Erasmus Mundus Joint Master's Degree in Work, Organizational and Personnel Psychology (WOP-P)

Subgroups and team effectiveness: the mediating role of affective commitment

Master Thesis

Beatriz dos Reis Pereira

Faculdade de Psicologia e de Ciências da Educação - Universidade de Coimbra

Home tutor:

PhD. Teresa Rebelo

Faculdade de Psicologia e de Ciências da Educação - Universidade de Coimbra

Host tutor:

PhD. Rita Berger

Facultat de Psicologia - Universitat de Barcelona

Coimbra, June 2021

Title of the research project:

Subgroups and team effectiveness: the mediating role of affective commitment

Keywords:

Work groups/teams; Subgroups; Affective Commitment; Effectiveness; Performance; Satisfaction

Author:

Beatriz dos Reis Pereira

Faculdade de Psicologia e de Ciências da Educação

Universidade de Coimbra

beatrizrpereira@hotmail.com

Home tutor:

PhD. Teresa Rebelo

Faculdade de Psicologia e de Ciências da Educação

Universidade de Coimbra

terebelo@fpce.uc.pt

Host tutor:

PhD. Rita Berger

Facultat de Psicologia

Universitat de Barcelona

ritaberger@ub.edu

Agradecimentos

Ao meu pai, Luciano por me ter proporcionado a oportunidade de fazer parte deste mestrado, pelas expectativas que deposita em mim e que me ajudam sempre a querer ir mais além, e por me mostrar que tudo é possível. Aos meus tios, Fernanda e Virgílio, que são como uns pais para mim, obrigada por todos os valores que me incutiram e pela educação que me deram e continuam a dar. Foi graças a eles que consegui chegar até aqui. Ao meu irmão Zé, pelas poucas palavras ditas, mas que sem ele nada disto faria sentido. E aos meus primos, Joana e Bruno, dois irmãos que a vida me deu, pelos exemplos que sempre foram para mim.

Agradeço também ao João pelo grande apoio que me dá todos os dias, força, ajuda e paciência constantes, e por nunca me ter deixado desistir quando eu própria o queria fazer.

À minha orientadora, Professora Doutora Teresa Rebelo, por toda a ajuda, principalmente nos momentos em que estava mais em baixo, e paciência que teve comigo. Pelo apoio, disponibilidade e orientação. Obrigada pela boa disposição e por todos os conhecimentos que nunca esquecerei.

Às minhas duas arguentes, Professora Doutora Ana Pinto e Professora Doutora Helena Martins, pelo trabalho que tiveram e atenção que deram à leitura da minha tese e, sobretudo, a revisão efetuada que foi uma grande ajuda para poder melhorar a minha tese.

Aos meus amigos de longa data, que estando longe, são como se fossem da família, e sempre estiveram presentes em todos os momentos marcantes da minha vida. Sem eles, o meu percurso certamente não teria sido repleto de tão boas memórias. E um especial obrigada às amigas que este mestrado uniu. À Daniela e à Camila, pela ajuda, companheirismo e momentos de aprendizagem e diversão que me proporcionaram ao longo destes dois anos e que espero que se estendam por muito mais.

À FPCEUC e a todos os professores deste mestrado, que fizeram destes últimos dois anos de faculdades, os mais enriquecedores e interessantes do meu percurso.

Por fim, a todas as outras pessoas, especialmente família e amigos, que contribuíram de alguma forma de forma positiva na minha vida académica, o meu mais sincero agradecimento.

Abstract

The main goal of this research is contributing to clarify the mechanisms that link the formation of subgroups to team effectiveness, taking affective team commitment as the mediator. Thus, the model that this study aims to test is a mediation model, where it is hypothesized that the existence of subgroups in a team negatively affects the commitment of members to the team as a whole, and that by affecting the members' affective bond towards the overall team, indirectly leads to a loss of team effectiveness. This research is focus on a group level analysis. The sample is composed of 124 teams, working in different sectors from 83 Portuguese organizations. Team leaders have provided data concerning team performance, while the teams' members were surveyed about the team's satisfaction, the team's affective commitment and the perception of subgroups. Two simple mediation models were tested using PROCESS. The results revealed that affective team commitment fully mediates the relationship between the subgroups perception and both group effectiveness criteria (team performance and team satisfaction). The results revealed that when members perceived the subgroups formation, the affective commitment of members is affected negatively to the team, and consequently, team losses effectiveness, which means, making the team more committed to the team, the team performance would be enhanced.

Keywords: Work groups/teams; Subgroups; Affective Commitment; Effectiveness; Performance; Team Satisfaction.

Introduction

Teams have become an essential factor of the organizations and became one of the answers to the uncertain environment that we live in nowadays (Rico et al., 2011); they are pervasive in today's world, and rightfully so as we need them, and have come to be considered as a central element in the functioning of organizations (Bishop et al., 2000; Goodwin et al., 2009). More and more studies reveal the advantages of using work teams (Bishop et al., 2000), once they aim to perform organizational relevant tasks, maintaining their terms of goals and tasks (Kozlowski & Bell, 2013; Rico et al., 2011). They need an environment that make sure the development of beliefs that support coordination, cooperation, communication, and conflict, for the team to succeed (Salas et al., 2014). Work teams are then considered to be a key element in the success of organizations, and it can be added that these benefits are largely due to the commitment of individuals to the organization and to its work team (Bishop et al., 2000).

Thus, work teams[1] can be defined as a permanent and formal group of individuals that maintain a certain level of interdependence in terms of accomplishment of goals and tasks set by the organization (Sundstrom et al., 1990; Kozlowski & Bell, 2013). Teams are viewed as complex, adaptative and dynamic systems (Ilgen, 1999), and some of them are very successful, but others are confronted with a series of failures, which underlines the importance of understanding which are the variables that can influence its success (Aubé & Rousseau, 2005).

Teams provide diversity (in terms of gender, ethnicity, personality, among others) (Jehn & Bezrukova, 2010; Guzzo & Dickson, 1996) in knowledge, attitudes, skills, and experience. However, the literature has shown contradictory results regarding the effects of various types of diversity on teams (Horwitz & Horwitz, 2007; Webber & Donahue, 2001). Due to these inconclusive results, Lau and Murnighsn (1998) introduced the concept of *faultlines* (hypothetical lines of division that can break a group into smaller subgroups based on one or more attributes), stating that it is not diversity that may be the reason for problems within a team, but rather the alignment of certain characteristics and attributes, which leads to fragmentation, like the creation of subgroups within a workgroup. So, according to Thatcher & Patel (2011, 2012), what affects team outcomes

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[1] In this study, group and team will be used as synonyms (e.g. Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Kozlowski & Bell, 2003).

is the alignment of potential subgroups within the team. In this way, this fragmentation only occurs effectively when members perceive the divisions into subgroups (Jehn & Bezrukova, 2010).

According to Byrne (1971) similarity / attraction paradigm, when subgroups are formed in a team, individuals are more likely to work and have more positive attitudes toward the ingroup (most similar individuals) than toward the outgroup (in turn, more distinct individuals); and due to this, is important to explore the dynamics of subgroups and their impact on team effectiveness (Chen et al., 2017). Team effectiveness can be considered as the extent to which the group goals assigned by the organization are achieved and consequently measured by the team performance (Langfred, 2000). Despite of team performance is being the most frequently used criterion of team effectiveness, it can also be assessed by different indicators, such as members' satisfaction (Ilgen, 1999).

Team effectiveness depends on interactions between different inputs, processes, derived emerging states, mixed mediators, and outcomes (Rico et al., 2011). The mediating role of affective team commitment in the relationship between the existence of subgroups and other team effectiveness dimensions has been studied, for example by the authors Cronin et al. (2011), as we mentioned below. According to Meyer and Herscovitch (2001), affective team commitment is the type of commitment most beneficial to teams, which can be important for the team to continue working together in the future. In the present study, framed in the Input-Mediator-Outcome-Input (IMOI) effectiveness model (Ilgen et al.,2005; Kozlowski & Ilgen, 2006), this relation will be studied considering the existence of subgroups as an input, affective team commitment as an emerging state of the working group and two criteria of team effectiveness as the outputs (performance and satisfaction). The IMOI model breaks the simplified and unitary vision that the I-P-O (Input, Process and Output) model had on team processes, distinguishing between processes[2] and emergent states[3], assuming a multidimensional approach on effectiveness, stating that it can be measured and operationalized through multiple criteria (Rico et al., 2011).

In this way, the purpose of this research is to clarify the relationship between subgroups and team effectiveness, considering affective team commitment as mediator.

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[2] Actions' people engage in to fulfill satisfactorily the team's task and the interaction between team members (Rico et al., 2011).

[3] Mediating mechanisms that can be conceived as cognitive, motivational, or affective states (Rico et al., 2011).

This research contributes to better understand the impact of the internal fragmentation of work teams on their effectiveness, through the analysis of affective team commitment as a potential mediator of this relationship and of the relationships between these variables. Simultaneously, it will also contribute to understanding the role of affective team commitment as a mediator. The model under analysis is represented in Figure 1.
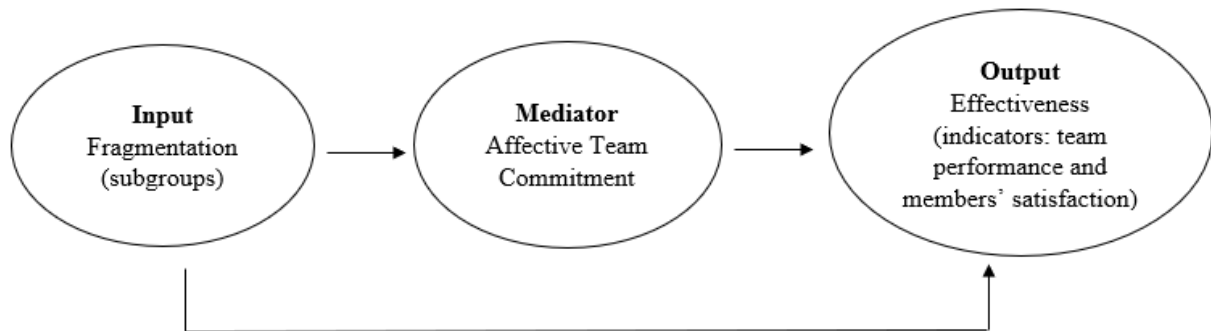

Figure 1: Proposed hypothesized model.

State of Art

Team Effectiveness

At the same time as organizations have increased their experience in the use of teams, there has also been a significant increase in research aimed at the development of methods and theories for measuring the effectiveness of work teams (Goodwin et al., 2009). Team effectiveness is often considered as the extent to which the group goals assigned by the organization are achieved and consequently measured by the team performance (Langfred, 2000).

According to the I-P-O and IMOI models of team effectiveness (McGrath, 1964; Kozlowski & Ilgen, 2006, respectively) their composition may directly or indirectly influence both their functioning and the results the team achieves. Although grounded on the I-P-O model, originally proposed by McGrath (1984), most of the research conducted nowadays on team effectiveness is based on the IMOI model (Kozlowski, & Ilgen, 2006; Ilgen et al, 2005). The IMOI model distinguishes processes (actions people engage in to fulfill satisfactorily the team's task and the interaction between team members) from emergent states (mediating mechanisms that can be conceived as cognitive, motivational, or affective states), and it emphasizes the importance and stands out the traditional

distinction between criteria and determinants of effectiveness, to the extent that the "criteria" may also function as determinants or inputs in a new cycle (Ilgen et al., 2005; Rico et al., 2011). In this model, *inputs* refer to the composition of the team in terms of the gathering of individual characteristics and resources at multiple levels. *Mediators* are the set of psychosocial mechanisms that allow team members to combine de available resources to achieve the team's goal, and can be distinguished between processes (e.g. team conflict, team learning, supportive behaviors) and emergent states (e.g. trust, potency, cohesion) (Kozlowski, & Ilgen, 2006). *Outputs* are the team results and can be operationalized through multiple criteria (e.g, team task performance, team satisfaction, team innovation) pertaining to different dimensions (Kozlowski, & Ilgen, 2006). The last "I" in the IMOI Model, that stands for input, represents the cyclical nature of team functioning, through feedback mechanisms, meaning that an output always leads to a new input (Mathieu et al., 2008).

The main goal of team working is to enhance organizational value (Dimas et al., 2016). In this sense, team effectiveness becomes a key concept, which can be defined as the evaluation of team results, based on a set of criteria to be selected for this study (Salas et al., 2009; Dimas et al., 2016). According to Cohen and Bailey (1997) and Hackman (1987), it is possible to identify team performance and members' satisfaction as two relevant criteria to be considered when assessing group effectiveness: performance refers to obtaining results as established and idealized (Hackman, 1987), contributing to organizational success (Rousseau & Aubé, 2010), and is considered the most used criterion for evaluating effectiveness (Bommer et al., 1995); and the satisfaction of the members with the team can be defined as an effective response of the members in relation to their group (Witteman, 1991).

The perception of subgroups in teams

A composition of a group or work team, an existing diversity and its effects on the group's processes and results are fundamental for the study of organizations (Jehn & Bezrukova, 2010). Therefore, the issue of the effects of the diversity effects on team composition has been a studied topic (Jehn & Bezrukova, 2010). However, the literature has shown contradictory results regarding the effects of various types of diversity on teams (Horwitz & Horwitz, 2007; Webber & Donahue, 2001). Although many organizations believe that homogeneous teams show inferior results compared to those

characterized by diversity, this is not always the case (Stanciu, 2015), and diversity can have several effects (Guzzo & Dickson, 1996; Horwitz & Horwitz, 2007).

According to the *faultlines* theory by Lau and Murnighan (1998), diversity in groups has a positive impact on group results, as it increases the variety of knowledge and skills, resulting in more creativity, greater learning and better decisions (Guillaume et al., 2013). Lau & Murnighan (1998), introduced the concept of *faultlines* as hypothetical lines of division that can divide a group into different subgroups based on one or more attributes. Due to the presence of *faultlines*, groups are split into subgroups of different sizes and relatively homogeneous (Lau & Murnighan, 1998), that can remain inactive for a long time (Murnighan & Lau, 2017); it is possible that they exist without giving originating a real perception of group fragmentation (Jehn & Bezrukova, 2010). Thus, *faultlines* are only considered active when group members really perceive the group's divisions into subgroups (Jehn & Bezrukova, 2010). However, a member can perceive that he/she belongs to a subgroup with certain members, but they do not have that same perception (Murnighan & Lau, 2017). Thus, the activation of *faultlines* does not always occur, so it is considered that they only have the potential to originate subgroups, and their negative effects are not caused by this potential, but by their activation, that is, by the true formation of subgroups (Lau & Murnighan, 1998).

Groups with active *faultlines* are more likely to have high levels of conflict, low levels of satisfaction, and low levels of group performance than *faultlines* that are not active (Jehn & Bezrukova, 2010). One way that *faultlines* may become active is through a '*faultline* trigger' that is defined as an event or situation that makes a previously *faultline* salient (Jehn & Bezrukova, 2010). Once the *faultlines* became active, the group distributed tasks to subgroups based on location, resulting in decreased group communication and increased subgroup communication (Polzer et al., 2006). *Faultline* theory predicts that subgroup formation influences the overall performance of the group (Polzer et al., 2006). Subgroups caused by *faultlines* hinder the negotiation processes that occur in groups as communication and task interdependence are damaged (Halevy, 2008). Strong *faultlines* (strong *faultlines* occur when the attributes are highly correlated, reducing the number and increasing the homogeneity of the resulting subgroups) (Lau & Murnighan, 1998) have been found to have a negative influence on group-level bonuses (Bezrukova et al., 2012), group learning (Lau & Murnighan, 1998), group functioning, quality of decision making and group performance (Jehn & Bezrukova, 2010; Thatcher et al., 2003). *Faultline* theory predicts also that the relationship between *faultlines* and

members' satisfaction with the team is negative (Jehn & Bezrukova, 2010). Competition between subgroups decreases the overall morale of group members, so strong *faultlines* result in decreased satisfaction of team members due to the conflict and decreased trust (Jehn & Bezrukova, 2010). In addition, *faultlines* have been found to have a direct negative effect on group cohesion, so members in groups with strong *faultlines* were less satisfied with the group experience and less satisfied with their group performance than members in groups with weak *faultlines* (Jehn & Bezrukova, 2010; Thatcher et al., 2003).

Thatcher and Patel's (2011) meta-analysis found that the negative effects of *faultlines* on performance were stronger than the effects of *faultlines* on group satisfaction, because the positive feelings engendered by being part of a subgroup offset some of the negative aspects of *faultlines* experienced at the group level.

Thus, it is possible to conclude that this model suggests a negative impact of the formation of subgroups on team results (Jehn, 2010). This relationship can be explained by the fact that the existence of subgroups results in a negative perception of some members. In this way, the perception of subgroups may contribute to members belonging to a subgroup perceiving members of others as less trustworthy, less kind, among others, which in turn may decrease satisfaction levels with the team as a whole (Cronin, 2010). Meanwhile, group fragmentation contributes to increased levels of conflict (Lau & Murnighan, 1998; Murnighan & Lau, 2017), which may also negatively influence members' satisfaction with the team.

As we mentioned before, once *faultlines* are active into subgroups, team members with strong perceived subgroups experienced lower satisfaction from being part of a team, and, consequently, they were less effective (Cronin et al., 2010). To summarize, according to the results of previous studies, it is expected that the perception of subgroups could be negatively related to team performance and team satisfaction, which is the two first hypothesis of the current study:

H1a: The perception of subgroups relates negatively to team performance.

H1b: The perception of subgroups relates negatively to team satisfaction.

Affective Team Commitment

Commitment is a psychological state that characterizes the relationship of an individual with the organization / team to which he belongs, influencing the decision to continue or not to belong to it (Allen & Meyer, 1991). Thus, at the group level,

commitment is defined as the psychological bond, or bond, that members feel about their team (Pearce & Herbik, 2004). According to Meyer and Herscovitch (2001), members show commitment towards their team, and employees are more committed to their team than to the organization (Riketta & Van Dick, 2005).

Keeping employees committed to the organization is a top priority for many contemporary organizations (Foote & Tang, 2008; Bell & Marentette, 2011). In this way, Tamayo et al. (2001) refer that the connection of the individual with the organization can be somewhat complex and that involves several dimensions, with a variety of connections with the work itself, with employment, with the work team, with the career, with the union and with the organization. Then, members can also show commitment towards their team. Some researchers have shown that employees tend to be more committed to their team than to the organization (Riketta & Van Dick, 2005).

Although there are many definitions, Meyer and Allen (1991) refers to organizational and team commitment as a psychological state that describes the employees' relationship with the organization or the team, which impacts the decision of continuing the membership. According to these authors, there are three types of commitment: (a) normative commitment, which is related to feeling obligated to stay in the organization or the team as part of recognizing the investment made by it and a way of paying it back; (b) continuance commitment, which reflects the perception of costs associated with leaving the organization or the team; and (c) affective commitment, that refers to an attachment and an identification with the organization or the team, along with the wish to stay. It is important to clarify that, in the literature, team commitment usually refers to the affective form of commitment. Bishop and Scott (2000) defines team commitment as the strength of team members' involvement and identification with their team. Such definition indicates an emotional relationship that the individual creates toward his team, much like the affective commitment.

Meyer & Allen (1991), also suggest that employees' whose affective commitment is high will exert more effort, contributing to effectiveness. Indeed, several studies focuses on the desirable outcomes from affective team commitment that it is important for team effectiveness (Gellatly et al., 2006; Ganesh & Gupta, 2015). However, the antecedents of affective team commitment are also important, as the outcomes. This aspect could be related to the perception of subgroups, and some authors argue that subgroups can form based on shared interests such as common attitudes and beliefs

(Harrison et al., 1998). Actually, when team members perceive subgroups, they will determine future interactions and behaviors (Cronin et al., 2010).

Members with strong affective commitment to their team are more likely produce favorable collaborative behaviors (Kang et al., 2007). In this sense, could be that committed members collaborate and give support to each other, which can impact on the team's capacity to overcome challenges and to stay together. Hsu and Mutjaba (2011), concentrates on commitment at the team level, and it was found that commitment to group members would be a better predictor of behaviors relevant than to general organizational commitment (Herscovitch & Meyer, 2002). It is supposed that when team members have emotional attachments to their teams and are committed with them, they would behave in order to produce beneficial outcomes to the teams (Van Beek, 2011).

We can consider a strong affective commitment as contingent on the level of alignment of an individual's priorities, personal capabilities, and interests, with organizational or team objectives (van Vuuren et al., 2008). In fact, group affect involves a complex interplay of divergence in the context of convergence processes (Emich, 2020), and these have important consequences for the social influence process, once group members' affective states influence each other (Barsade, 2002).

Following the indications of Thatcher and Patel (2012) and Tiede et al. (2021), there is a need for better understanding how subgroups influence team emergent states, processes, and outcomes. Affective team commitment is an emergent state. According to the results of previous studies of the effects of subgroups, it is expected that the perception of subgroups could be negatively related to team commitment, which is the second hypothesis of the current study (Emich, 2020; McCormick & Donohue, 2019):

H2: Perception of subgroups relates negatively to affective team commitment.

Affective commitment was already found to strongly correlate with dimensions of effectiveness, such as team performance (Meyer & Herscovitch, 2001; Bishop et al, 1997). Involving the experience of positive affective states, it can encourage team members to engage in proactive behaviors (Parker, 2007). Furthermore, affective team commitment has shown a strong correlation with positive affect (Marchand & Vandenberghe, 2013).

Indeed, a previous study found that affective team commitment is positively related to some criteria of team effectiveness, including team performance and team satisfaction (Paolucci et al, 2018). In other words, members with strong affective

commitment to their team are more likely produce favorable collaborative behaviors (Kang et al., 2007). In this sense, could be that committed members should interact with each other to enhance their positive effects on employee performance (van Dick et al., 2008), also resulting in higher level of satisfaction.

According to the literature review, it is expected that the emotional attachment of the team can enhance team effectiveness, and to verify this relationship, it is proposed the third hypothesis of this study:

H3a: Affective team commitment positively relates to team performance

H3b: Affective team commitment positively relates to team satisfaction.

The mediating role of the members' commitment with the team in the relationship between the existence of subgroups and team effectiveness

Researcher have begun to give more attention to mediating processes and emergent states that explain why some inputs affect team effectiveness (Ilgen et al., 2005). Based on the previous, affective team commitment will considered as the mediator between the existence of subgroups and team effectiveness (Meyer & Herscovitch, 2001; Bishop et al., 1997).

As can be seen from the literature review that we performed in the previous points of this section, the variables that are an object of analysis in the present investigation are interrelated. Thus, it is important to highlight the relationships that subgroups establish with affective team commitment and team effectiveness, and that affective team commitment establishes with team effectiveness. Cronin et al. (2010) argue that the effect of subgroups formation on satisfaction can be mediated by affective team commitment. In other words, teams with stronger subgroup formation experienced lower satisfaction because they were less affectively committed (Cronin et al., 2010).

In this way and considering what has already been said about the existence of internal fragmentation, it is expected that the existence of subgroups in a team negatively affects the affective commitment of members to the team as a whole, and that by affecting the bond members' affection towards the overall team, indirectly leads to a loss of team effectiveness. In this sense, this study proposes the analysis of affective team commitment as a mediator between the perception of subgroups and their effectiveness, in terms of team performance and satisfaction with the team.

H4a: Affective team commitment mediates the relationship between subgroups and team performance.

H4b: Affective team commitment mediates the relationship between subgroups and team satisfaction.

Method

Sample

The sample was composed of 124 work groups from 83 Portuguese organizations, including 124 team leaders and 554 team members.

The organizations where the teams of the present study are integrated belong to different sectors of activity, wherein the most represented sector is commerce and services (62.5%), followed by the associative sector (21.7%) and, finally, the industrial sector (15.8%). It should be noted that small organizations (up to 10 employees) are the most represented in the sample with a share of 30.6%.

Regarding specifically the teams of our samples, they were distributed in different areas of activity, such as services (38.3%), commercial (18.3%), project (8.3), administrative (5.8%), management and production (both 3.3%), and others which were not specified (22.5%). The size of the teams varies between 3 and 22 ($M = 6$; $SD = 3.96$). The average tenure of the teams is 8 years ($SD = 8.81$), ranging from 3 months to 46 years and 3 months. Regarding the degree of virtuality of the teams, it varies between 2.13% and 94.92%, with an average of approximately 35.68% ($SD = 17.08$).

Regarding team members, these are aged 17 through 67 ($M = 35.83$; $SD = 11.61$), and the majority are female (59.9%). Furthermore, the average tenure in the team varies from 1 month and 43 years to 5 months ($M = 5.23$; $SD = 6.42$), and average tenure in the organization is 9.30 ($SD = 10.02$), ranging from 1 month to 50 years.

The leaders of the present study are aged between 18 and 67 ($M = 42.37$; $SD = 11.38$), in which men are the majority (58.3%). Additionally, most of them (58.7%) have an academic degree. They have been teams' leaders for an average of 6 years ($SD=4.87$), ranging from 1 month to 27 years.

Data collection procedures

In the selection of the teams to be surveyed, the definition of team adopted by the research team has as criterion where the selected teams must be constituted, at least, by three elements (Lourenço et al., 2014), that are perceived by themselves and others as a team (Cohen & Bailey, 1997; Lourenço et al., 2014), and that they interact regularly, in an interdependent way, to accomplish a common objective (Costa, 2003; Cohen & Bailey, 1997; Lourenço et al., 2014).

The sample data was collected from 2017 to 2019, taking into account the convenience sampling method, (Robson & McCartan, 2016), under the VITEM research project[4].

Firstly, a personal contact was established with the representative of each organization as it is a necessary requirement to be part of this study, through a letter of presentation of the research project. The VITEM research project was also presented to organizations that fulfilled all the participation criteria and showed interest in collaborating.

After the presentation of the project, data collection was made through questionnaires. The questionnaire response from the members and the team leaders was carried out in person or through its online version[5]. It is important to note that during the application of the questionnaires, the ethical assumptions regarding confidentiality and anonymity, as well as informed consent, were assured and all questions that could be raised during the entire process were clarified. Finally, it should be noted that the research team also assured not to make use of any individual result.

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[4] The present study is part of the VITEM project, an international project involving researchers from several universities in Portugal (University of Coimbra, University of Aveiro and University of Beira Interior) and Spain (University of Valencia and University of Seville) and aims to understand how, in teams with some degree of virtuality, some constructs related to group functioning are related to each other and to the effectiveness of work teams.

[5] The online questionnaire was developed using the site: www.limesurvey.org (cf., Bastos, 2018, Campelo, 2018, Lopes, 2018, Silva, 2018).

Measures

Perception of subgroups

A single item was used in order to capture the team members' perception of the existence of subgroups: "When we are working together on a task, subgroups are formed" (cf. Appendix 2), based on a Likert response scale of 7 points that ranges from 1 (totally disagree) to 7 (totally agree).

The use of a single item in the measurement of this construct is due to the redundancy of the scales' items found in the literature, an aspect noted by the participants of the pilot test, conducted within the scope of the VITEM project, to assess the face validity of the scales. However, this item was based on the scales by Shen et al. (2008) and Earley and Mosakowski (2000).

Team performance

To assess team performance, the Group Performance Assessment Scale - II (Dimas & Lourenço, 2015) was used, whose objective is to assess the quality and quantity of the work developed by the team, based on the perspective of the leaders. An example of the item is "Efficiency developing tasks" (cf. Appendix 1). This instrument is a scale composed of 10 items with 10 answer options from 1 (bad) to 10 (excellent).

The analysis of dimensionality by Dimas and Lourenço (2015) was based on a principal component analysis, which pointed to unidimensional structure and the scale showed an adequate internal consistency, with a Cronbach's alpha of .88.

The value of .86 obtained in the KMO criterion (*Kaiser-Meyer-Olkin Measure of Sampling Adequacy*), in the present sample, indicates a good adequacy of the sample (Marôco, 2011) and the value of the Bartlett test suggests that the intercorrelation matrix differs from the identity matrix [$\chi 2$ (45) = 687.19, *p* <.001], which allowed us to proceed with the Exploratory Factorial Analysis (EFA). Based on principal axis method, a two-dimensional structure was initially obtained, which explains 59.31% of the total variance (47.61% and 11.70%). However, the scale used has a one-dimensional structure (cf. Dimas & Lourenço, 2015) and, since the second factor only explains a small percentage of the variance and none of the items significantly loaded it, a second factorial analysis forced to one single factor was run. This single-factor structure explains 46.41% of the total variance. The items' communalities obtained varies between .30 and .65. The

loadings obtained are adequate, varying between .55 and .81 (Moreira, 2004). In the analysis of internal consistency, the Cronbach's alpha was .89.

Team satisfaction

The Satisfaction with the Working Group Scale (Dimas et al., 2018) was used to measure team satisfaction. This scale was developed with the aim of assessing members' satisfaction in relation to various aspects of the working group's functioning, either at the level of the task system or the socio-affective system. This scale includes 7 items that assess the degree of satisfaction or dissatisfaction in relation to different aspects, based on a 7-point Likert scale, ranging from 1 (totally dissatisfied) to 7 (totally satisfied), and as an example of an item is "Relationships between team members and the leader" (cf. Appendix 2).

The unidimensional structure of the scale was studied through an exploratory factor analysis and later supported through a confirmatory factor analysis showing a Cronbach's alpha higher than .90 in several samples (Dimas et al., 2018).

In the sample of this study, the value of the KMO test was .88 and the Bartlett sphericity test is significant at $p < .001$ [$\chi2$ (21) = 2637.51], which indicated to proceed with EFA, since they indicate a good adequacy of the analysis to the data obtained (Marôco, 2011). The analysis pointed, as expected, to a unidimensional structure.

The solution obtained explains 61.96% of the total variance, with communalities between .48 and .72 and loadings ranging from .69 to .85, with appropriate values (Costello & Osborne, 2005; Moreira, 2004; Pestana & Gageiro, 2005). Regarding internal consistency assessed, the Cronbach alpha value obtained was .92.

Affective team commitment

To measure this construct, the scale proposed by Batarseh et al. (2017) was used, composed by four items adapted from the scale of affective team commitment by Allen & Meyer (1999). An example of the items is "Members feel emotionally connected to the team" (cf. Appendix 2). The items were evaluated through a Likert scale from 1 (totally disagree) to 5 (totally agree) by the team members. The scale was adapted to Portuguese by Bastos et al. (2019) in the scope of the VITEM project.

In order to validate the factorial structure of the scale in the present sample, an EFA was performed, which showed that the value of the KMO (Kaiser-Meyer-Olkin

Measure of Sampling Adequacy) test was .84 and the Bartlett sphericity test is significant at $p < .001$ ($\chi2(6) = 1383.857$), both indicating that the factorial analysis is appropriate. The factorial solution obtained showed a unique factor, explaining 77.26% of the variance and with all the items loading above .80. The obtained Cronbach's alpha was .90.

Control variables

Team size

The team size will be considered as a control variable, since several studies and authors claim that it has an influence on group processes and results (Hülsheger et al., 2009; Wheelan, 2009), being used as control variable in several studies (De Dreu, 2002; De Dreu and Van Vianen, 2001; Jehn, 1995; Li and Hambrick, 2005). This variable was measured through a question in the questionnaire applied to the leaders, in which it was requested to indicate the number of elements of his/her team, not including himself/herself.

Team tenure

This variable, evaluated based on the information collected in the questionnaire applied to the leaders, refers to the time of the team's existence and will also be considered as a control variable, as there is empirical evidence that this variable has a significant influence on group processes and results too (Katz, 1982; Schippers et al., 2003).

Team virtuality

Information about the degree of virtuality was collected from team and was also considered as a control variable, since there is literature suggesting that it has the capacity to influence group processes and results (De Guinea et al., 2012; Schweitzer & Duxbury, 2010). To measure this variable, members were asked to distribute a percentage of 100% for nine types of communication. The degree of virtuality was calculated using the equation of De Jong and colleagues (2008), according to the values proposed by Baltes et al. (2002)[6].

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[6] Degree of team virtuality = (1.00 x % face-to-face) + (0.68 x % videoconference) + (0.55 x % teleconference) + (0.15 x % chat) + (0.09 x % social network or forum) + (0.04 x % e-mail) + (0.6 x % electronic document sharing platform or agenda management) + (0.003 x % memo or reports).

Statistical Analysis

As this study was conducted at the group level of analysis and measures provided by team members were collected individually, it was necessary to aggregate variables obtained from team members to the team level. In order to justify the aggregation, the r_{wg} values were previously calculated (James et al., 1984), adopting a uniform null distribution, and the values of the Intraclass Correlation Coeficients - ICC (1) and ICC (2) -, using to the tool in Excel 2007 - Tool for Computing Interrater Agreement (IRA) & Interrater Realiability (IRR) Estimates for Consensus Composition Constructs prepared by Biemann and Cole, in 2014.

Regarding affective team commitment, the mean of r_{wg} was .89, while the ICC (1) and ICC (2) were .33 and .69, respectively. For team satisfaction, the r_{WG} was .92, the ICC (1) and ICC (2) were .28 and .63, respectively. These values were in line with the values considered acceptable in the literature (Brown & Hauenstein, 2005; Bliese, 2000; Klein & Kozlowski, 2000). Concerning the perception of subgroups, the r_{wg} value was .51 and it was considered unacceptable (Brown & Hauenstein, 2005), however, the ICC (1) and ICC (2) were .32 and .68, respectively, and were also in line with the values considered acceptable in the literature (Bliese, 2000; Klein & Kozlowski, 2000). In this way, and in general, the values provided support to the aggregation of data to the team level.

Before the mediation test, we analyze the correlations between the variables in cause (team performance, team satisfaction, perception of subgroups and affective team commitment) were carried out, also including, as control variables, the size of the team, the tenure of the team and the team degree of virtuality.

The assumptions of the regression analysis technique were tested, specifically the absence of uni and multivariate outliers, the absence of multicollinearity, normality, linearity, and homoscedasticity of the residuals (Tabachnick & Fidell, 2007). In our sample (124 teams) an outlier emerged, so we took it from the analysis. Due to this, the analyses were done with 123 teams.

Mediation hypotheses were tested using PROCESS, a macro from SPSS developed by Hayes (2013). Model 4 of this macro allows, through bootstrapping, the construction of a 95% confidence interval for assessing a simple mediation (a 5000 estimated bootstraps samples will be used to build the interval). The indirect effect will be statistically significant if zero is not included between the maximum and minimum

limits of the 95% confidence interval generated by PROCESS. Since this study aims to analyze two criterion variables (i.e. team performance and team satisfaction), we have carried out two separate analyses, one for each criterion variable (Hayes, 2013).

Results

Descriptive statistics and correlations between study variables are presented in Table 1. As previously mentioned, team virtuality, team size, and member's tenure were also included as control variables since several studies indicate that these variables influence the functioning and the results of the teams (Gibson & Gibbs, 2006; Hülsheger et al., 2009). To test the hypotheses of this study, we first analyzed the correlations between the perception of subgroups and the affective team commitment and of these with the two criteria of group effectiveness - group performance and team satisfaction - to understand the magnitude and direction of the relationship between these variables.

Using bivariate correlation analysis, it is possible to verify that the perception of subgroups does not significantly correlate with team performance ($r = -.118$, $p = .192$), but correlates negatively and significantly with team satisfaction ($r = -.211$, $p = .019$), supporting the H1b hypothesis, but not H1a. The perception of subgroups also correlates negatively and significantly with affective team commitment ($r = -.190$, $p = .036$). Although it is a correlation of low magnitude (Cohen, 1988), the H2 hypothesis was supported. Finally, affective team commitment correlates positively and significantly with both team performance and team satisfaction ($r = .396$, $p < .001$; $r = .727$, $p < .001$, respectively), the value of correlation with team performance being of moderate magnitude and that of correlation with team satisfaction of high magnitude (Cohen, 1988). These results support the H3a and H3b hypotheses. Regarding the control variables, none presented significant correlations with the mediator and criterion variables. Thus, following the recommendations of Becker (2005), we eliminated the team size, team tenure, and the degree of virtuality of all subsequent analyses. To sum up, there is empirical support for the H1b, H2, H3a and H3b hypotheses, but not for the H1a hypothesis.

Table 1.

Descriptive statistics and correlations between variables

	M	SD	1	2	3	4	5	6	7
1. Perception of Subgroups	3.45	1.36	-						
2. Affective Team Commitment	3.83	.54	-.190*	-					
3. Performance	7.65	.99	-.118	.396***	-				
4. Satisfaction	5.52	.66	-.211*	.727***	.402***	-			
5. Member's tenure	8.14	8.82	.121	-.160	.067	-.130	-		
6. Team Size	6.18	3.97	.222*	-.172	-.167	-.136	-.182*	-	
7. Team Virtuality	35.6	17.1	.182*	.031	-.060	.068	-.086	.086	-

Note. $N = 123$ teams[7]. * $p < .05$; ** $p < .01$; ***$p < .001$.

The mediation model was then tested using PROCESS. Table 2 presents the results obtained in the test of the model involving team performance. The perception of subgroups is negative and significantly associated with affective team commitment ($b = -0.08$, $SE = 0.04$, $p = .04$), explaining 4% of the variance of this variable ($R^2 = .04$, $F (1, 122) = 4.51$, $p = .04$). In the model that explains 16% of the variance of team performance ($R^2 = .16$, $F (2, 120) = 11.3$, $p < .001$), the relationship between affective team commitment and team performance is positive and statistically significant ($b = 0.71$, $SE = 0.16$, $p < .001$). In turn, the perception of subgroups did not reveal a statistically significant relationship with team performance ($b = -0.03$, $SE = 0.06$, $p = .60$).

The analysis related to the indirect effect of the perception of subgroups on team performance, mediated by affective team commitment, revealed that the confidence interval generated by the bootstrapping method does not include the value zero, which reveals a significant indirect effect ($a*b = -0.05$, *Boot SE* $= 0.03$, 95% CI [-0.12, -0.01]). Since the analysis does not point to a statistically significant relationship between the perception of subgroups and team performance ($b = 0.03$, $p = .60$), it can be concluded that there is a full mediation. Thus, there is empirical support for the H4a hypothesis.

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[7] On this base of 124 an outlier emerged in a number team, and for that reason we removed it from the analysis.

Table 2.

Mediation regression analysis for model 4 tested (Hypothesis 4a)

			95% CI		
DV/ Predictor	b	SE	LLCI	ULCI	R²
Affective team commitment					.04*
Subgroups	-0.08*	0.04	-0.15	-0.01	
Team performance					.16***
Affective team commitment	0.71***	0.16	0.40	1.01	
Perception of subgroups	-0.03	0.06	-0.16	0.09	
Indirect effect	-0.05	0.03	-0.12	-0.01	

Note: N = 123 teams. DV = dependent variable; *b* = non-standardized regression coefficient; *SE* = Standard error; CI = confidence interval; LLCI = lower CI limit; ULCI = Upper CI limit. *$p < .05$; ***$p < .001$.

Table 3 presents the results obtained in the test of the model involving team satisfaction. As already mentioned, the relationship between the perception of subgroups and affective team commitment is negative and statistically significant ($b = -0.08$, $SE = 0.04$, $p = .04$), explaining 4% of the variance of team reflexivity ($R^2 = .04$, F (1, 121) = 4.51, $p = .04$). In the model that explains 53% of the variance of team satisfaction ($R^2 = .53$, F (2.120) = 68.70, $p < .001$), the relationship between affective team commitment and satisfaction with the team, after controlling the effect of the perception of subgroups, is positive and statistically significant ($b = 0.86$, $SE = 0.08$, $p < .001$). On the other side, in this analysis, the perception of subgroups did not reveal a statistically significant effect on team satisfaction ($b = -0.04$, $SE = 0.03$, $p = .24$).

The analysis related to the indirect effect of the perception of subgroups on team satisfaction, mediated by affective team commitment, revealed a confidence interval generated by the bootstrapping method that did not include the value zero, revealing a significant indirect effect ($a*b = -0.08$, *Boot SE* = 0.03, 95% CI [-0.14, -0.03]). In this regression, the relationship between the perception of subgroups and satisfaction is not statistically significant ($b = -0.04$, $p = .24$), so we are in the presence of a full mediation. Thus, there is empirical support for the H4b hypothesis.

Table 3.

Mediation regression analysis for model 4 tested (Hypothesis 4b).

			95% CI		
DV/ Predictor	b	SE	LLCI	ULCI	R²
Affective team commitment					.04*
Subgroups	-0.08*	0.04	-0.15	-0.01	
Team satisfaction					.53***
Affective team commitment	0.86***	0.08	0.71	1.02	
Perception of subgroups	-0.04	0.03	-0.10	0.02	
Indirect effect	-0.07	0.03	-0.14	-0.003	

Note: N = 123 teams. DV = dependent variable; *b* = non-standardized regression coefficient; *SE* = Standard error; CI = confidence interval. LLCI = lower CI limit; ULCI = Upper CI limit. *p < .05; ***p < .001.

Discussion

The main goal of this study is to contribute to the understanding of the mechanisms that link the formation of subgroups to team effectiveness. Accordingly, we tested, in the context of working teams, the relationship between the perception of subgroups and the team effectiveness (in their team performance and team satisfaction), as well as the mediating role of affective team commitment in this relationship.

We hypothesized that the perception of subgroups would reveal a negative relationship with both effectiveness criteria analyzed (H1a and H1b), but only H1b hypothesis was supported, revealing a negative and significant relationship between the perception of subgroups and satisfaction with the team. The relationship between the perception of subgroups and group performance (H1a) was not supported.

It is also important to be mentioned that several authors supported the existence of a negative relationship between *faultlines* and group performance (Rico et al., 2011) and, according to Stanciu (2015), the formation of subgroups will negatively impact on group outcomes, once this is characterized by negative affective reactions that will have a negative impact on group performance. However, it should be noted that there is an empirical support for a positive relationship between *faultlines* and effectiveness (Thatcher et al., 2003). In this way, the relationship between the existence of subgroups and team performance must continue to be investigated, for example, studying the role of

other mediator variables, rather than affective commitment, that can contribute to explain how these variables are not directly related.

On the other hand, since previous research showed a negative relationship between *faultlines* and satisfaction (Thatcher & Patel, 2011; Cronin, 2010), our result is in line with these studies, suggesting that the higher the perception of subgroups, the lower the level of satisfaction with the team. The perception of subgroups contributes to members belonging to a subgroup perceiving members of others as less trustworthy, less kind, among others, which decrease satisfaction levels for the team (Cronin, 2010).

The results also point to a negative relationship between the perception of subgroups and affective team commitment (H2), in line with previous research (Murnighan & Lau, 2017). When team members perceive subgroups, they determine future interactions and behaviors (Cronin et al., 2010), so, by having an emotional attachment to their teams, they stay committed with them, and their behavior produce beneficial outcomes to the teams (Van Beek, 2011). In this way, our results reinforce that higher the perception of subgroups, less affective team commitment.

Regarding the relationship between affective team commitment and team effectiveness, in both criteria (group performance - H3a, and team satisfaction - H3b) the results point to a positive and significant relationship between these variables. In line with the existing literature, our findings support the hypothesis that employee affectively committed to the group, perform better, and carry on working together (Ng et al., 2010; Strauss et al., 2009). In this way, our results support the perspective that the higher the levels of affective commitment, the greater the levels of group performance and satisfaction with the team (Konradt, 2015).

Regarding the mediation hypotheses, when members perceived the subgroups formation, the affective commitment of members is affected negatively to the team, and consequently, team losses effectiveness. Indeed, we observe that there is an indirect effect of the perception of subgroups on team effectiveness via affective commitment. This result points to a full mediation effect of affective team commitment on this relationship, suggesting how subgroups translate into both dimensions of effectiveness (team performance and team satisfaction) studied, by the positive effect that it has on affective team commitment.

Conclusions, limitations, and suggestions for future research

Our starting point, in this study, relied on the importance that organizations and individuals have to understand how to improve the relationships between members and the effectiveness of the team, and it is known that the reality of teamwork is present and increasingly alive within organizations. Teams change the way people see their work. Teamwork is the driving force of each organization, and the achievement of its objectives is usually based on the contribution and agglomeration of effort and dedication of all its members, always with a view to individual success, but above all, organizational success. For that matter, and based on the literature review, we proposed to test a model that included the perception of subgroups as an input variable, affective team commitment as a mediating variable and team effectiveness (team performance and team satisfaction) as the output variable.

In fact, the results of the previous study support that the perception of subgroups relates negatively to team satisfaction. It is important that leaders develop strategies that encourage cooperation and reliability among all team members so that they feel comfortable, understood, and integrated into the team, to help team members to feel satisfied with the teams. Given the challenges that we face nowadays, it is very important that leaders have some skills and the ability to manage conflicts and know how to relate with their employees. An effective management of the human resources is fundamental to increasing productivity levels, ensuring greater results, which are reflected in the level of well-being and, consequently increased motivation and less conflicts in the work environment. In this way, leaders must be able to make quick decisions, and is essential that they can be adaptative, innovative and at the same time a negotiator in order to be able to influence the organization or its direct employees.

Our results also supported a negative relationship between the perception of subgroups and affective team commitment, which means that subgroups have an important role for the social influence processes that occur when group member motivations and behaviors merge into a singular collective process (Emich, 2020). Also, and according to Barsade (2002), group members' affective states influence each other. In this way, affective commitment can be increased through interpersonal relationships and socialization processes, in order to, for example, familiarize the members of the team with their workplace and with the rules underlying it (Barsade, 2002).

In the same line of recommendations, the present study provides some clues for future investigations, highlighting the importance of continuing studies that contribute to the enrichment and deepening of knowledge related to the functioning and effectiveness of work teams and the way they are affected by the existence of subgroups. For example, the existence of subgroups can create conflicts and some barriers to information shared by the team (Murnighan & Lau, 2017), which contribute to members communicating less and can negatively affect the team effectiveness. In this way, it would be useful the implementation of practices that promote trust, openness, and disinhibition, to contribute to a more honest discussion among all team members. Thus, it can benefit managers and team leaders, who desire to understand how they can improve teamwork, creating effective teams.

It is also important to be noted that this study has been developed in the field of work teams and proposes a better analysis related to the relationship between the three variables studied, once there are a few studies that portray this relationship, in this context.

On the other hand, the present study also had some limitations. The first one consists in the fact that it may not be susceptible for generalization, since the sample was Portuguese and taken by convenience. In this way, one suggestion for further research is replicate this study with samples of other countries different from Portugal.

Another limitation of the present study is that, for being a cross-sectional study, cannot infer causal relationship between the variables. Therefore, it is suggested longitudinal studies to clarify the mediation effect suggested in this study.

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Appendixes

Appendix 1: Leaders' Questionnaire

Appendix 2: Members' Questionnaire

Appendix 1: Leaders' Questionnaire

Cód. Organização:	Cód. Equipa:	Cód. Individual:

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 objetivo 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 corretamente o modo como deverá responder. Certifique-se que respondeu a todas as questões.

Declaração de consentimento informado (Participante)

Declaro que tomei conhecimento e fui devidamente esclarecido/a quanto aos objetivos e procedimentos da investigação a realizar. Foi-me garantida a possibilidade de, em qualquer altura, recusar participar neste estudo sem qualquer tipo de consequências. Desta forma, aceito participar neste estudo e permito a utilização dos dados que, de forma voluntária, forneço, confiando nas garantias de confidencialidade e anonimato que me são asseguradas pela equipa de investigação, bem como na informação de que não serão tratados de forma individual e de que apenas serão utilizados para fins de investigação.

Confirmo □

_____, _____ de _____ 2018

[**Tempo estimado de preenchimento**: cerca de 7 minutos]

Idade: _____   Sexo: M □   F □

Habilitações literárias: _____

Há quanto tempo trabalha <u>nesta organização</u>? Indique, por favor, o número de anos e meses ou de meses e semanas (por exemplo: 1 ano e 3 meses). _____

Informação relativa à organização:

Nº. de trabalhadores da organização: Até 10 □   11- 49 □   50 – 249 □   250 ou mais □

Sector de atividade da organização: _____

Informação relativa à equipa:

Há quanto tempo se formou <u>a sua equipa</u>? Indique, por favor, o número de anos e meses ou de meses e semanas (por exemplo: 1 ano e 3 meses). _____

Há quanto tempo lidera <u>esta equipa</u>? Indique, por favor, o número de anos e meses ou de meses e semanas (por exemplo: 1 ano e 3 meses). _____

Nº de elementos da sua equipa (considere somente os elementos da equipa, não se incluindo a si próprio): _____

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

□ Produção   □ Comercial   □ Serviços   □ Projeto

□ Administrativa   □ Gestão   □ Outra. Qual?_____

Tendo em conta que este estudo prevê dois momentos de recolha de dados, insira, por favor, **as iniciais do seu nome completo,** de forma a podermos efetuar a correspondência da informação recolhida nos dois momentos (reforçamos que este dado será exclusivamente utilizado para fins de investigação).

Iniciais do seu nome completo: _____

Desempenho grupal

Avalie a sua equipa de trabalho em cada um dos parâmetros apresentados em seguida, utilizando uma escala de 1 (mau) a 10 (excelente):

Mau				Médio/a					Excelente
1	2	3	4	5	6	7	8	9	10

	1	2	3	4	5	6	7	8	9	10
1. Capacidade de abordar os problemas adequadamente.										
2. Definição de estratégias tendo em vista o alcance dos objectivos estabelecidos.										
3. Qualidade do trabalho produzido.										
4. Eficiência no desenvolvimento das tarefas.										
5. Quantidade de trabalho produzido.										
6. Qualidade das novas ideias/sugestões introduzidas.										
7. Capacidade de implementar novas ideias.										
8. Cumprimento dos prazos estabelecidos.										
9. Número de novas ideias/sugestões introduzidas.										
10. Capacidade de lidar com a incerteza e com acontecimentos imprevisíveis.										

Appendix 2: Members' Questionnaire

Cód. Organização:	Cód. Equipa:	Cód. Individual:

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 objetivo 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, na medida em que não existem respostas certas ou erradas.

Leia com atenção as instruções que lhe são dadas, certificando-se de que compreendeu corretamente 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!

Declaração de consentimento informado (Participante)

Declaro que tomei conhecimento e fui devidamente esclarecido/a quanto aos objetivos e procedimentos da investigação a realizar. Foi-me garantida a possibilidade de, em qualquer altura, recusar participar neste estudo sem qualquer tipo de consequências. Desta forma, aceito participar neste estudo e permito a utilização dos dados que, de forma voluntária, forneço, confiando nas garantias de confidencialidade e anonimato que me são asseguradas pela equipa de investigação, bem como na informação de que não serão tratados de forma individual e de que apenas serão utilizados para fins de investigação.

Confirmo ☐

_____, _____ de _____ 2018

[**Tempo estimado de preenchimento**: cerca de 20 minutos]

PARTE 1
(Dados demográficos - para fins exclusivamente estatísticos)

Idade: _____   Sexo: M □   F □

Habilitações literárias: _____

Já teve formação em trabalho de equipa? Sim □   Não □

Há quanto tempo trabalha nesta organização? Indique, por favor, o número de anos e meses ou de meses e semanas (por exemplo: 1 ano e 3 meses). _____

Há quanto tempo trabalha nesta equipa? Indique, por favor, o número de anos e meses ou de meses e semanas (por exemplo: 1 ano e 3 meses). _____

Tendo em conta que este estudo prevê dois momentos de recolha de dados, insira, por favor, **as iniciais do seu nome completo** de forma a podermos efetuar a correspondência da informação recolhida nos dois momentos (reforçamos que este dado será exclusivamente utilizado para fins de investigação)

Iniciais do seu nome completo: _____

De forma a garantir uma maior validade dos dados recolhidos, pedimos que responda a todos os itens apresentados abaixo pensando na sua **equipa formal como um todo**.

Indique-nos, por favor, qual o tipo de comunicação estabelecida entre si e os outros membros da sua equipa **no último mês**. Distribua 100% pelos diversos tipos, considerando que as percentagens mais elevadas correspondem aos meios de comunicação que mais frequentemente utiliza para comunicar com os restantes membros da sua equipa:

TIPOS DE COMUNICAÇÃO UTILIZADOS	Percentagem
1. Presencial.	___%
2. Através de *videoconferência* (comunicação à distância com som e imagem – por exemplo *skype* com som e imagem).	___%
3. Através de *teleconferência* (comunicação à distância somente com som – por exemplo *telefone/telemóvel* ou *skype* somente com som).	___%
4. Através de um serviço de *chat* (comunicação à distância, somente escrita e em tempo real – por exemplo, *whatsApp* ou *messenger do facebook*).	___%
5. Através de *rede social* ou *forum* (comunicação à distância somente escrita, sem ser em tempo real – por exemplo, *facebook* sem chat).	___%
6. Através de *e-mail*.	___%
7. Através de *plataforma eletrónica* de partilha de documentos ou gestão de agenda (por exemplo, *dropbox* ou *google drive*).	___%
8. Através de *memorandos* ou *relatórios.*	___%
9. Outro: Qual? _____	___%
TOTAL	**100%**

Satisfação com a equipa

Indique o seu grau de satisfação ou de insatisfação com cada um dos seguintes aspetos relativos à sua equipa de trabalho:

Totalmente insatisfeito	Bastante insatisfeito	Moderadamente Insatisfeito	Nem satisfeito nem insatisfeito	Moderadamente satisfeito	Bastante satisfeito	Totalmente satisfeito
1	**2**	**3**	**4**	**5**	**6**	**7**

	1	2	3	4	5	6	7
1. Clima existente na equipa de trabalho.							
2. Forma de trabalhar da equipa.							
3. Forma como o líder organiza e coordena as atividades da equipa.							
4. Resultados alcançados pela equipa de trabalho.							
5. Relações entre os membros da equipa e o líder.							
6. Relações entre os membros da equipa de trabalho.							
7. Papel que cada membro desempenha na equipa.							

Comprometimento com a Equipa

O conjunto das seguintes afirmações tem como objetivo continuar a **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
Discordo fortemente	Discordo	Não concordo nem discordo	Concordo	Concordo fortemente

	1	2	3	4	5
1. Os membros têm um forte sentimento de pertença à equipa.					
2. Os membros sentem os problemas da equipa como sendo seus.					
3. Os membros sentem-se emocionalmente ligados à equipa.					
4. Os membros da equipa sentem-se como fazendo parte da "mesma família".					

Perceção de subgrupos

Por fim, assinale com uma cruz (x) o valor que melhor se adequa a cada afirmação relativamente à sua equipa, utilizando a seguinte escala:

Discordo Totalmente	Discordo muito	Discordo em parte	Não concordo nem discordo	Concordo em parte	Concordo muito	Concordo Totalmente
1	2	3	4	5	6	7

1	2	3	4	5	6	7

1. Quando estamos a trabalhar em conjunto numa tarefa, formam-se subgrupos.							