after controlling for *team size*. This supports H_1.

Table 3. Hierarchical linear regression for *team size*, *organizational climate* and *team learning behaviors* as predictors of *quality of group experience*.

Variables	*B*	*SE*	B[a]	R^2	ΔR^2
Step 1.				.125***	
Team Size	–.038	.011	–.353***		
Step 2.				.429***	.304***
Team Size	–.011	.010	–.104		
Organizational Climate	.138	.143	.117		
Team Learning Behaviors	.574	.138	.516***		

Note: *** $p<.001$ level. [a] standardized coefficients.

Results for the second hierarchical linear regression are shown on Table 3. *Team learning behaviors* were significantly related to *quality of group experience*, after controlling for *organizational climate* ($\beta = .516$, $SE = .138$, $p<.001$), supporting H_{2A}. The estimated mediated effect ($\alpha\beta = .332$) was statistically significant ($P = z_\alpha \cdot z_\beta = 27.68$, $p<.001$). The direct or non-mediated effect of organizational climate on quality of group experience was not statistically significant ($\tau = .117$, $SE = .143$, $p = .34$), implying we also have a total mediation model.

As already stated, the control variable was dropped from this point forward. Standard multiple regressions analyses were then performed for the remaining criteria, namely: team performance, team viability, and team process improvement.

Table 4. Standard regression for *organizational climate* and *team learning behaviors* as predictors of *team performance*.

Variables	*B*	*SE*	β
Organizational Climate	–.013	.163	–.011
Team Learning Behaviors	.553	.149	.498***

$R = .490$; $R^2 = .240$

Note: *** $p<.001$ level.

As we can see in Table 4, *team learning behaviors* were also statistically significantly related to *team performance* ($\beta = .498$, $SE = .149$, $p<.001$), supporting H_{2B}. The estimated mediated effect ($\alpha\beta = .320$) was statistically significant ($P = z_\alpha \cdot z_\beta = 24.72$, $p<.001$). The direct or non-mediated effect of organizational climate on team performance was not statistically significant ($\tau = -.011$, $SE = .163$, $p = .93$). We consequently have a total mediation model.

Table 5. Standard regression for *organizational climate* and *team learning behaviors* as predictors of *team viability*.

Variables	*B*	*SE*	β
Organizational Climate	.036	.163	.031
Team Learning Behaviors	.467	.150	.430**

$R = .452$; $R^2 = .205$

Note: ** $p<.01$ level.

Table 5 shows *team learning behaviors* significantly related to *team viability* (β = .430, *SE* = .150, $p<.01$), supporting H_{2C}. The estimated mediated effect (αβ = .280) was statistically significant ($P = z_\alpha \cdot z_\beta = 21.24$, $p<.001$). The direct or non-mediated effect of organizational climate on team viability was not statistically significant (τ = .031, *SE* =.163, $p = .82$). We also have a total mediation model.

Table 6. Standard regression for *organizational climate* and *team learning behaviors* as predictors of *team process improvement*.

Variables	*B*	*SE*	β
Organizational Climate	–.186	.179	–.142
Team Learning Behaviors	.677	.164	.562***

$R = .470$; $R^2 = .221$

Note: *** $p<.001$ level.

Finally, in Table 6, we can see that *team learning behaviors* were significantly related to *team process improvement* (β = .562, *SE* = .164, $p<.001$), supporting H_{2D}. The estimated mediated effect (αβ = .362) was statistically significant ($P = z_\alpha \cdot z_\beta = 25.38$, $p<.001$). The direct or non-mediated effect of organizational climate on team process improvement was not statistically significant (τ = -.142, *SE* =.179, $p = .30$). This also denotes that we have a total mediation model.

Table 7 includes all results obtained for testing mediation, which support our third hypotheses (H_{3A}, H_{3B}, H_{3C}, and H_{3D}).

Table 7. Mediation measures.

Dependent variables / Predictors	τ	αβ	P = zα•zβ
Quality of Group Experience			
OC (τ) / TLB (β)	.117	.332	27.68***
Team Performance			
OC (τ) / TLB (β)	–.011	.320	24.72***
Team Viability			
OC (τ) / TLB (β)	.031	.280	21.24***
Team Process Improvement			
OC (τ) / TLB (β)	–.142	.362	25.38***

Note: *** p< .01 level, (2-tailed).

Discussion and conclusions

The objective of this study was to test whether the relationship between organizational climate and team effectiveness was mediated by team learning behaviors. The results obtained showed that organizational climate was positively related to team learning behaviors, which in turn was positively related to all four variables of team effectiveness. In this case, the relationship between *organizational climate* and all four variables of *team effectiveness* is fully mediated by *team learning behaviors*. The study hypotheses were supported.

Other authors have found the same relationship between similar variables (e.g., the influence of team climate for learning on team effectiveness and innovation potential; Ramírez Heller et al., 2014), or at least between organizational climate and team learning behaviors (e.g., Baer & Frese, 2003; Edmondson, 1999; West, 1990), or organizational climate and team effectiveness (e.g., Baer & Frese, 2003; Kopelman et al., 1990; Kozlowski & Bell, 2013). Also, a statistically significant positive relationship between team learning behaviors and team effectiveness has been supported in the past (Chan et al., 2003; Edmondson, 1999, 2002; Flood et al., 2001; Katzenbach & Smith, 1993; Mathieu et al., 2008; Rico et al., 2011; Zellmer-Bruhn & Gibson, 2006). Nevertheless, this study makes some contributions to the literature. Firstly, the results obtained fill a gap. There is abundant research on each one of the three major concepts addressed in this study, especially team effectiveness, but less literature on how team learning behaviors are affected by organizational climate and on how they affect team effectiveness. To our knowledge, no study has tested this specific mediation relationship. Secondly, the results show that organizational climate has several outcomes, but in the case of the outcomes under study it affects team effectiveness through a mediating variable. It is also a contribution for organizational psychology, because it becomes more clear where to intervene, when the goal is to enhance team effectiveness.

Our study also presents some limitations. The sample was collected without the intention of performing a multilevel analysis, ending up with many organizations with just one team. In the future, if a multilevel analysis is pursued, data collecting must be made in a different way, having more than one team per organization as an inclusion criterion. Mediation models also require a chronological relation between variables (e.g., organizational climate should come first, followed by team learning behaviors followed by team effectiveness), condition which has not been verified in this study. A

sample by convenience is also to be considered a limitation, along with the cross-sectional design of the study, but the fact that it is based on more than one source (team members and their leaders) avoids the common-source bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012).

Despite these limitations, the expected mediation model was observed. The clear practical implication is that organizations and team managers can ensure a positive organizational climate conductive to team learning behaviors to improve team effectiveness in its different dimensions. To achieve this goal, companies must firstly ensure that climate is properly measured, by conducting climate surveys. These would allow reliable evidence to design interventions upon. Only this way can organizational climate be improved. Then, companies must foster better cooperation, relationships with co-workers and leaders, innovation, autonomy, participation, the reward system, physical conditions and schedules, in order to facilitate the emergence of learning behaviors, such as asking questions, seeking feedback, experimenting, reflecting on results and discussing errors or unexpected outcomes of actions. When team members are surrounded by these circumstances, their effectiveness will increase, through performance, viability, team process improvement and quality of group experience.

And because healthy organizational and team climates for learning have been seen to predict individual and team-level outcomes, it befalls clear that *climates* conductive to learning are a prolific ground for present and future research. This could be accomplished by studying the effect of other mediators in this relationship between organizational climate and team effectiveness, such as leadership styles, autonomy, trust or justice. Trust, for example, as for collective job satisfaction, tend to facilitate knowledge sharing and therefore compensate for some learning behaviors that might depend on initiative and proactivity. Including evaluations from other stakeholders (internal or external clients, other teams) could also be a valid contribution. Another suggestion would be to measure the same variables in different time periods.

Acknowledgements

I would like to thank my tutor from Coimbra, Teresa Rebelo and from Barcelona, Rita Berger, for their availability and support. I also would like to thank Prof. Paulo Renato Lourenço for his availability and support. A huge appreciation to my investigation colleagues Josef Bader and Nicola Paolucci. For being without me for so long, gratitude to my soulmate Cristina and my daughter Filipa.

References

Albuquerque, L. B. (2016). *Team resilience and team effectiveness: Adaptation of measuring instruments* (Master thesis). Faculdade de Psicologia e de Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal.

Allen, N. J., & Hecht, T. D. (2004). The "Romance of Teams": Towards an understanding of its psychological underpinnings and implications. *Journal of Occupational and Organizational Psychology, 77*(4), 439–461.

Anderson, N. R., & West, M. (1998). Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of Organizational Behavior, 19*, 235–258.

Aniceto, D. F. (2016). *Liderança Transformacional e Eficácia Grupal: o papel mediador dos Comportamentos de Aprendizagem*. (Master thesis). Faculdade de Psicologia e de Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal.

Argote, L., Gruenfeld, D., & Naquin, C. (1999). Group learning in organizations. In M. E. Turner (Ed.). *Groups at work: Advances in theory and research*. New York: Lawrence Erlbaum.

Argote, L., & Olivera, F. (1999). Organizational learning and new product development: CORE processes. In L. L. Thompson, J. M. Levine, & D. M. Messick (Eds.). *Shared cognition in organizations: The management of knowledge* (pp. 297–325). Mahwah, NJ: Lawrence Erlbaum.

Argote, L., & McGrath, J. E. (1993). Group processes in organizations: Continuity and change. *International Review of Industrial and Organizational Psychology*, *8*, 333–389.

Aubé, C., & Rousseau, V. (2005). Team goal commitment and team effectiveness: The role of task interdependence and supportive behaviors. *Group Dynamics: Theory, Research, and Practice*, *9*(3), 189–204.

Aubé, C., & Rousseau, V. (2011). Interpersonal aggression and team effectiveness: The mediating role of team goal commitment. *Journal of Occupational and Organizational Psychology*, *84*(3), 565–580.

Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of organizational behavior*, *24*(1), 45–68.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.

Beaudin, G., & Savoie, A. (1995). L'efficacité des équipes de travail: Définition, composantes et mesures. *Revue québécoise de psychologie*, *16*(1), 185–201.

Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods, 8*, 274–289.

Brodbeck, F. C. (2003). Team climate for learning in higher education. *Aston Network (Summer)*, 4–5.

Brown, S., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology, 81*, 358–368.

Bryman, A. & Cramer, D. (2004). Análise de dados em ciências sociais. Introdução às técnicas utilizando o SPSS (3rd Ed.). Oeiras: Celta Editora.

Burke, M. J., Finkelstein, L. M., & Dusig, M. (1999). On average deviation indices for estimating interrater agreement. *Organizational Research Methods*, *2*(1), 49–68.

Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications and programming* (2nd ed.). London: Lawrence Erlbaum.

Campbell, J. J., Dunnette, M. D., Lawler, E. E., & Weick, K. E. (1970). *Managerial behavior, performance, and effectiveness.* New York: McGraw-Hill.

Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Climate perceptions matter: a meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *Journal of Applied Psychology, 88*(4), 605–619.

Chan, C. C., Pearson, C., & Entrekin, L. (2003). Examining the effects of internal and external team learning on team performance. *Team Performance Management: an international journal*, *9*(7-8), 174–181.

Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management, 23*(3), 239–290.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297–334.

Denison, D. R. (1990). *Corporate culture and organizational effectiveness*. Oxford, England: John Wiley & Sons.

Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *The Academy of Management Review, 21*(3), 619–654.

Dimas, I. D. (2007). (*Re)pensar o conflito intragrupal: Níveis de desenvolvimento e eficácia* (Doctoral dissertation). Faculdade de Psicologia e de Ciências da Educação, Universidade de Coimbra. Coimbra, Portugal.

Dimas, I. D., Alves, M. P., Lourenço, P. R., & Rebelo, T. (2016). *Equipas de trabalho: Instrumentos de avaliação*. Lisboa: Edições Sílabo.

Dimas, I. D., Rebelo, T., & Lourenço, P. R. (2011). The learning organization article information: A multilevel analysis. *The Learning Organization*, *22*(2), 131–147.

Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, *44*(2), 350–383.

Edmondson, A. C. (2002). *Managing the risk of learning: Psychological safety in work teams*. Division of Research, Harvard Business School.

Edmondson, A. C., Dillon, J. R. & Roloff, K. S. (2007). Three perspectives on team learning: Outcome improvement, task mastery and group process. In Brief, A. P. & Walsh, J. P. (Eds.), *The academy of management annals* (pp. 269–314). Hillsdale, NJ: Psychology Press.

Edmondson, A. C., & Nembhard, I. M. (2009). Product development and learning in project teams: the challenges are the benefits. *Journal of Product Innovation Management*, *26*(2), 123–138.

Edmondson, A. C., & Singer, S. (2008). Confronting the tension between learning and performance. *Reflections: The Systems Thinker*, *19*(1), 2–7.

Flood, P., McCurtain, S., & West, M. (2001). *Effective top management teams*. Blackhall Publishing Ltd.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly, 29*(4) 499–517.

Glisson, C., & James, L. R. (2002). The cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior, 23(6),* 767–794.

Goodman, P. S., Ravlin, E. C., & Schminke, M. (1987). Understanding groups in organizations. In Cummings, L. L., & Staw, B. M. (Eds.), *Research in Organizational Behavior* (vol. 9) (pp. 121–173). Greenwich, CT: JAI Press Inc.

Hackman. J. R. (1987). The design of work teams. In Lorsch, J. W. (Ed.), *Handbook of organizational behavior* (pp. 315–342). Englewood Cliffs, NJ: Prentice-Hall.

Hackman, J. R. (1990). *Groups that work and those that don't*. San Francisco, CA: Jossey-Bass.

Hackman, J. R., & Wageman, R. (2005). A theory of team coaching. *Academy of Management Review, 30*, 269–287.

Hair, J. F., Black, W. C., Babin, B.J., Anderson, R. E. & Tatham, R.L. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, N.J.: Pearson Education.

Harzing, A. W. (2011). *The Publish or Perish Book: Your guide to effective and responsible citation analysis*. Melbourne, Australia: Tarma Software Research Pty, Ltd.

Hershberger, S. L., Lichtenstein, P., & Knox, S. S. (1994). Genetic and environmental influences on perceptions of organizational climate. *Journal of Applied Psychology, 79*, 24–33.

Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annual Review of Psychology*, *56*(1), 517–543.

James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology, 74*(5), 739–751.

James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin, 81*(12), 1096–1112.

James, L. R., Mulaik, S. A., & Brett, J. M. (2006). A tale of two methods. *Organizational Research Methods*, *9*(2), 233–244.

James, L. R., James, L. A., & Ashe, D. K. (1990). The meaning of organizations: the role of cognitions and values. In B. Schneider (Ed.), *Organizational climate and culture* (40–84). San Francisco: Jossey-Bass.

Katzenbach, J. R., & Smith, D. K. (1993). *The wisdom of teams: Creating the high-performance organization*. Boston, MA: Harvard Business Press.

Kolodny, H. F., & Kiggundu, M. N. (1980). Towards the development of a sociotechnical systems model in woodlands mechanical harvesting. *Human Relations*, *33*(9), 623–645.

Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity. *Organizational Climate and Culture*, *282*, 318.

Kozlowski, S. W. J., & Bell, B. S. (2013). Work groups and teams in organizations: Review update. In Schmitt, N., & Highhouse, S. (Eds.), *Handbook of psychology* (vol. 12). Industrial and organizational psychology (2nd ed., pp. 412–469). Hoboken, NJ: Wiley.

Kozlowski, S. W., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest*, *7*(3), 77–124.

Kozlowski, S. W., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In Klein, K. J.

& Kozlowski, S. W. J. (Eds.), *Multilevel theory, research and methods in organizations: Foundations, extensions, and new directions* (pp. 3–90). San Francisco, CA: Jossey-Bass.

Lawler, E. E., Hall, D. T., & Oldham, G. R. (1974). Organizational climate: relationship to organizational structure, process and performance. *Organizational Behavior and Performance, 11*, 139–155.

LeBreton, J. M., Wu, J., & Bing, M. N. (2009). The truth(s) on testing for mediation in the social and organizational sciences. In Lance, C. E., & Vandenberg, R. J. (eds.), *Statistical and Methodological Myths and Urban Legends*, (pp. 107–141).

Lourenço, P. R. (2002). *Concepções e dimensões da eficácia grupal: Desempenho e níveis de desenvolvimento* (Doctoral dissertation). Faculdade de Psicologia e de Ciências da Educação, Universidade de Coimbra. Coimbra, Portugal.

Lourenço, P. R., Miguez, J., Gomes, A. D., & Freire, P. (2000). Equipas de Trabalho: Eficácia ou Eficácias. In A. D. Gomes, A. Caetano, J. Keating e M. P. Cunha (Eds.), *Organizações em transição: contributos da Psicologia do Trabalho e das Organizações*. Coimbra: Imprensa da Universidade de Coimbra.

Lourenço, P. R., Miguez, J., Gomes, A. D. & Carvalho, C. (2004). Eficácia grupal: Análise e discussão de um modelo multidimensional, *Psychologica, Extra-Série*, 611–621.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*, 83–104.

Mathieu, J. E., Hoffman, D. A., & Farr, J. L. (1993). Job perceptions–job satisfaction relations: an empirical comparison of three competing theories. *Organizational Behavior and Human Decision Processes, 56*, 370–387.

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997–2007: A review of recent advancements and a glimpse into the future. *Journal of Management, 34*(3), 410–476.

McGrath, J. E. (1964). *Social psychology: A brief introduction*. New York, NY: Holt, Rinehart, & Winston.

Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., Robinson, D. L., & Wallace, A. M. (2005). Validating the organizational climate measure: links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, *26*(4), 379–408.

Pirola-Merlo, A., Härtel, C., Mann, L., & Hirst, G. (2002). How leaders influence the impact of affective events on team climate and performance in R&D teams. *The Leadership Quarterly*, *13*(5), 561–581.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63*, 539–569.

Ramírez Heller, B., Berger, R., & Brodbeck, F. C. (2014). Does an adequate team climate for learning predict team effectiveness and innovation potential? A psychometric validation of the team climate questionnaire for learning in an organizational context. *Procedia: Social and Behavioral Sciences, 114*, 543–550.

Rentsch, J. (1990). Climate and culture: interaction and qualitative differences in organizational meanings. *Journal of Applied Psychology, 75*, 668–681.

Rico, R., Hera, C. M. A., & Tabernero, C. (2011). Work team effectiveness, a review of research from the last decade: 1999–2009. *Psychology in Spain, 15*(1), 57–79.

Robbins, S. (2007). *Comportamento organizacional* (11ª Edição). São Paulo: Pearson Prentice Hall.

Rousseau, D. M. (1988). The construction of climate in organizational research. In C. L. Cooper, & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 3, pp. 139–158). New York, NY: Wiley.

Savelsbergh, C. M., van der Heijden, B. I., & Poell, R. F. (2009). The development and empirical validation of a multidimensional measurement instrument for team learning behaviours. *Small Group Research*.

Savoie, A., & Beaudin, G. (1995). Les equipes de travail: que faut-il en connaitre? *Psychologie du Travail et des Organisations, 1*(2/3), 116–137.

Savoie, A., Larivière, C., & Brunet, L. (2006). *Objectif Prévention, 29*(1), 20–21.

Shea, G. P., & Guzzo, R. A. (1987). Group effectiveness: What really matters? *Sloan Management Review (1986–1998)*, *28*(3), 25.

Schneider, B. (2000). The psychological life of organizations. In N. M. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), *Handbook of organizational culture and climate* (pp. xvii–xxi). Thousand Oaks, CA: Sage.

Sobel, M.E. (1990). Effect analysis and causation in linear structural equation models. *Psychometrika, 55*, 495–515.

Suárez, E. P., Fernández, J. M., Alvarez, A. C., Pedrero, E. F., & Cueto, E. G. (2013). Assessing organizational climate: Psychometric properties of the CLIOR Scale. *Psicothema*, *25*(1), 137–144.

Tabachnick, B. G., Fidell, L. S. (2001). Using Multivariate Statistics (4th ed.). Needham Heights, MA: Allyn and Bacon.

van Beveren, P. Q. F. (2015). *Liderança transformacional e autonomia grupal: adaptação de instrumentos de medida* (Unpublished master thesis). Faculdade de Psicologia e de Ciências Sociais, Universidade de Coimbra, Portugal.

van Mierlo, H., Rutte, C. G., Kompier, M. A., & Doorewaard, H. A. (2005). Self-managing teamwork and psychologycal well-Being: Review of a multilevel research domain. *Group & Organization Management, 30*(2), 211–235.

West, M. A. (1990). The social psychology of innovation in groups. In M. A. West, & J. L. Farr (Eds.), *Innovation and creativity at work: Psychological and organizational strategies* (pp. 309–335). Chichester, UK: Wiley.

Zellmer-Bruhn, M., & Gibson, C. (2006). Multinational organization context: Implications for team learning and performance. *Academy of Management Journal*, *49*(3), 501–518.

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research, 37*(2), 197–206.

Appendix A — Presentation Letter

Coimbra, 2 de Abril de 2015

Exma. Senhora Doutora,

Dirigimo-nos a V. Exa. na qualidade de investigadoras da Universidade de Coimbra onde nos encontramos a realizar estudos de mestrado.

No âmbito dos projetos de investigação de mestrado que estamos a realizar na área de Psicologia do Trabalho e das Organizações, sob a orientação da Prof.ª Doutora Isabel Dórdio Dimas, Prof. Doutor Paulo Renato Lourenço e Prof.ª Doutora Teresa Dias Rebelo, na Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra, propomo-nos estudar alguns processos de funcionamento dos grupos/equipas de trabalho.

Para levar a cabo esta investigação pretendemos aplicar, em diversas organizações, um questionário a diversos grupos/equipas de trabalho e aos respetivos líderes (tempo estimado para preenchimento: 20 a 25 minutos).

Às organizações participantes nesta investigação fica garantido o direito ao anonimato e à confidencialidade dos dados, bem como a entrega, após a conclusão dos mestrados, de uma cópia das teses. Caso manifestem o desejo de obter informação sobre os resultados referentes à vossa Organização em particular, disponibilizamo-nos, igualmente, para facultar esse *feedback*. Consideramos que o benefício poderá ser mútuo, na medida em que, por um lado, a organização de V. Exa. promove a investigação de excelência em Portugal e, por outro, beneficia de informação em retorno, assente no tratamento e análises de dados com rigor metodológico e cientificamente fundamentados.

Gostaríamos de poder contar com a colaboração da vossa Organização para este estudo. Neste sentido, e para uma melhor apreciação da investigação e da colaboração solicitadas, teremos todo o gosto em explicar este projeto, de forma mais detalhada, através do meio de comunicação que considerem mais adequado.

Desde já gratos pela atenção dispensada, aguardamos o vosso contacto.

Com os melhores cumprimentos,
(P'la equipa de investigação)

Rua do Colégio Novo
Apartado 6153 - 3001-802, COIMBRA
Telef/Fax: +351 239 851 454

Proposta de Colaboração em Investigação

Liderança, Processos e Eficácia dos Grupos

1) Equipa responsável pelo projeto de investigação

Nicola Paolucci (aluno do Mestrado *Work, Organizational and Personal Psychology* da Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra)

Pedro Almeida Maia (aluno do Mestrado *Work, Organizational and Personal Psychology* da Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra)

Josef Bader (aluno do Mestrado *Work, Organizational and Personal Psychology* da Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra)

Orientação: Prof. Doutor Paulo Renato Lourenço, Prof.ª Doutora Teresa Rebelo e Prof.ª Doutora Isabel Dórdio Dimas

2) Introdução e Objetivos

A investigação sobre grupos em contexto organizacional é bastante extensa e diversificada. Existem, contudo, algumas áreas que se encontram insuficientemente estudadas, como é o caso das temáticas que são objeto do presente estudo. Desta forma, com este trabalho propomo-nos estudar a forma como processos/estados como a liderança transformacional, a autonomia e as relações existentes entre os membros do grupo se relacionam com a eficácia das equipas de trabalho. Visamos, assim, contribuir para um melhor e mais profundo conhecimento relativo ao funcionamento dos grupos, bem como às condições que permitem potenciar a eficácia grupal.

Variáveis em estudo:

- Clima organizacional - conjunto de perceções partilhadas pelos trabalhadores de uma determinada organização;
- Aprendizagem grupal - processo que se caracteriza pela aquisição, partilha e integração do conhecimento por parte dos membros do grupo;
- Comprometimento afetivo - relação de vinculação que o trabalhador estabelece com a organização onde trabalha;
- Liderança Transformacional - traduz-se nos seguintes comportamentos: comunicar a visão, desenvolver os colaboradores, fornecer apoio, delegar poder e capacitar os colaboradores, ser inovador, liderar pelo exemplo e ser carismático;
- Comportamentos de suporte - grau em que os membros de cada equipa dão apoio uns aos outros, quando necessário, durante a realização de tarefas;
- Resiliência - num nível grupal, a resiliência traduz-se na capacidade de a equipa enfrentar e superar fracassos, contratempos, conflitos ou qualquer outra ameaça ao bem-estar da equipa;
- Autonomia - grau de liberdade de que as equipas dispõem para decidir como conduzir as suas tarefas.
- Eficácia grupal - desempenho, viabilidade, qualidade da experiência grupal e melhoria dos processos.

3) Amostra e participação das organizações

O estudo será realizado nos grupos/equipas de trabalho e os respetivos líderes desta organização. Para que seja considerada uma equipa válida para este estudo é necessário que (1) seja constituída por três ou mais elementos, (2) os membros e o respetivo líder sejam reconhecidos e se reconheçam como equipa, (3) possuam relações de interdependência e (4) interajam regularmente tendo em vista o alcance de, pelo menos, um objetivo comum.

A participação da organização no estudo consiste em possibilitar a recolha dos dados, isto é, da informação necessária à realização do estudo. Deste modo, obriga-se a proporcionar as condições necessárias à execução das atividades referidas.

A recolha de dados decorrerá entre Dezembro de 2015 e Fevereiro de 2016, num período a acordar entre a equipa de investigação e a organização.

4) Formas de recolha da informação e tempo previsto

Na organização, será necessário efetuar:

a) O preenchimento de um questionário pelos membros das equipas de trabalho participantes no estudo (10-20 minutos).

b) O preenchimento de um questionário pelos líderes das equipas de trabalho (5 minutos). Os questionários poderão ser preenchidos online.

5) Direitos e obrigações da equipa de investigação

A equipa de investigação terá o direito de:

- Não fornecer quaisquer resultados do estudo caso haja interrupção da participação ou recolha incompleta de informação;
- Devolver os resultados do estudo somente na condição de a Organização aceitar que esses dados sejam devolvidos num formato que proteja a identidade dos participantes e que nunca sejam utilizados com a finalidade de avaliar o desempenho dos colaboradores envolvidos;
- Fornecer os resultados somente aquando da conclusão do estudo.

A equipa de investigação obriga-se a:

- Assegurar as condições que permitam e garantam o consentimento informado dos participantes;
- Garantir a confidencialidade e o anonimato de todos os dados recolhidos e cumprir as demais normas éticas que regulamentam a investigação na área da Psicologia;
- Recusar a entrega de dados e resultados individuais, quer referentes a trabalhadores da organização participante, quer referentes a outras organizações da amostra;
- Efetuar a recolha de dados de forma a causar o mínimo transtorno possível à organização e aos seus colaboradores.
- Não disponibilizar, em circunstância alguma, a listagem de endereços de e-mail que for fornecida para aplicação do questionário online.

Appendix B — Informed Consent

CONSENTIMENTO INFORMADO

Papel dos/das participantes: a sua colaboração neste projeto é voluntária e consiste no preenchimento de questionários de autorresposta.

Confidencialidade: a participação neste estudo é confidencial e anónima. Todos os questionários serão identificados por um código e os dados serão tratados apenas coletivamente.

Papel dos investigadores:
Os investigadores responsáveis por este projeto comprometem-se a:
a) Garantir total confidencialidade sobre os dados que forem fornecidos pelos participantes;
b) Utilizar os dados fornecidos pelas/pelos participantes somente para fins de investigação.

Consentimento informado:
Aceito participar neste estudo
Sim ☐
Não ☐

Data: _____

Appendix C — Team Members' Instrument

FACULDADE DE PSICOLOGIA E DE CIÊNCIAS DA EDUCAÇÃO
UNIVERSIDADE DE COIMBRA

O presente questionário insere-se num estudo sobre os processos e os resultados dos grupos de trabalho, em contexto organizacional. As questões que se seguem têm como objectivo conhecer as opiniões e atitudes dos elementos de cada equipa no que diz respeito a algumas situações que podem acontecer no seio das mesmas.

Todas as respostas que lhe solicitamos são rigorosamente anónimas e confidenciais. Responda sempre de acordo com aquilo que faz, sente ou pensa, não existindo respostas certas ou erradas.

Leia com atenção as instruções que lhe são dadas, certificando-se de que compreendeu correctamente o modo como deverá responder. **Note que as instruções não são sempre iguais.** Antes de dar por finalizado o seu questionário, certifique-se de que respondeu a todas as questões.

Muito obrigado pela colaboração!

[**Tempo estimado de preenchimento**: 20 a 25 minutos]

FACULDADE DE PSICOLOGIA E DE CIÊNCIAS DA EDUCAÇÃO
UNIVERSIDADE DE COIMBRA

PARTE 1

(Dados demográficos - para fins exclusivamente estatísticos)

Idade: _____ Sexo: M □ F □

Habilitações literárias: _____

Há quantos anos trabalha nesta organização? _____

Há quantos anos trabalha nesta equipa?_____

Do total de horas que trabalha por dia, quantas dessas horas, aproximadamente, trabalha em interacção com os seus colegas de equipa? _____

Função desempenhada: _____

FACULDADE DE PSICOLOGIA E DE CIÊNCIAS DA EDUCAÇÃO
UNIVERSIDADE DE COIMBRA

(Aprendizagem Grupal)

O conjunto das seguintes afirmações tem como objetivo caracterizar a sua equipa de trabalho no que diz respeito aos processos de aprendizagem. Neste sentido, diga, por favor, em que medida cada uma delas se aplica à equipa onde trabalha. Assinale com uma cruz (x) o valor que melhor se adequa ao que lhe é apresentado em cada afirmação, utilizando a seguinte escala:

1 Quase não se aplica	**2** Aplica-se pouco	**3** Aplica-se mode-radamente	**4** Aplica-se muito	**5** Aplica-se quase totalmente

	1	**2**	**3**	**4**	**5**
1. A informação recolhida pelos membros da equipa é complementada com informação de outros membros da equipa.					
2. Chegamos a conclusões coletivas a partir das ideias discutidas na equipa.					
3. Os membros da equipa desenvolvem as informações e ideias uns dos outros.					
4. Os membros da equipa escutam-se atentamente uns aos outros.					
5. Se algo não está claro, fazemos perguntas uns aos outros.					
6. Se um membro da equipa dá a sua opinião, em seguida ele ou ela pede a opinião dos restantes membros.					
7. Encorajamo-nos uns aos outros a ver o nosso trabalho sob diferentes perspetivas.					
8. Depois de errar, a equipa procura em conjunto analisar o que causou esse erro.					
9. Na nossa equipa, achamos que é útil analisar os erros.					
10. Se alguma coisa falhou, a equipa dedica o tempo necessário para pensar seriamente nisso.					
11. Depois de um erro cometido, este é cuidadosamente analisado.					
12. Os membros da equipa expõem os seus erros, para prevenir que outros membros cometam o mesmo erro.					
13. Na nossa equipa discutimos os erros, porque os erros e soluções podem fornecer informações importantes.					
14. Na nossa equipa, discutimos os erros entre nós.					
15. Os erros são discutidos abertamente.					
16. Discutimos frequentemente os nossos métodos de trabalho.					
17. Como equipa, discutimos regularmente em que medida somos eficazes a colaborar.					
18. Na nossa equipa revemos frequentemente os procedimentos de trabalho.					
19. Despendemos, com regularidade, o tempo necessário para refletir sobre como melhorar os nossos métodos de trabalho.					
20. Na nossa equipa verificamos o que podemos aprender com os nossos resultados.					

21. Na nossa equipa verificamos se as nossas ações resultaram naquilo que era esperado.					
22. Na nossa equipa avaliamos os resultados das nossas ações.					
23. Procuramos obter feedback acerca dos nossos métodos de trabalho.					
24. Analisamos o nosso desempenho em conformidade com outras equipas.					
25. Procuramos obter feedback acerca dos nossos resultados, a partir de membros internos e externos à organização.					
26. Na nossa equipa experimentamos outros métodos de trabalho.					
27. A nossa equipa testa novos métodos de trabalho.					
28. Em conjunto, planeamos testar novos métodos de trabalho.					

(Qualidade da experiência grupal)

Relativamente às relações na sua equipa de trabalho, pedimos-lhe que indique em que medida concorda ou discorda das seguintes afirmações, assinalando com uma cruz (x) a opção que melhor se adequa, utilizando a seguinte escala:

1 Discordo forte-mente	**2** Discordo	**3** Não concordo nem discordo	**4** Concordo	**5** Concordo for-temente

	1	**2**	**3**	**4**	**5**
1. Na nossa equipa, o clima de trabalho é bom.					
2. Na nossa equipa, as relações são harmoniosas.					
3. Na nossa equipa, damo-nos bem uns com os outros.					

(CLIOR)

De seguida serão apresentadas algumas afirmações relativas a alguns aspectos relacionados com o funcionamento da sua organização. Refira o grau em que concorda ou discorda com as afirmações, assinalando com uma cruz (x) a opção que melhor se adequa, utilizando a seguinte escala:

1 Discordo forte-mente	**2** Discordo	**3** Não concordo nem discordo	**4** Concordo	**5** Concordo for-temente

	1	**2**	**3**	**4**	**5**
1. As relações com as minhas chefias são boas.					
2. As minhas chefias encorajam-me quando tenho problemas, para que os possa resolver.					
3. As minhas sugestões sobre o trabalho são ouvidas.					
4. São dadas oportunidades de formação.					
5. Se necessito de ajuda por excesso de trabalho, são-me dados os meios necessários.					
6. Os objetivos do meu trabalho estão claramente definidos.					

7. As chefias sabem escutar os seus colaboradores.					
8. Socialmente, o meu trabalho tem o prestígio que merece.					
9. No meu trabalho, são valorizadas as sugestões inovadoras.					
10. Os meus superiores felicitam-me quando faço algo bem.					
11. O meu trabalho está bem definido.					
12. Os prazos estabelecidos são adequadamente cumpridos.					
13. As minhas chefias vigiam de perto o meu trabalho.					
14. Os meus superiores não respondem às minhas solicitações.					
15. Nesta organização, tudo é decidido a partir de cima.					

Appendix D — Team Leaders' Instrument

FACULDADE DE PSICOLOGIA E DE CIÊNCIAS DA EDUCAÇÃO
UNIVERSIDADE DE COIMBRA

O presente questionário insere-se num estudo sobre os processos e os resultados dos grupos de trabalho, em contexto organizacional. As questões que se seguem têm como objectivo conhecer a forma como avalia a sua equipa de trabalho, em função de um conjunto de critérios.

Todas as respostas que lhe solicitamos são rigorosamente anónimas e confidenciais. Responda sempre de acordo com aquilo que pensa na medida em que não existem respostas certas ou erradas.

Leia com atenção as instruções que lhe são dadas, certificando-se de que compreendeu correctamente o modo como deverá responder. Certifique-se que respondeu a todas as questões.

Muito obrigado pela colaboração!

[**Tempo estimado de preenchimento**: 5 minutos]

FACULDADE DE PSICOLOGIA E DE CIÊNCIAS DA EDUCAÇÃO
UNIVERSIDADE DE COIMBRA

PARTE 1

(Dados demográficos - para fins exclusivamente estatísticos)

Idade: _____ Sexo: M □ F □

Habilitações literárias: _____

Nº de trabalhadores da organização: _____

Tipo de organização: Micro □ Pequena □ Média □ Grande □

Sector de actividade da organização: _____

Há quanto tempo se formou a sua equipa? _____

Há quantos anos trabalha nesta organização? _____

Há quantos anos trabalha nesta equipa? _____

Função desempenhada: _____

Nº de elementos da sua equipa: _____

Qual é a principal actividade da sua equipa? [assinale a resposta]

□ Produção □ Comercial
□ Administrativa □ Gestão
□ Outra. Qual? _____

Avalie o **desempenho da sua equipa de trabalho** de 1 (muito baixo) a 5 (muito alto), em função dos seguintes indicadores (assinale com um x):

	Muito baixo				Muito alto
	1	**2**	**3**	**4**	**5**
1. Alcance dos objetivos de desempenho.					
2. Produtividade (quantidade de trabalho).					
3. Qualidade do trabalho realizado.					
4. Respeito pelos prazos.					
5. Respeito pelos custos.					

O conjunto das seguintes afirmações tem como objetivo **caracterizar a sua equipa de trabalho.** Neste sentido, diga, por favor, em que medida cada uma delas se aplica à equipa onde trabalha. Assinale com uma cruz (x) o valor que melhor se adequa ao que lhe é apresentado em cada afirmação, utilizando a seguinte escala:

1	**2**	**3**	**4**	**5**
Quase não se aplica	Aplica-se pouco	Aplica-se mode-radamente	Aplica-se muito	Aplica-se quase totalmente

	1	**2**	**3**	**4**	**5**
1. Os membros da equipa adaptam-se às mudanças que ocorrem no seu ambiente de trabalho.					
2. Quando surge um problema, os membros desta equipa conse-guem resolvê-lo.					
3. Os novos membros são facilmente integrados nesta equipa.					
4. Os membros desta equipa poderiam trabalhar juntos por um longo período de tempo.					

Para finalizar, pedimos-lhe que nos indique em que medida as afirmações seguintes se aplicam à sua equipa de trabalho, assinalando com uma cruz (x) o valor que melhor se adequa a cada afirmação, utilizando a seguinte escala:

1 Quase não se aplica	**2** Aplica-se pouco	**3** Aplica-se mode-radamente	**4** Aplica-se muito	**5** Aplica-se quase totalmente

Os membros desta equipa têm implementado com sucesso novas formas de trabalhar…	**1**	**2**	**3**	**4**	**5**
1. … para facilitar o cumprimento dos objetivos de desempenho.					
2. … para serem mais produtivos.					
3. … para produzirem trabalho de alta qualidade.					
4. … para diminuir o tempo de concretização das tarefas.					
5. … para reduzir custos.					