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How to promote innovation in work teams: The role of trust and reflexivity

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Abstract

Team innovation is one of many factors that allow organizations to achieve competitive advantage in times of change, and as such, the main goal of this dissertation is to contribute to the understanding of the factors that promote the innovation capacity of work teams, contributing to the knowledge in this area.

Thus, this study aims to test a mediation model, where it is hypothesized that team trust positively influences the capacity of the teams to innovate, either directly or indirectly through its influence on the team reflexivity process.

Then, an empirical study was carried out, with a cross-sectional design, involving a sample of 111 work teams and their leaders, belonging to 72 Portuguese organizations from different sectors of activity. The data were collected through the survey method and was analyzed at the group level, testing a simple mediation model using PROCESS. The results revealed a direct and statistically significant relationship between team trust (cognitive and affective), team task reflexivity, and team innovation. Regarding the hypothesis of mediation, the results revealed a full mediation of team task reflexivity in the relationship between team trust (in both components) and team innovation. On the other hand, team task reflexivity does not mediate the relationship between cognitive trust and team innovation. These results reinforce previous studies that point to the relevance of team trust as a strategy to increase team innovation, either directly or through an increase of team task reflexivity.

Keywords: Team Innovation, Team trust, Team task reflexivity, Work Teams

Table of contents

Theoretical Framework.....	1
Team Innovation.....	3
Team Trust.....	5
Team Reflexivity	9
The role of team reflexivity in the relationship between team trust and team innovation	11
Method.....	13
Sample	13
Data Collection Procedures	14
Measures	16
Statistical Analysis	19
Results	21
Discussion.....	26
Conclusions, limitations and suggestions for future research	29
References	32
Appendixes	42
Appendix 1: Presentation Letter	43
Appendix 2: Research Project (VITEM)	46
Appendix 3: Members' Questionnaire	52
Appendix 4: Leaders' Questionnaire	58

Theoretical Framework

Nowadays, organizations are expected to stay ahead of competitiveness by developing new business models, anticipating future opportunities, and reinventing themselves in order to cope with times of change that are increasing (Rico, de la Hera, & Taberner, 2011). One of the techniques to manage these periods of change is innovation, which leads work teams¹ to develop and implement new practices and products to maintain or increase effectiveness and gain competitive advantage (Farnese & Livi, 2015).

Currently, the organizations are very dependent on work teams for the structuring of its activities (Lourenço, Dimas, & Rebelo, 2014). The study of work teams is an important component for the success of the organizations, as they are involved in innovative projects. Work teams are seen as "the vehicle that allows the crucial cross-functional collaboration and the sharing of scarce resources to bring projects to successful completion through synergy of the various functions, satisfying increased pressures to bring products to market faster" (Hoegl & Parboteeah, 2006).

Since most of the work teams are constantly facing a changing environment, and they wish to remain in front of competitiveness, they must reinvent themselves often, anticipating future opportunities and innovating their work processes (Rico et al., 2011), and, most important, they must be able to maintain and strengthen themselves during the innovation process (West, 2002). This is the reality of the current organizational world: dynamic, uncertain, complex and increasingly technological environments, in which it is increasingly necessary to innovate (Rico et al., 2011) and there is insufficient information on what can help promote innovation.

Lourenço et al. (2014) point to teamwork as the most capable way to deal with complex tasks and problems, with new challenges. Thus, the main goal of this thesis is to contribute to the understanding of the factors that promote the innovation capacity of work teams, defined as a collective learning process through which new ways of solving problems are developed (Alegre & Chiva, 2008).

¹ From early, the concepts of group and team generated a lot of debate about whether or not to refer to the same collective entity. In this study, we will use them undifferentiated in line with several researchers (e.g. Lourenço, Dimas & Rebelo, 2014).

This study focuses on two of these factors that influence team innovation - team reflexivity (e.g., Farnese & Livi, 2015) and team trust (e.g., Ruppel & Harrington, 2000) - that, although suggested in previous studies, there is still a research gap, since there are no studies that portray the relationship between the three variables. Team reflexivity, defined as the point at which teams think of strategies and behaviors and adapt their functioning, especially when confronted with complex and unpredictable environments (Konradt, Otte, Schippers, & Steenfatt, 2016), is one of the factors that help work teams stay or become more innovative. However, it is trust, defined as the set of trustworthiness perceptions that the team members possess in relation to each other (Langfred, 2004), that is seen as required for the quality of interpersonal relationships (Dimas, Alves, Lourenço, & Rebelo, 2016). According to Tjosvold, Tang, and West (2004), strong relationships stimulate the problem-solving skills that are necessary for teams to reflect on their experience and change. And Miles, Snow, and Miles (2000) argued that mutual communication based on trust is critical for knowledge creation and innovation.

Thus, considering the literature and some studies already carried out by Campelo (2018) and Bastos (2018), in teams where members trust each other, the ability to develop new ways to function and solve problems is higher. Team reflexivity is also considered a good predictor of the innovation capacity because it generates new ideas and solutions (Schippers et al., 2015). On the other hand, team members' ability to trust each other, thus having cooperation and sharing of ideas, is one of the necessary conditions for the creation of a conducive environment to team reflexivity (Tjosvold, Tang, & West, 2004). In this way, the model that this study aims to test is a mediation model, where team trust, positively influences the capacity of the teams to innovate, either directly, or indirectly, through its influence on team reflexivity process.

In this sense, adopting an approach that is based on the IPO (Input, Process, and Output) model (McGrath, 1964), the mediation model in test considers team trust as an input, team task reflexivity as a mediating process, and team innovation as an output, since there is no research before that did something similar.

However, it is important to realize that the concepts of trust and reflexivity are distinct and theoretically relevant, hence they are used as input and process, respectively. In the study by Hülshager, Anderson, and Salgado (2009) participative safety is identified as a construct that includes both, interconnecting them.

Team task reflexivity is seen as a mediator in the input-output relationship because, according to the literature, our input (team trust) influences directly the team task reflexivity and this directly influences our output (team innovation). As for the outputs, they are, by definition, the consequences of the team's actions or activities, such as productivity/performance, members' satisfaction, or innovation (Landy & Conte, 2009), which is the output included in the present study.

As previously mentioned, this study is relevant to the scientific community as it seeks to contribute to the understanding of the factors that promote team innovation and is crucial given the growing emphasis on work teams in organizations. In this scope, this study emphasizes the importance of team trust, especially considering the impact on team reflexivity, highlighting its role as a mediating variable in the relationship between team trust and team innovation. It also contributes to a better understanding of the team's functioning regarding innovation, adding new knowledge to the existing literature.

In practice, this study can also help organizations and their leaders to manage better their teams and adapt their strategies, in order to promote team trust and team task reflexivity and take advantage of those benefits to encourage team innovation.

Team Innovation

In a world where competition is increasingly present, organizations must place greater emphasis on the capacity to problem-solving, decision-making, and responding rapidly to competitive threats. Globalization has opened new possibilities for establishing and maintaining competitive advantage and, in order to maintain or to improve effectiveness within rapidly changing environments, organizations need to adapt appropriately, once the innovation is an essential factor for success (Batarseh, Daspit, & Usher, 2017).

West and Farr (1990) defined innovation as “the intentional introduction and application within a job, work team or organization of ideas, processes, products or procedures which are new to that job, work team or organization and which are designed to benefit the job, the work team or the organization”. According to this definition, innovation is related to intentional attempts to obtain anticipated benefits from the change, such as administrative efficiency, staff well-being, personal growth, increased

satisfaction, improved team cohesiveness, better interpersonal communication, and those productivity measures and economics more routinely invoked (West & Anderson, 1996).

Teams' ability to innovate depends on how well they generate, import, share, interpret and apply creative knowledge and ideas in viable methods, products and services (De Dreu & West, 2001; Gibson & Gibbs, 2006). In this sense, innovation requires the parties involved to suspend judgment, remain open to others' ideas and perspectives, and make the necessary effort to integrate new knowledge with existing knowledge (Gibson & Gibbs, 2006).

Another important aspect is that the definition does not require an absolute novelty of an idea, simply that the idea is new to the relevant unit of adoption. Therefore, a team that brings new ideas to one organization that derive from another is considered an innovation within the definition² (West & Anderson, 1996). According to West (2002), some innovations are planned, requiring a great deal of attention, while others appear by accident.

Regarding the relationship between innovation and creativity, the view that supports the idea that they are complementary concepts seems to be the most consensual in the literature. As McLean (2005) states "creativity without innovation is of significantly diminished value". In fact, based on Amabile, Conti, Coon, Lazenby, and Herron (1996, p. 1155), creativity is defined as "the production of novel and useful ideas in any domain", while the concept of innovation is defined as "the successful implementation of creative ideas within an organization". Creativity involves processes that lead to the generation of new and valued ideas and, on the other hand, the implementation of these ideas is the process where innovation happens (Nakano & Wechsler, 2018). In this sense, creativity is seen as the first stage of the problem-solving process, and it is a necessary but not sufficient condition for innovation to happen because without generating new and useful ideas, innovation in organizations will not occur (Amabile, et al., 1996). Innovation is generally seen as a cyclical process with four periods of innovation: initiation, implementation, adaptation, and stabilization. Although

² Innovation can be confused with improvisation, which can be defined, according to Preston (1991, p.88, as cited in Vera & Crossan, 2005), as a way "to cope or ingenuously adapt to a set of circumstances" or as a way of "developing ingenious solutions to intractable problems" (Meyer 1998: 572, as cited in Vera & Crossan, 2005). Improvisation can be highly innovative or chaotic, in which innovation is a necessary characteristic for improvisation; otherwise, the opposite is not true (Vera & Crossan, 2005).

creativity is also important during the process, it is more present in the early periods of the innovation process because it is when the organization needs to develop more ideas in order to answer their needs (West, 2002).

Following this predominant view of creativity and innovation as interrelated and complementary processes, innovation is conceptualized in this study as composed of two correlated processes: creativity and the implementation of innovation (Nakano & Wechsler, 2018).

Anderson et al. (1992) have developed a four-factor model, distinguishing four crucial elements that promote team innovation: a vision (negotiated, shared and clear) to encourage the development of new and improved ways of working; participative security, by providing a non-threatening and supportive environment, in which team members are more likely to take the risk and come up with new ideas; a supportive climate, which implies a commitment to achieve quality performance, modifying procedures and implementing improved methods or working practices; and, finally, support for innovation.

Thus, team innovation involves a system of social processes, which are facilitated by the collaboration capacity, in that it allows the team to evaluate information, share perspectives and new ideas and develop innovative solutions (Blomqvist & Levy, 2006). On the same line, West and Anderson (1996), in their model on team innovation, suggest that, among other variables, the supporting climate (for which communication and trust are relevant) is a condition for innovation.

Team trust is one of the variables that may act as an input to team innovation and the study by Ruppel and Harrington (2000) have shown a positive relationship between team trust and innovation, which supports the idea that trust is an important variable in team innovation, assuring people that they will not be penalized for sharing new ideas. This relationship will be analyzed in the next section.

Team Trust

Trust emerges in organizations associated with increased performance, team satisfaction, and team innovation. In the literature, we find several definitions of the concept of trust and various levels of analysis are taken into account. However, most

authors agree that trust is a highly complex, multidimensional, and abstract phenomenon, containing distinct but related components (Rousseau, Sitkin, Burt, & Camerer, 1998).

The study of trust has been widely applicable, having a prominent role in several areas such as psychology, sociology, economics, and anthropology (Grichanik, 2014). In this way, the construct in question can be presented interpersonally or collectively and reflects a multiplicity of roles, functions, and levels of analysis (Costa et al., 2001). Thus, it is expressed through three levels within the organizations - individual, group and organizational (Rousseau et al., 1998) - generating some lack of agreement as to its definition (Grichanik, 2014).

Although in the present investigation the focus is on trust at the group level, to clarify the construct in a more comprehensive way, different approaches are presented, though briefly, not necessarily located at the group level, and then focus specifically on trust at the group level.

In this sense, McAllister (1995) focuses on the interindividual level and defines trust as "the extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another" (p. 25). This construct is also stated in the literature as a willingness to take risks (Cummings & Bromiley, 1996) or an act that increases the vulnerability of the individual to the other, since the one who trusts has no control over the other's behaviors (Lorenz, 1988).

In the context of approaches to trust, Lewicki, Tomlinson, and Gillespie (2006) identify and characterize the behavioral approach and the psychological approach to trust as predominant. The first one sees trust as a rational choice behavior made by an individual in a particular interpersonal context (Lewicki et al., 2006). Related to the psychological approach, it places emphasis on cognitive and affective processes, which means that is the understanding of internal psychological processes and dispositions, including expectations, intentions, affections and dispositions, that makes the individual to modify their choices (Lewicki et al., 2006, Mayer, Davis, & Schoorman, 1995; McAllister, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998).

Focusing on the psychological approach, Lewicki et al. (2006) describe three possible theoretical models of trust - unidimensional, bidimensional and transformational.

In the unidimensional approach (e.g., McAllister, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998), trust is defined as a set of positive expectations about the intentions and behaviors of another party and/or dispositions to become vulnerable, and distrust as

opposing extremes of a *continuum*. According to this approach, trust between individuals is developed based on the qualities of the subject who is trusted, on the relationship history, on communication processes and structural factors (Grichanik, 2014; Lewicki et al., 2006).

The model proposed by McAllister (1995) is the best-known unidimensional model and emphasizes that trust has two components: the affective, that derives from feelings and sharing ideas, to receive support and understanding from others; and the cognitive one, that emerges associated with the recognition of attitudes of professionalism, and demonstration of competences from the other members in the accomplishment of tasks. Affective trust usually takes longer to develop and is long-lasting than cognitive trust (Webber, 2008).

On the other hand, in the bidimensional approach, trust and distrust are interrelated, however, they constitute distinct constructs that can be measured separately. It should also be noted that in this approach, trust, and distrust, at an early point in the relationship, are low leveled and are developed in the light of support or breaches of expectations in various contexts and circumstances (Grichanik, 2014; Lewicki et al., 2006).

The last approach is the transformational one, in which the nature and form of trust change over time. Relationships begin with trust based on calculations (maximizing benefits and minimizing risks), progressing towards knowledge-based trust (predicting a particular behavior), and finally, trust based on identification with desires and intentions from others (Lewicki & Bunker, 1996).

Team trust will be analyzed in this study following the unidimensional approach by McAllister (1995) as a construct that integrates two components (cognitive and affective), with the objective of perceiving the differences in the impact of trust (in its two components) on team reflexivity and team innovation. In addition, work with different components helps us verify different effects on other variables and controlling a construct, in its different components, helps us get more detailed results, adding value and understanding of the relationships under study.

Relating now trust and the group level, a few years ago, literature started to show a certain level of consensus on team trust, and it came to be defined as the "willingness of each individual to trust others and the perceived trustworthiness of colleagues, which

leads to cooperative and monitoring behaviors among team members" (Costa & Anderson, 2011, p. 123)³.

In this approach, trust in work teams can be conceptualized as multifaceted, with distinct but related indicators: formative and reflective. The first one includes the propensity to trust, which refers to the willingness and disposition of team members to trust each other, as well as the perceived trustworthiness, that refers to how much each member believes that others' behaviors are honest and responsible (Costa & Anderson, 2011; Dimas et al., 2016). On the other hand, and taking into account that it may not exist as a result of trusting action, reflective indicators include cooperative behaviors, which are related to how much each team member demonstrates trust in other members, as well as monitoring behaviors (supervision, verification, and surveillance) (Costa & Anderson, 2011; Dimas et al., 2016). Team members reveal more cooperative behaviors and less monitoring when they perceive others as trustworthy (Costa & Anderson, 2011).

In a study carried out by Costa and Anderson (2011), it was supported that trust positively affects team communication, influences mutual acceptance and personal involvement with the rest of the team. The same authors claim that increased trust results in more positive attitudes and behaviors at work, high job satisfaction, and greater commitment to the organization.

When connecting team trust to team innovation, Zheng, Zhu and Yang (2010) argued that team trust is an important variable in team innovation because it helps to solve the problems between team members and promotes the exchange of information, with the objective of leading to new work procedures. These authors also consider that a good relationship between team members based on trust, helps create a healthier environment by having team members perform their roles better, as well as being receptive to the innovation process of their team. Also, Ruppel and Harrington (2000) propose that less monitoring and defensive behavior of managers and greater enthusiasm of team members for innovation are essential mechanisms by which team trust influences team innovation. The idea that trust is well-defined as the willingness to take risks (Rousseau et al., 1998) also contributes to explain why team trust is an antecedent of team innovation. In fact,

³ Which is related with the definition proposed by Mayer et al. (1995) where trust is conceived as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p.712).

trust makes it easier for people to share ideas that lead to team innovation (Ruppel & Harrington, 2000). Thus, our first hypothesis is:

Hypothesis 1: Team cognitive trust (1a) and team affective trust (1b) are positively related to team innovation.

Team Reflexivity

Schön introduced the reflexivity, articulated with the organizational vision, in 1983, defining the construct as a learning process based on actions and professional practices in the workplace (Farnese & Livi, 2015).

However, it was West (1996, 2000, 2002) who defined reflexivity, relating it to work teams, as a process that encourages collective reflection on the objectives, strategies, and processes of the team. Through reflexivity, teams become capable of monitoring, working together and developing and implementing improvement plans, stimulating change attitudes (Tjosvold et al., 2004).

In a study carried out by Carter and West (1998), teams that experienced periods of change and had to make complex decisions often used reflexive strategies as a way to manage better their tasks and functioning. These authors also developed a scale to measure reflexivity, taking into account two dimensions: task reflexivity, which is associated to the reflection and discussion of team objectives, strategies, and processes that allow the team to adapt to the circumstances and the periods of change; and social reflexivity, which is a reflection on how a team deal with conflicts, reviews team support, and promotes the well-being and development of its members (Carter & West, 1998). In this study, the task reflexivity dimension will be analyzed. In recent years, researchers have dedicated time to understanding the functioning and results of teams, mainly due to the evolution of information and communication technologies and the increase in competitiveness (De Guinea, Webster, & Staples, 2012). Thus, analyzing this dimension is particularly useful when teams are facing complex environments and intend to continue or improve their performance (Tjosvold et al., 2004).

Regarding its temporal nature, reflexivity presents two phases: transition and action. In this way, team reflection is considered a team process that mostly takes place during transition phases, since it is at this stage that tasks begin to be performed and the

team start to reflect on previous performance and efforts, and actions are prepared for future work (LePine, Piccolo, Jackson, Mathieu, & Saul, 2008). Reflexivity emerges from the results obtained during task and action periods and can serve as a feedback function, including information relevant to future improvements (Konradt et al., 2016).

It is also important to emphasize that teams that are reflexive tend to focus on and make changes regarding their goals (clarity, values, and team commitment), in strategies to achieve those goals (detail, time, and effectiveness), in processes (communication, feedback, and support) and even in their environment (rewards system, social impacts, and intergroup relations) (West, 1996). On the other hand, teams that are not reflexive and have little awareness of the factors mentioned above react defensively to the threats that arise along the way (Schippers et al., 2007).

Some researchers suggest that reflexivity can be an important process to promote team innovation, development, and implementation of more efficient processes or procedures (Schippers, West, & Dawson, 2015). In the Paulus and Yang's study (2000), teams may innovate by reflecting on work processes because it stimulates a reflection in order to increase efficiency. Another study states that reflecting on work processes can help teams to innovate by promoting the generation of new ideas about how to work together effectively (Schippers et al., 2014). Finally, in a study by Farnese and Livi (2015), reflexivity turns to be a process that promotes organizational performance, taking into account the capacity for innovation.

Team reflexivity has been shown to be an important predictor of team innovation (e.g., Farnese & Livi, 2015). Some authors argue that highly reflexive teams will be more innovative than teams with low reflexivity when facing a demanding work environment (Schippers et al., 2015). Thus, previous research suggests a direct link between reflexivity and innovation, which lead to the following hypothesis:

Hypothesis 2: Team task reflexivity is positively related to team innovation.

According to Edmondson (2004), one of the reasons why trust promotes team performance is because it increases the capacity to reflect, by encouraging teams to reflect on current problems, where a safe environment is created in which team members can talk about their problems. Also, team trust will increase the willingness of team members to initiate new actions to achieve effectiveness. In fact, the literature suggests that trust is

related to team reflexivity. MacCurtain, Flood, Ramamoorthy, West, and Dawson (2010) suggests in their study that trust between team members positively affects reflexivity and knowledge sharing. For those authors, if the team has high levels of trust, there is a greater probability of a more honest debate about the issues and problems of the task in which they are working. In addition, the greater the team trust degree, the more likely it is to be proactive, optimistic, task-focused, and provide relevant feedback (Clark, Clark, & Crossley, 2010). Another study, related to mobile engineering, showed that in situations where reflexivity is interdependent with team knowledge and interactions, the mobile engineer must trust the team to facilitate reflection on their insight and knowledge, so it is important that the reflexivity develops under conditions of trust (Sankowska & Söderlund, 2015).

Considering these findings, we hypothesize that:

Hypothesis 3: Team cognitive trust (3a) and team affective trust (3b) are positively related to team task reflexivity.

The role of team reflexivity in the relationship between team trust and team innovation

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 team trust establishes with team task reflexivity and team innovation, and that team reflexivity establishes with team innovation.

Concerning trust and innovation, Ruppel and Harrington (2000) suggest that building trust is essential where innovation is desired, as trust among team members helps to smooth out the difficulties they face in work and to promote the exchange of information and ideas that may lead to new products, services or ways of working (Zheng et al., 2010). In this domain, Pinho (2017) also suggests that both cognitive and affective trust are positively related to the improvement of team processes, which refers to team members' ability to develop innovative solutions that improve results. This study backs up Khan, Breitenacker, Gustafsson, and Schwarz (2015) who suggest that, on the one hand, affective trust can encourage team members to share new information and ideas

essential for innovation and, on the other hand, is the keystone of this process because the different points of view that arise when innovation is interpreted on the basis of members' perceived reliability of each other in respect of performance-relevant factors.

Regarding the relationship between team trust and reflexivity of team tasks, MacCurtain et al. (2010) emphasize that, in a team where there is more trust, there will also be a greater propensity to share, reflect and discuss more openly some issues and problems of the team. In other words, trust among members of a particular team promotes honest debate of problems, positively affecting reflexivity and, consequently, knowledge sharing.

Also, Schippers (2015), in his study of team reflexivity and team innovation, suggests that exists a positive relationship, so, he suggested that teams whose members report higher levels of reflexivity are adjudged to be more innovative by independent raters.

Since team trust relates to team innovation (Ruppel & Harrington, 2000; Costa & Anderson, 2011) and to higher levels of team reflexivity that, in turn, leads to higher levels of team innovation (Schippers et al., 2015), we can hypothesize that team reflexivity can play a mediator role in the relationship between team trust and team innovation.

Hypothesis 4: Team cognitive trust (4a) and team affective trust (4b) are also related to innovation through the mediating influence of team task reflexivity.

To sum up, the mediation model that this study aims to analyze is depicted in Figure 1.

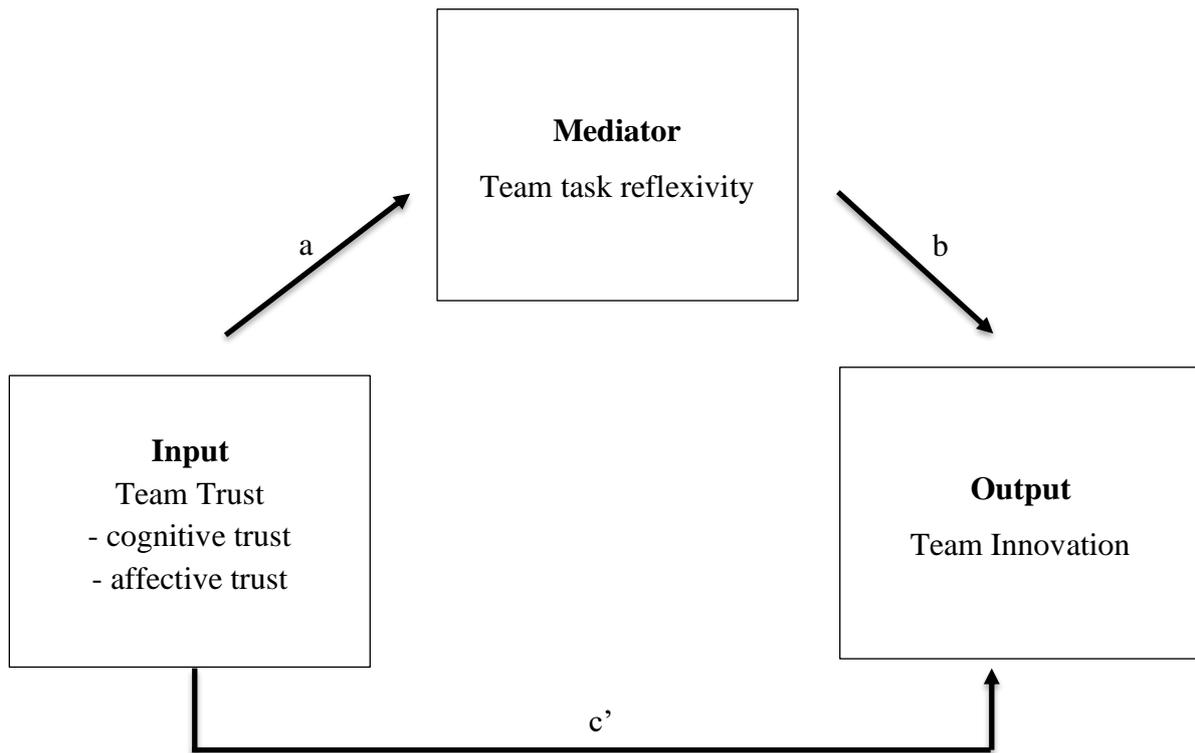


Figure 1. Hypothesized Mediation Model

Method

Sample

The present study consists of a sample of 111 teams, from 72 Portuguese organizations, belonging to commerce and services (63.60%), associative (20%) industrial (16.40%) sectors.

The average number of members per team is about six ($SD = 3.84$), ranging from 3 to 22 members, in which teams had to have at least three elements, perceived by themselves and others as a team, interact regularly, in an interdependent way, to accomplish a common objective (Lourenço et al., 2014). The team's tenure has an average value of 8.47 years ($SD = 9.13$), ranging from 3 months to 46 years, and the degree of virtuality of the teams is 33.71% ($SD = 16.02$).

Considering team members, these individuals are aged between 18 and 67 years ($M = 35.98$; $SD = 11.42$), in which women are the majority (61.70%). The tenure of each

member in the respective team varies between 1 month and 43 years ($M = 5.55$, $SD = 6.63$), and in the organization is 9.68 years ($SD = 9.96$), ranging from 1 month to 50 years. As far as education level is concerned, the highest percentage of members reported having a bachelor's degree (41.10%) or a degree equal or inferior to the 12th grade (41.10%), in which 55% said that they had training in teamwork.

The leaders of the present study are aged between 18 and 67 years ($M = 42.93$, $SD = 11.27$), 54.60% male and 45.40% female. Most leaders have education levels equal to or higher than the bachelor's degree (58.70%) and, on average, have been in the organization for 14.82 years ($SD = 10.93$), ranging, their tenure in the organization, between the 3 months and 45 years. Finally, it should be noted that their tenure in leading the team is, on average, 5.98 years ($SD = 6.84$), 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 was used as the criterion, meaning that the teams selected had to be constituted by three elements, at least, that are perceived by themselves and others as a team, interact regularly, in an interdependent way, to accomplish a common objective (Lourenço et al., 2014).

It was also fundamental that the leader of these teams is formally recognized and that they use some means of virtual communication in the coordination and execution of their tasks.

The sample data were collected⁴ in the 2017/18 and 2018/19 academic years, between October and December, taking into account the convenience sampling method, within a personal network of formal and/or informal contacts (Hill & Hill, 2012).

Firstly, personal contact and/or e-mail was established with the representative of each organization that corresponded to the necessary requirements to be part of this study, through a letter of presentation of the research project (cf. Appendix 1).

⁴ The data were collected by the research team composed of national and international researchers, integrating the students Clara Campelo, Daniela Lopes, Inês Carvalho, Liliana Bastos, Lúcia Silva, Mariana Sousa and Susana Santos in the academic year 2017/2018 and in 2018/2019 by the students Ana Rita Bravo, Adriana Moreira, Catarina Gouveia, Catarina Senra, Helena Baptista, Joana Dinis and Sara Silva, all of them to carry out their master's research.

The VITEM research project ⁵ (cf. Appendix 2) was also presented to organizations that fulfilled all the participation criteria and showed interest in collaborating. 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 guaranteed and all questions that could be raised during the entire process were clarified.

After the presentation of the project, data collection was made through questionnaire surveys. This method makes it possible to collect a large amount of standardized data in a short period of time, including a considerable number of individuals dispersed across different geographical areas (Mitchell & Jolley, 2010). In addition, the questionnaires are an inexpensive method, based on standardized instruments with a strong theoretical basis, allowing the collection of objective and easily quantified responses (Harrison, 2005).

The questionnaire response from the members and the team leaders was carried out in person or through its online version⁶. Data from 246 participants (187 members and 59 leaders) were collected using this version. Whenever possible, the answer to the questionnaires was made in person and in the presence of the team's research member, making it possible to clarify any doubts that might arise. However, when this was not possible, the team leaders were asked to distribute and collect the completed questionnaires by the members of their teams. In this case, the team leader was responsible for clarifying doubts, and the confidentiality of responses was always guaranteed.

⁵ 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.

⁶ The online questionnaire was developed using the site: www.limesurvey.org (cf., Bastos, 2018, Campelo, 2018, Lopes, 2018, Silva, 2018).

Measures

Team trust. In the present study the adaptation to the Portuguese language of the Trust Scale for the group level of Grichanik (2014), originally proposed for the individual level by McAllister (1995) was used and applied to 499 team members.

The original version of the scale includes 10 items that are divided into two components of trust: the cognitive (involving the first 5 items of the scale, in which item 5 is reversed) and the affective one (the last 5 items of the scale). Examples of the items are "I can trust that my colleagues will not make it difficult for me to work with their actions" (cognitive component), and "If I share my problems with my colleagues, I know they will respond with concern and constructively" (affective component) (cf. Appendix 3). The response scale is a 6-point Likert type, ranging from 1 (totally disagree) to 6 (totally agree), with higher values indicating that the members of the team trust the remaining elements and the smaller ones indicate that there is low trust.

The Portuguese version was adapted by Inês Nascimento (2015) following the procedures recommended by Hambleton (2005). The psychometric qualities of the scale were evaluated on a sample of students with higher education (e.g. with a bachelor's degree) and later evaluated by Rita Nascimento (2017) in a Portuguese work teams' sample.

In this study and taking into account the analyzes made by Rita Nascimento (2017), a principal component analysis (PCA) was performed, forced to two factors with varimax rotation. In the PCA, the value of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) test was .91, and the Bartlett sphericity test is significant at $p < .001$, which indicated to proceed with PCA. The solution obtained explains 76.34% of the total variance, with communalities between .69 and .83 (considered adequate by Costello and Osborne, 2005). Regarding the loading values, they range from .72 to .80 concerning the first 4 items of the scale (cognitive component) and from .68 to .82 in the last 4 items of the scale (affective component) (considered adequate by Tabachnick and Fidell, 2007). The Cronbach alpha demonstrated good internal consistency for both components ($\alpha = .90$ in the cognitive component and $\alpha = .88$ in the affective component) (DeVellis, 2003).

Team task reflexivity. In order to measure the reflexivity of the team, a Portuguese version (developed within the scope of the VITEM project) of a scale proposed by Tjosvold et al. (2004) was used (cf. Appendix 3) and applied to 499 team members.

The scale of Tjosvold et al. (2004) is adapted from the *Team Reflexivity Scale* of Carter and West (1998) and is composed of 9 items that measure task reflexivity, with a Likert response scale of 5 points that ranges from 1 (totally disagree) to 5 (totally agree) and as an example of an item, "team members are open to better ways of working". In the study by Tjosvold et al. (2004), Cronbach's alpha of this scale was .88.

In this study, the dimensionality and reliability of the Portuguese version of this scale were analyzed. More specifically, dimensionality was studied through a PCA. In the PCA, the value of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) test was .92, and the Bartlett sphericity test is significant at $p < .001$, which indicated to proceed with PCA. The analyses point, as expected, to a unidimensional structure, taking into account the previously mentioned study.

The solution obtained explains 59.46% of the total variance, with communalities between .56 and .69 and loadings ranging from .62 to .83. Regarding reliability, the Cronbach alpha value obtained was .91.

Team innovation. To measure this variable, a Portuguese version of the three-item scale of Vera and Crossan (2005) was used, which, in turn, is based on Roth's innovation scale (1993, as cited in Vera & Crossan, 2005), applied to 111 team leaders. The items are "The team is highly innovative", "The team is fast in adopting new and innovative solutions" and "The team often introduces new and innovative solutions". Each item was rated on a 7-point Likert scale from 1 (totally disagree) to 7 (totally agree) (cf. Appendix 4).

As for the previous scales, due to the nonexistence of a Portuguese version, the scale was translated, retranslated and submitted to a group of specialists in the field of research on work teams, in order to evaluate whether there was agreement among all on the translation of the items (from which no change was necessary) (Hambleton, 2005).

Also, the psychometric properties for this scale were analyzed regarding dimensionality and reliability. The value of the KMO test was .74, and the Bartlett sphericity test which indicated a $p < .001$ allowed us to proceed with PCA. The initial solution indicated, as expected, a unidimensional structure. The solution obtained

explains 81.85% of the total variance, with communalities between .79 and .85 and loading ranging from .89 to .92. Concerning internal consistency, the Cronbach alpha obtained was .89.

Control variables. Team virtuality, team size, and members' tenure in the team were considered due to their potential influence in team reflexivity and team innovation. Team virtuality was included as a control variable since we can find studies that indicate that this variable affects innovation. For example, Gibson and Gibbs (2006) suggest that in teams with different degrees of virtuality, virtuality decreases innovation. These authors, in explaining the results they obtained, suggest that they are associated with the fact that virtuality reduces team trust and information sharing, prevents clarity of message and delays coordination of interaction.

Team size was included as a control variable since several studies show that team size affects team emergent processes/states and team results (e.g. Hülsheger et al., 2009).

Members' tenure in the team was also included as a control variable because, although there are no studies that directly relate this variable to team reflexivity or team innovation, some studies suggest that sociodemographic characteristics such as literacy can affect reflexivity (e.g. Marques & Silva, 2016). Thus, as tenure in the team falls within the category of sociodemographic characteristics, it may be suggested that this also affects reflexivity and innovation. On the other hand, group characteristics, such as cohesion (e.g. Janis, 1987) or team culture (e.g. López, 2017) develop over time that members remain in the same team, and could lead to psychological phenomena, like groupthink, or the establishment of taken for granted assumptions and routines, that can impair team reflexivity and innovation.

Degree of team virtuality: Information about the degree of virtuality was collected from team members (cf. Appendix 3), where they were asked to distribute a percentage of 100% for nine types of communication that belong to the scale developed by De Jong, Schalk, and Cursceu (2008).

Team size: Information about the size of each team was collected from team leaders through the question "Number of members of your team (consider team members only, do not include yourself)" (cf. Appendix 4).

Members' tenure in the team: This information was collected from team members through the question “How long have you been working on this team? Please indicate the number of years and months or months and weeks (for example, 1 year and 3 months)” (cf. Appendix 4).

Statistical Analysis

Concerning the psychometrics qualities of the measures, only reliability, through Cronbach alphas, was evaluated, given the existence of previous studies that demonstrated good psychometric qualities of the scale in samples similar to this one.

As previously stated, (cf. section III - Method, 1. Sample), firstly, the teams that were not valid were eliminated. Then, the missing values analysis was performed, and cases with more than 10% of missing values were eliminated, as recommended by Bryman and Cramer (2005). Secondly, in order to replace the missing values still present in the questionnaires, the Little Mcar Test was performed for each scale (Hair, Black, Babin, & Anderson, 2010).

Where the test revealed a random distribution of the missing values ($p \geq .05$), the replacement was implemented by the average because there was no pattern that could be explained by the characteristics of the items and/or the participants (Hair et al., 2010). In cases where the distribution was non-random ($p < .05$), the replacement was performed using the *Expected Maximization* (EM) method (Hair et al., 2010). Thus, the missing values of the task reflexivity scale were replaced by the average. In the trust scale, the replacement was through the EM method. The team innovation measure had no missing values.

The data were aggregated for the team level since they were collected at the individual level. In order to justify this aggregation, the values of r_{wg} , (within-group interrater reliability statistic) proposed by James, Demaree, and Wolf (1984), as well as the values of Intraclass Correlation Coefficients, ICC (1) and ICC (2), were calculated for the scales answered by team members. In order to perform these calculations, the *Excel 2007 Tool for Computing Interrater Agreement (IRA) and Interrater Reliability (IRR) Estimates for Consensus Composition Constructs*, prepared by Biemann and Cole, in 2014, and designed to accompany the work published by Biemann, Cole, and Voelpel (2012), was used.

Taking into account the null distribution uniform model, often used when there is no theory or data suggesting the application of another distribution (Cohen, Doveh, & Nahum-Shani, 2009), the medium values obtained for r_{wg} were .89 for cognitive trust, .89 for affective trust, and .92 for team reflexivity. Considering that the recommended value for r_{wg} is, at least, .70 (Lance, Butts, & Michels, 2006), the values presented at all scales are higher than the threshold, and it can be inferred that there is a satisfactory agreement between team members (Brown & Hauenstein, 2005).

Regarding ICC (1) values, a value of .27 was obtained for cognitive trust, .30 for affective trust, and .41 for team reflexivity. For ICC (2) the values found were .62 for cognitive trust, .66 for affective trust, and .75 for team reflexivity. These values are in accordance with the values considered acceptable in the literature (Bliese, 2000). So, in general, the values found in both the r_{wg} and the ICCs support the aggregation of data at the team level.

The mediation hypotheses were tested through *Simple Mediation Analysis* using model 4 of PROCESS, a macro developed for SPSS by Hayes (2013). PROCESS allows the use of the bootstrapping method with 95% confidence intervals for the indirect effects, based on 1000 samples. These indirect effects, in simple mediation, are calculated through the product of the coefficients of the independent variable for the mediator and the mediator for the dependent variable. The indirect effect is statistically significant when zero is not included between the minimum and maximum limits of the 95% confidence intervals generated by PROCESS. The use of this method has the advantage of respecting the irregularities in the sample distribution of $a*b$ and, as a result, produces inferences that are more likely to be accurate (and with greater power) than when the normal theory approach is used. Also, this method is particularly useful when using smaller samples, since it is in this type of smaller samples that the non-normality of the $a*b$ sample distribution is probably more severe, and the power advantages of the bootstrap are more pronounced (Hayes, 2018).

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, these assumptions were fulfilled, pointing to the maintenance of all the cases and variables in the analysis to be performed.

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 (e.g., Gibson & Gibbs, 2006; Hülshager et al., 2009; Marques & Silva, 2016).

Table 1 shows that the three variables studied significantly correlate with each other. Specifically, both components of trust, cognitive and affective, had positive and significant correlations with team innovation ($r = .33, p < .001$; $r = .22, p = .021$, respectively), and with team task reflexivity ($r = .63, p < .001$; $r = .62, p < .001$, respectively). These results provide empirical support for hypothesis 1, which states a positive link between team trust and team innovation, and for hypothesis 3, which postulates a positive relationship of team trust with team task reflexivity. Team task reflexivity had a positive and significant correlation with team innovation ($r = .27, p = .004$), providing support for hypothesis 2.

Regarding control variables, member's tenure in the team was correlated with team task reflexivity ($r = -.27, p = .004$) and team size was also correlated with team innovation ($r = -.19, p = .042$). On the other hand, team virtuality did not significantly correlate with the mediator and criterion variables and was eliminated from all successive analyses, following the recommendations of Becker (2005).

Table 1

Correlations, Means, Standard Deviations and alpha coefficients of the Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Team size	6.10	3.84	-						
2. Member's tenure	5.30	5.22	.17	-					
3. Team virtuality	33.71	16.02	.04	-.17	-				
4. Cognitive trust	5.06	.56	-.15	-.17	.12	(.90)			
5. Affective trust	5.01	.60	-.10	-.09	.15	.80***	(.88)		
6. Team task reflexivity	3.75	.55	-.04	-.27**	.14	.63***	.62***	(.91)	
7. Team innovation	5.09	1.02	-.19*	-.08	-.02	.33***	.22*	.27**	(.89)

Notes. $N = 111$; * $p < .05$; ** $p < .01$; *** $p < .001$; Cronbach *alphas* in brackets

Our mediation hypotheses (4a and 4b) were tested using the PROCESS macro in SPSS, Model 4.

Table 2 presents the results for the test of the model involving cognitive trust. Cognitive trust (*path a*: $b = 0.59$, $SE = 0.07$, $p < .001$) and member's tenure ($b = -0.02$, $SE = 0.01$, $p = .021$) were significantly related to team task reflexivity and the model explained 43% of the variance of team task reflexivity ($R_2 = .43$, $F(3) = 26.61$, $p < .001$). In a model that explains 14% of the variability in team innovation ($R_2 = .14$, $F(4) = 4.33$, $p = .003$), the relationship between team task reflexivity and team innovation, after controlling for the effect of cognitive trust, did not reach statistical significance (*path b*: $b = 0.23$, $SE = 0.22$, $p = .312$). Cognitive trust did have a significant and positive effect on the team innovation (*path c'*: $b = 0.43$, $SE = 0.21$, $p = .045$). These results, specifically the non-significance of path b, do not provide support for a mediation effect. The statistical significance of the indirect effect of cognitive trust on team innovation via reflexivity was tested through the calculation of bias-corrected 95% bootstrap intervals, based on 1000 samples. It revealed a confidence interval that included the value of zero,

which does not support a significant indirect effect ($a*b = 0.13$, $Boot SE = 0.11$, 95 % CI [-0.05, 0.36]), as expected by the previously reported finding of path b. These results fail to support hypothesis 4a, which pointed to a mediation effect of team reflexivity on the relationship of team cognitive trust with team innovation.

Table 2

Results of simple mediation analysis examining the mediating role of team task reflexivity in the link between team cognitive trust and team innovation

DV/Predictor	<i>b</i>	<i>SE</i>	95% CI		<i>R</i> ²
			<i>LL</i>	<i>UL</i>	
Team task reflexivity					.43***
<i>Cognitive trust</i>	0.59***	0.07	0.45	0.74	
<i>Member's tenure</i>	-0.02*	0.01	-0.03	-0.003	
<i>Team size</i>	0.01	0.01	-0.01	0.03	
Team innovation					.14*
<i>Team task reflexivity</i>	0.23	0.22	-0.22	0.67	
<i>Cognitive trust</i>	0.43*	0.21	0.01	0.85	
<i>Member's tenure</i>	0.004	0.02	-0.03	0.04	
<i>Team size</i>	-0.04	0.03	-0.09	0.007	
Indirect Effect	0.13	0.11	-0.05	0.36	

Note. N = 111. DV = dependent variable; *b* = non-standardized regression coefficient; *SE* = standard error; CI = confidence intervals; LL = lower levels; UL = upper levels

* $p < .05$

** $p < .01$

*** $p < .001$

Table 3 presents the results of the mediational model involving affective trust. Affective trust (*path a*: $b = 0.55$, $SE = 0.07$, $p < .001$) and member's tenure ($b = -0.02$, $SE = 0.01$, $p = .003$) were significantly related to team task reflexivity and the model explained 43% of the variance of team task reflexivity ($R^2 = .43$, $F(3) = 27.19$, $p < .001$). In a model that explains 11% of the variability in team innovation ($R^2 = .11$, $F(4) = 3.25$, $p = .015$), team task reflexivity (*path b*: $b = 0.43$, $SE = 0.23$, $p = .058$) is marginally related to team innovation after controlling for the effects of affective trust. The relationship of affective trust with team innovation became non-significant (*path c'*: $b = 0.10$, $SE = 0.20$, $p = .627$) when team reflexivity was included in the model. The statistical significance of the indirect effect of affective trust on team innovation through team task reflexivity was tested via bootstrapping with 1000 samples. It revealed a confidence interval that did not include a zero value, indicating a significant indirect effect ($a*b = 0.24$, $Boot SE = 0.11$, 95 % CI [0.06, 0.50]). These results support hypothesis 4b, indicating a full mediation role of team task reflexivity in the link team affective trust – team innovation.

Table 3

Results of simple mediation analysis examining the mediating role of team task reflexivity in the link between team affective trust and team innovation

DV/Predictor	<i>b</i>	<i>SE</i>	95% CI		<i>R</i> ₂
			<i>LL</i>	<i>UL</i>	
Team task reflexivity					.43***
<i>Affective trust</i>	0.55***	0.07	0.42	0.68	
<i>Member's tenure</i>	-0.02*	0.01	-0.04	-0.01	
<i>Team size</i>	0.01	0.01	-0.01	0.03	
Team innovation					.11*
<i>Team task reflexivity</i>	0.43†	0.23	-0.02	0.89	
<i>Affective trust</i>	0.10	0.20	-0.30	0.50	
<i>Member's tenure</i>	0.004	0.02	-0.03	0.04	
<i>Team size</i>	-0.05	0.03	-0.10	0.001	
Indirect Effect	0.24	0.11	0.06	0.50	

Note. N = 111. DV = dependent variable; *b* = non-standardized regression coefficient; *SE* = standard error; CI = confidence intervals; LL = lower levels; UL = upper levels

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

Discussion

The main goal of this study is to contribute to the understanding of the factors that promote the innovation capacity of work teams. Accordingly, we tested, in the context of teams with some degree of virtuality, the relationship between team trust (in their cognitive and affective components) and team innovation, as well as the mediating role of team task reflexivity in this relationship.

First, we found a positive and significant association between trust (in their affective and cognitive components) and team innovation, which is in line with several previous studies (e.g., Ruppel & Harrington, 2000; West & Anderson, 1996), suggesting that trust, often defined as the willingness to take risks (e.g., Mayer et al., 1995; Rousseau et al., 1998), is an antecedent of team innovation. In other words, our results point to that when affective trust among team members is stronger, they feel safer to collaborate to achieve innovation (Khan et al., 2015). Concerning cognitive trust, it was supported in the teams' sample we studied that the trustworthiness perception among team members, about relevant aspects regarding performance, is related to team innovation (Khan et al., 2015).

The results also point to a relationship of team task reflexivity with team innovation, in line with previous research (e.g., Farnese & Livi, 2015; Schippers et al., 2015). Thus, our results suggest, according to Schippers et al. (2015), and taking into account that the sample under study contains teams from different sectors of activity, that when teams are highly reflexive, they will be more innovative than teams with low reflexivity, regardless the work environment.

Thus, reflexivity can be an important process to promote team innovation, development, and implementation of more efficient processes or procedures. Thus, strategies to increase the team's reflexivity are something that companies must provide to their members and it is important to note that previous research suggests some necessary conditions for creating an environment conducive to team reflexivity. According to Tjosvold et al. (2004), the feeling of unity, team critical spirit and the establishment of cooperative and challenging, but not competitive, objectives seem to be a good basis for the development of reflexivity. Also, the feedback given to the team on processes, results, and performance, where the team tries to understand the meaning of the feedback received thus creating future improvement plans (Konradt et al., 2016), is one of the best practices.

However, due to the fact that team reflexivity and team innovation are low-moderated related (Cohen, 1988), and that its relationship loses statistical significance in the models that also include team trust (namely cognitive trust), team size and members' tenure as predictors. However, we should cautiously look at this finding, since the sample under study contains teams from different sectors of activity, and this mediation effect may be being moderated by the complexity of team processes.

Regarding the relationship between team trust, in both components, and team task reflexivity, the results point to a positive and statistically significant relationship between these variables. This result is in line with other studies (e.g., MacCurtain et al., 2010) that have revealed that trust acts as a background for team task reflexivity. In this way, our results support the perspective that when trust among team members is strong, team task reflexivity is also stronger. Thus, when individuals, in a team, trust one another, they tend to reflect and discuss more openly the issues raised from the task they are performing, adapting to the surrounding environment proactively (MacCurtain et al., 2010; Tjosvold et al. al., 2004).

However, it is important to reflect on the fact that trust is developed over time and there is a great need to maintain different practices within the team that make it possible to build trust. First, there must be strong and clear leadership as teams are often not in the same place, and it is in these situations that firm leadership is essential. Strong and proactive leaders can easily identify conflict, lack of productivity, and act accordingly. Another strategy involves team building activities, which are a great way to foster team spirit, through various activities, usually in outdoor format. These can be from simple exercises to more complex simulations, or even multi-day retreats, in which several group dynamics games are performed. Finally, trust circles are also a way of building trust within teams, and the environment must be conducive to conversations, where workers have space to express their thoughts and opinions, to ensure that they are heard and respected by their colleagues.

In order to contribute to the understanding of how team trust translates into team innovation, we tested the role of team reflexivity as a mediator. We based this option on the rationale that team trust, by one hand, is related to team innovation (Ruppel & Harrington, 2000; Costa & Anderson, 2011) and to higher levels of team reflexivity. And that team reflexivity, by another hand, leads to higher levels of team innovation (Schippers et al., 2015).

The results did not show that team task reflexivity acts as a mediator of the relationship between cognitive trust and team innovation. Only a direct effect of cognitive trust on team innovation was observed. These results diverge from those who suggest that cognitive trust acts indirectly on team innovation through team task reflexivity (e.g., Ruppel & Harrington, 2000). However, cognitive trust has a moderate correlation with team innovation, being possible to expect a direct effect of the trust that emerges associated to the recognition of attitudes of professionalism, and demonstration of competences of the other members in the accomplishment of tasks on the promotion of innovation. Nevertheless, it is important to reflect on the fact that team task reflexivity is not the only possible mediator of the relationship between team trust and team innovation, affective commitment (e.g., Bastos, 2018) is an example of a mediator. This suggestion is because affective commitment can lead to a greater sharing of knowledge (Bouwman, Runhaar, Wesselink, & Mulder, 2017), which supports the idea that people will share more ideas and knowledge among team members, which promotes innovation. Other studies also suggest that trust is positively associated with affective commitment to the team (e.g., Schlechter & Strauss, 2008).

When analyzing the results regarding affective trust, we observe another type of results, in which there is an indirect effect of affective trust on team innovation via team task reflexivity. This result point to a full mediation effect of team reflexivity on this relationship, suggesting that affective trust translates into team innovation by the positive effect that has on team reflexivity.

Thus, and in spite of the variance of team innovation explained by the model, this finding suggests that trust that derives from feelings and sharing ideas, to receive support and understanding from others, has an impact on team task reflexivity. In turn, the reflection and discussion of team objectives, strategies, and processes allow the team to adapt to changing circumstances and the periods of change and, consequently, promoting team innovation. Given the results obtained for affective trust, which showed a low-moderate relation with innovation, it could already be expected that there would not be a direct effect due to the lack of strength of the relationship. This result can also be interpreted as in the study by Khan et al. (2015) when it suggests that affective trust can encourage team members to share new information and ideas essential for innovation.

Conclusions, limitations and suggestions for future research

The uncertainty is growing in modern working contexts, where time pressure, unpredictable environmental conditions, and the relevance of knowledge and distributed skills drive this growth (Navarro, Quijano, Berger, & Meneses, 2011). Organizations seek to maximize their agility and ability to adapt to dynamic environments and to generate innovation (Reuveni & Vashdi, 2015), and it is important to train their teams to deal with uncertainty and to create the synergies necessary to innovate (Leuteritz, Navarro, & Berger, 2017). As such, understanding the relationship of this construct (team innovation) with some of its potential predictors, like team trust and team task reflexivity, constitutes a relevant contribution to the research.

Thus, based on the literature review, we proposed to test a model that included team trust (affective and cognitive) as an input variable, team task reflexivity as a mediating variable and team innovation as the output variable.

In fact, team's trust, in its affective and cognitive components, shows to be positively related to team innovation and team task reflexivity, supporting the results presented in other investigations. On the other hand, team task reflexivity shows to be a mediator between affective trust and team innovation.

From the intervention' point of view, our results highlight the importance of creating a climate of trust among work teams' members in order to promote team innovation. Team's leaders should focus on strategies that increase the perceived trustworthiness of colleagues, which will lead to team task reflexivity and, consequently, the promotion of team innovation, such as team building. In addition, the results showed a stronger influence of cognitive trust on team task reflexivity and team innovation, compared to affective trust, highlighting the need for leaders and managers to encourage, in addition to creation and maintenance of emotional bonds, the recognition of attitudes of professionalism and competences from others.

On the other hand, the results of the present study also demonstrated that team task reflexivity is positively related to team innovation. Thus, the present research contributes to the literature that portrays the positive relationship between team task reflexivity and team innovation (e.g., Farnese & Livi, 2015; Schippers et al., 2015), highlighting the importance of high levels of reflexivity in the work teams, in order to promote organizational performance, taking into account the capacity for innovation.

Team's leaders should often develop reflective strategies as a way of better managing their tasks and functioning, in order to promote monitoring, teamwork, and development and implementation of improvement plans, stimulating attitudes of change (Tjosvold et al., 2004) so that their levels of reflexivity increase and team innovation as well, such as feedback.

On the other hand, the present study also has some limitations. Firstly, the use of the questionnaires as a data collection instrument may have led to the social desirability or contamination, i.e., the questionnaires' responses may reflect the desire of the members to convey a positive image of the team to the which they belong. However, it is important to note that the data for the variables under analysis came from two sources of information (members and team leader) from 111 teams and, the fact that the analyses were carried out at the group level, pointing to a strength of the study.

However, the fact that there was a strong relationship between trust and reflexivity ($r = .60$), may have generated common source bias and possible inflation effects (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), because the collections of these data were performed at the same time and to the same source of information. In this way, one suggestion for further research is to carry out a longitudinal study in which the variables are measured at different times (ideally measuring trust before the mediator), although the literature review allows establishing, from a conceptual point of view, the causal meaning of the analyzed relationships. Also, it is important to use a longitudinal design because, as suggested by Webber (2008), affective trust usually takes longer to develop and is longer-lasting than cognitive trust, and it would be interesting to replicate this study to the same sample, to verify if affective trust increased and, consequently, its impact on team innovation.

In future investigations, it would be relevant to adopt such a longitudinal design in which other variables that are also relevant would be included, and that helps in the promotion of team innovation. Thus, it is advisable to study constructs such as intragroup conflict or leadership style, as suggested by Gilson et al. (2015). It would also be pertinent to adopt the original Team Reflexivity Scale of Carter and West (1998), using its two dimensions - task reflexivity and social reflexivity - given that in the present study we focused only on task reflexivity, similar to other studies (e.g., Tjosvold et al., 2004). This other dimension can be interesting to include since it promotes the well-being and

development of the teams' members and helps reflection on how a team deals with conflicts (Carter & West, 1998).

Regarding team innovation, and as previously mentioned, it can be divided into two components (genesis and implementation of ideas), which is an interesting point to analyze in future studies. This suggestion stems from the fact that innovation and creativity are complementary concepts, in which authors state that creativity is seen as the first stage of the problem-solving process, and is a necessary, but not sufficient, condition for innovation to happen (Amabile, et al. 1996). Thus, it would also be relevant to have a questionnaire with different items for each component to generate knowledge about the impact of inputs and processes on creativity and on innovation.

In the same line of recommendations, it is advised that the future research sample contain teams from different countries/cultures or that this study be replicated in other countries, due to the fact that the present sample consists only of Portuguese organizations, which impairs the generalization of the results obtained to organizations from other countries or different cultures. Also, given the pandemic we are experiencing, it would be important to replicate this study in the future, as I believe that many organizations have adopted a teleworking regime, and it is interesting to see if there was any decrease in the team's trust or reflexivity and, consequently, in innovation.

Also, and taking into account that the sample under study contains teams from different sectors of activity, it would be relevant to explore the study of the moderation of the variable complexity of team processes in the relationship between reflexivity and innovation.

Finally, it is important to remark the fact that there are no studies that portray the relationship between the three variables mentioned, adding value to the research produced and emphasizing the importance of continuing it, creating new opportunities for new studies that can contribute to their improvement.

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Appendixes

Appendix 1: Presentation Letter

Appendix 2: Research Project (VITEM)

Appendix 3: Members' Questionnaire

Appendix 4: Leaders' Questionnaire

Appendix 1: Presentation Letter



Coimbra, _____ de _____ de 201_

Exmo/a. Senhor/a Doutor/a

Dirigimo-nos a V. Exa. na qualidade de estudantes de mestrado da Universidade de Coimbra.

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 (Univ. Aveiro), Prof. Doutor Paulo Renato Lourenço (Univ. Coimbra) e Prof.a Doutora Teresa Rebelo (Univ. Coimbra), 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 virtuais ou com algum grau de virtualidade.

Para levar a cabo esta investigação pretendemos aplicar, em diferentes organizações e em dois momentos distintos, um questionário a vários grupos/equipas de trabalho e aos respetivos líderes. O primeiro momento decorrerá entre os meses de outubro e novembro de 2018 e o segundo durante os meses de dezembro de 2018 e janeiro de 2019. O tempo estimado para o preenchimento de cada questionário ronda os 20 minutos para os membros e os 7 minutos para os líderes.

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 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 gratas pela atenção dispensada, aguardamos o vosso contacto. Com os melhores cumprimentos,

(P'la equipa de investigação)

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Appendix 2: Research Project (VITEM)



Projeto de Colaboração em Investigação

Projeto VITEM - A incidência de subgrupos e de competências emocionais no bem-estar e desempenho de equipas virtuais

1. Introdução e Objetivos

Fruto da globalização e avanço das tecnologias, é cada vez mais comum a presença e utilização de grupos/equipas com algum grau de virtualidade nas organizações. Embora a investigação sobre grupos em contexto organizacional seja já bastante extensa e diversificada, torna-se imprescindível aprofundar o conhecimento acerca do referido tipo de grupos. É neste contexto que se insere o Projeto VITEM - A incidência de subgrupos e de competências emocionais no bem-estar e desempenho de equipas virtuais. Trata-se de um Projeto internacional que envolve investigadores de diversas Universidades de Portugal (Universidade de Coimbra, Universidade de Aveiro e Universidade da Beira Interior) e de Espanha (Universidade de Valência e Universidade de Sevilha) e visa compreender como, em equipas com algum grau de virtualidade, alguns constructos relativos ao funcionamento grupal (cf. 3. “Variáveis em estudo”) se relacionam entre si e com a eficácia das equipas de trabalho, nomeadamente no que diz respeito ao desempenho grupal, à inovação e à capacidade da equipa para se adaptar à mudança e continuar a trabalhar como tal no futuro (viabilidade grupal).

A realização do Projeto permitirá contribuir para o aumento do conhecimento acerca de equipas de trabalho com algum grau de virtualidade e, conseqüentemente, possibilitar a formulação e utilização de práticas capazes de promover um melhor funcionamento dessas equipas.

Em Portugal, a investigação do Projeto VITEM é coordenada por Paulo Renato Lourenço (Univ. Coimbra), Teresa Rebelo (Univ Coimbra), Isabel Dimas (Univ. Aveiro) e Marta Alves (Univ. da Beira Interior) e inclui a realização de diversos estudos. Alguns dos estudos serão realizados por estudantes do último ano do Mestrado Integrado em

Psicologia, da Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra e do Mestrado em Psicologia Clínica e da Saúde da Universidade da Beira Interior, no âmbito das suas dissertações de mestrado, sob supervisão científica dos Doutores Paulo Renato Lourenço, Teresa Rebelo, Isabel Dimas e Marta Alves.

2. Equipa responsável pela realização dos estudos

Estudantes do 2.º ano do Mestrado Integrado em Psicologia, da área de especialização de Psicologia das Organizações e do Trabalho, da Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra:

- Adriana Moreira
- Ana Rita Bravo
- Catarina Gouveia
- Catarina Senra
- Joana Dinis
- Sara Liliana Silva

Orientação:

- Prof. Doutor Paulo Renato Lourenço
- Prof.ª Doutora Teresa Rebelo
- Prof.ª Doutora Isabel Dórdio Dimas

Estudante do 2º ano do Mestrado em Psicologia Clínica e da Saúde da Universidade da Beira Interior:

- Helena Baptista

Orientação:

- Prof.ª Doutora Marta Pereira Alves

3. Variáveis em estudo:

- Aprendizagem grupal – processo contínuo de reflexão e ação, voltado para a obtenção e processamento de informação, com o objetivo de detetar, compreender

e adaptar melhor a equipa às mudanças do meio ambiente, melhorando a sua eficácia;

- Bem-estar afetivo individual – sentimentos/emoções vivenciados por uma pessoa;
- Capacidade de expressão de emoções – capacidade de os indivíduos, numa relação, expressarem, mais as suas emoções, quer as positivas quer as negativas, de uma forma construtiva;
- Capital psicológico das equipas – estado psicológico positivo caracterizado por atributos como a autoeficácia, o otimismo, a esperança e a resiliência;
- Comprometimento afetivo com a equipa – caracteriza-se pela forte convicção e aceitação dos objetivos e valores da equipa à qual se pertence, vontade de exercer esforços consideráveis em nome desta e pelo forte desejo de continuar a ser seu membro;
- Confiança grupal – capacidade de os membros de uma equipa confiarem uns nos outros, existindo assim cooperação e partilha de ideias;
- Conflito intragrupal – divergência de perspetivas no seio do grupo, percebida como geradora de tensão por pelo menos uma das partes envolvidas numa determinada interação
- Envolvimento no trabalho em equipa – envolvimento dos colaboradores com o trabalho de equipa. É composto por três componentes: vigor, dedicação e absorção;
- Faultlines/Presença de subgrupos – linhas hipotéticas de divisão que podem repartir um grupo em subgrupos com base num ou mais atributos, gerando subgrupos relativamente homogéneos;
- Gestão do trabalho de equipa – grau em que os membros da equipa estruturam a realização do seu trabalho, através do planeamento, de maneira a que consigam organizar e facilitar a implementação de novas práticas na equipa, bem como acompanhar a realização do trabalho;
- Grau de Virtualidade – refere-se à medida em que a interação de uma equipa se encontra dependente das tecnologias de comunicação, sendo esta virtualidade compreendida como um continuum que vai desde um polo "nada virtual" (referente a equipas que interagem exclusivamente cara-a-cara) para um polo

"totalmente virtual" (correspondente a equipas virtuais, cujos membros não se encontram num mesmo local);

- Reflexividade da equipa sobre a tarefa – medida em que os membros da equipa refletem e adaptam coletivamente os objetivos, estratégias e processos da equipa;
- Regulação emocional – conjunto de processos através dos quais o indivíduo influencia as emoções que experiencia, o momento da sua ocorrência e a sua expressão;
- Satisfação com a equipa – vontade de continuar a trabalhar com uma mesma equipa em virtude da ocorrência de experiências agradáveis durante a realização de um projeto com essa equipa.

4. Amostra e participação das organizações

Este estudo é direcionado aos membros de equipas/grupos virtuais ou com algum grau de virtualidade e respetivos líderes. Para ser considerada uma equipa válida para o estudo é necessário que (1) seja constituída por três ou mais membros (excluindo o líder), (2) os membros interajam, pelo menos, em algum grau, através de comunicação mediada por tecnologia eletrónica (e.g. computador, telefone) (3) se reconheçam e sejam reconhecidos como equipa, (4) partilhem relações de interdependência e (5) tenham em vista um objetivo comum.

A participação da organização consiste na autorização da recolha de dados. Assim, a organização deve proporcionar condições adequadas para a recolha de informação necessária à realização da investigação.

A recolha de dados acontecerá em dois períodos, em datas a acordar com a organização. O primeiro decorrerá durante os meses de outubro e novembro de 2018 e o segundo durante os meses de dezembro de 2018 e janeiro de 2019.

5. Formas de recolha de informação e tempo previsto

Na organização, em cada um dos momentos de recolha de dados referidos, será necessário:

- O preenchimento de um questionário pelos membros dos grupos/equipas de trabalho participantes no estudo (cerca de 20 minutos);

- O preenchimento de um questionário pelos líderes dos grupos/equipas de trabalho participantes no estudo (cerca de 7 minutos).

6. Direitos e obrigações da equipa de investigação

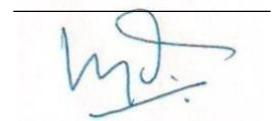
A equipa de investigação tem direito a:

- Não fornecer quaisquer resultados do estudo caso haja interrupção da participação ou recolha incompleta de informação;
- Devolver os resultados do estudo somente nas condições de a organização (1) aceitar que esses dados sejam devolvidos num formato que proteja a identidade dos participantes e (2) garantir que a informação recolhida nunca será utilizada com a finalidade de avaliar o desempenho dos colaboradores envolvidos;
- Fornecer os resultados somente aquando da conclusão do estudo.

A equipa de investigação tem o dever de:

- Assegurar 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 pertencentes à 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;
- Fornecer à organização, em formato digital (.pdf), um exemplar de cada uma das dissertações de mestrado realizadas com base na informação recolhida.

P'la Coordenação da Equipa de Investigação



Appendix 3: Members' Questionnaire

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

PARTE 2

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%

Reflexividade da equipa

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

1 Discordo fortemente	2 Discordo	3 Não concordo nem discordo	4 Concordo	5 Concordo fortemente
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	1	2	3	4	5
1.A equipa revê os seus objetivos com frequência.					
2.Discutimos regularmente em que medida a equipa está a trabalhar de forma eficaz.					
3.Os métodos utilizados pela equipa para realizarem o trabalho são frequentemente debatidos na equipa.					
4.Nesta equipa, alteramos os nossos objetivos em função das circunstâncias.					
5. Discutimos regularmente em que medida transmitimos a informação entre nós de uma forma adequada.					
6. Esta equipa revê com frequência a forma como faz o seu trabalho					
7.Os membros da equipa identificam os pontos fortes do seu trabalho, assim como as áreas que precisam de melhorias.					
8.Os membros da equipa estão comprometidos com a melhoria contínua da equipa.					
9.Os membros da equipa estão abertos a melhores formas de trabalhar.					

Confiança grupal

São apresentadas em seguida mais algumas afirmações acerca da sua equipa de trabalho. Pedimos-lhe que, **considerando a equipa como um todo**, nos indique em que medida concorda ou discorda de cada uma das afirmações referidas. Para isso, assinale com um X, à frente de cada afirmação, o valor que melhor corresponde ao que, em sua opinião, acontece na sua equipa de trabalho. Utilize, por favor, a seguinte escala:

1	2	3	4	5	6
Discordo muito	Discordo moderadamente	Discordo ligeiramente	Concordo ligeiramente	Concordo moderadamente	Concordo muito

	1	2	3	4	5	6
1. Os meus colegas encaram os objetivos do grupo com profissionalismo e dedicação.						
2. Tendo em conta os antecedentes dos meus colegas, não tenho razões para duvidar da sua competência e preparação para levar a cabo o nosso trabalho.						
3. Posso confiar que os meus colegas não me dificultarão o trabalho com as suas ações.						
4. Os meus colegas confiam neste grupo.						
5. Posso falar livremente com os meus colegas sobre as dificuldades que estou a ter com o trabalho sabendo que eles estão dispostos a ouvir.						

6. Todos sentiríamos uma sensação de perda se alguém saísse do grupo e já não pudéssemos trabalhar juntos.						
7. Se eu partilhar os meus problemas com os meus colegas, sei que eles irão responder com preocupação e de forma construtiva.						
8. Considero que todos fizemos um investimento emocional considerável na nossa relação de trabalho.						

Appendix 4: Leaders' Questionnaire

Cód. Organização:	Cód. Equipa:	Cód. Individual:
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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 7 minutos]

PARTE 1

(Dados demográficos - para fins exclusivamente estatísticos)

Idade: _____ Sexo: M F

Habilitações literárias: _____

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). _____

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 a sua equipa? 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 esta equipa? 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: _____

PARTE 2

Inovação Grupal

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 que lidera. Assinale com uma cruz (x) o valor que melhor se adequa ao que lhe é apresentado em cada afirmação, utilizando a seguinte escala:

Discordo Totalmente	Discordo Bastante	Discordo Ligeiramente	Não Concordo nem Discordo	Concordo Ligeiramente	Concordo Bastante	Concordo Totalmente
1	2	3	4	5	6	7

	1	2	3	4	5	6	7
1. A equipa é altamente inovadora.							
2. A equipa é rápida na adoção de soluções novas e inovadoras.							
3. A equipa introduz com frequência soluções novas e inovadoras.							