

LEADERSHIP SENSEGIVING AND LEADERSHIP PROMOTION OF SENSEMAKING: AN ANALYSIS OF THE MODERATED MEDIATION ON TEAM CONFLICTS AND IMPLICATIONS ON TEAM EFFECTIVENESS

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LEADERSHIP SENSEGIVING AND LEADERSHIP PROMOTION OF SENSEMAKING: AN ANALYSIS OF THE MODERATED MEDIATION ON TEAM CONFLICTS AND IMPLICATIONS ON TEAM EFFECTIVENESS

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Abstract

In the current world, where most of the work inside organizations is completed through

teamwork, team effectiveness becomes an important indicator of organizational performance,

in which leadership behavior has a strong influence. The present study aims to analyse the

combined effect of leadership sensegiving and the promotion of team sensemaking on the

relationship between intragroup conflicts (relational and task) and team effectiveness. In the

existing literature there are several studies on the types of conflicts and their positive and

negative impacts on team effectiveness, as well as leadership sensegiving and the promotion

of sensemaking. However, there are not yet many studies analyzing these specific leadership

behaviors in conflict situations as predictors of team effectiveness. A moderated mediation

model is proposed to analyze the combined effects of leadership sensegiving and the

promotion of team sensemaking on intragroup conflicts (relationship and task) as predictors

of team effectiveness. When conducting the study in 55 teams, however, the results found did

not support the proposed model. Nevertheless, the results did show a significant effect of the

leadership promotion of sensemaking as a simple moderator in the relationship between

leader sensegiving and relationship conflicts. More specifically, when there is a high level of

leadership promotion of sensemaking and low level of leadership sensegiving, relationship

conflict is negatively affected, decreasing its occurrence.

Keywords: Leadership sensegiving; leadership promotion of sensemaking; conflicts; team

effectiveness.

JEL Classification System: D23 – Organizational Behavior; O15 – Human Resources

Resumo

No mundo atual, onde a maior parte do trabalho realizado dentro das organizações é feito

através de grupos de trabalho, a eficácia da equipa se torna um importante indicador do

desempenho organizacional, na qual o comportamento da liderança tem grande influência. O

presente estudo tem como objetivo analisar o efeito combinado do sensegiving da liderança e

da promoção do sensemaking da equipa no relacionamento entre conflitos (relacional e de

tarefa) e a eficácia da equipa. Na literatura há diversos estudos sobre tipos de conflitos e seus

impactos positivos e negativos na eficácia da equipa, assim como do sensegiving da liderança

e da promoção do sensemaking. Entretanto, ainda não há muitos estudos que relacionem esses

comportamentos específicos da liderança em situações de conflito como preditores da

eficácia. Um modelo de mediação moderada é proposto para analisar o efeito combinado do

sensegiving do líder e da promoção do sensemaking pelo líder nos conflitos de grupos

(relacionamento e tarefa) como preditores da eficácia. Ao conduzir o estudo em 55 equipas de

trabalho, porém, os resultados encontrados não suportam o modelo proposto. No entanto, os

resultados mostram um efeito significativo da promoção do sensemaking pela liderança como

moderador simples na relação entre o sensegiving do lider e conflitos de relacionamento. Mais

especificamente, quando há um alto grau de promoção do sensemaking e baixo nível de

sensegiving do líder, o conflito de relacionamento é afetado negativamente, diminuindo sua

ocorrência.

Keywords: Sensegiving da liderança; promoção do sensemaking da equipa; conflitos; eficácia

da equipa.

Classificação JEL: D23 – Organizational Behavior; O15 – Human Resources

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Introduction

Organizations are increasingly restructuring their activities around the teams (Marks *et al.*, 2001). Therefore, team effectiveness has become a key indicator of organizational effectiveness, since most of the work done today inside organizations is already completed through teamwork.

It is not possible, however, to talk about teams without mentioning conflicts as they are intrinsically connected to interactions between individuals and therefore, are inevitable (Jehn and Bendersky, 2003; Jehn and Mannix, 2001; Jehn, 1995). Conflicts can be defined as a different perception of ideas, opinions and points of view inside the team (Shaw et al, 2011).

Some researches show that leadership has an important role in managing conflicts and affirm that a leader managing conflicts greatly affects team performance (Zaccaro *et al.*, 2001; Morgeson *et al.*, 2010). Consequently, it is important to understand which leadership behaviors are important in this context.

Sensegiving and the promotion of team sensemaking are two leadership behaviors that have been more explored lately, and although it has been broadly approached in the literature (Gioia and Chittipeddi, 1991; Foldy *et al.*, 2008; Zaccaro *et al.*, 2001; Morgeson *et al.*, 2010), there is still a lack of studies focusing on intragroup conflicts context and possible impacts of leadership sensegiving on team effectiveness.

Therefore, this study aims to analyse the combined effects of leadership sensegiving and leadership promotion of sensemaking on different types of conflicts (task and relationship) and team effectiveness. This report is divided in two parts. Part I contextualizes the theoretical framework, the definitions of teamwork, leadership, sensemaking, sensegiving, promotion of sensemaking and different types of conflicts and its relation to team effectiveness. It also presents the hypotheses defined for this research and the proposed model with moderated mediation. Part II is constituted by the empirical research, where it is presented the investigation and respective methodology, the results found and the discussions, conclusions and implications for future research.

Part I - Theoretical Framework

Teamwork and Team Effectiveness

Teamwork has a dramatic effect on organizational performance. An effective team can help an organization achieve incredible results, however, a team that is not working well can cause unnecessary disruption, failed delivery and strategic failure. Also, high performing teams can bring many benefits to the companies other than just results, such as motivated employees, innovation, flexibility, autonomy, and job satisfaction (Sharma *et al.*, 2012).

As said in Marks, Mathieu and Zaccaro (2001), most of the work in organizations is completed through teamwork, they state that when people work together they can achieve results that would not be possible for one individual working alone, and more important than the individual's talents alone are the processes that they use to interact with each other in order to have the work done.

The term "team processes", as defined by Marks *et al.* (2001: 357), is used in many researches to refer to the interactions between team members, through cognitive, verbal and behavioral activities, all directed toward collective goal achievement. Team processes are the means by which individuals in a team can convert resources, expertise, equipment and money to achieve meaningful outcomes, such as products development, team commitment and satisfaction, among others.

Over 40 years ago, McGrath (1964) defined the input-process-outcome framework (IPO) for studying team effectiveness. Since then, this model has been used as a guide for several researchers and has also been reviewed and extended in several ways (Mathieu *et al.*, 2008). In this model, team effectiveness is understood to be a group outcome.

However, several investigations have been done regarding team effectiveness considering not just performance indicators but also affective outcomes. A very important example is Hackman's (1983) normative model of team effectiveness in which he identifies three main attributes on how to measure team effectiveness: 1) the output of the team must satisfy internal and external customers (performance); 2) the team must develop and maintain capabilities to perform together in the future (viability); 3) team members must find meaning and satisfaction within the group (satisfaction).

Additionally, Zaccaro and Klimoski (in press) relate effective team performance to three main aspects: the integration of team members' individual actions, the complex and dynamic environments that requires higher coordination and adaptability, and the paper of leadership in defining directions and organizing the teams' efforts.

Regarding the first, they claim that each individual has a specific role that contributes to team success. Therefore, failure can happen not only because of individual inability but also for lack of coordination of individual contributions.

Second, the environments in which the team is inserted features multiple stakeholders with sometimes clashing agendas, high loads of information and data, dynamic situations and required contingencies actions, among others. All these facts combined heighten the need for individuals and team to be highly adaptive and coordinated.

For last, leadership represents the most critical factor on achieving effective team performance. The paper of the leader defining directions and doing a follow up on team efforts and desired outcomes are vital for team effectiveness.

Thereby we can suppose that leadership and team members' interactions are the key factor for either success or failure to achieve team effectiveness. That statement leads to the next chapter where we will further understand the concept of leadership, and its paper on managing those interactions.

Leadership and Team Effectiveness

Over time, different kinds of organizational leaderships have been developed, and although hierarchical teams are still the most common practice, you can find several self-managing or collective leadership teams. However, all teams do have in common a defined leadership role, or a focal point, or an informal supervisor who is responsible for supporting the team, providing resources and establishing normative basis for team functioning (Zaccaro *et al.*, 2001).

As mentioned earlier, team effectiveness is measured by three attributes: performance, viability and satisfaction (Hackman, 1983). Based on the previous assumption that every team has a leader, it is the leader's responsibility to support the team so that team members are mainly able to achieve their goals and successfully accomplish their tasks (performance) but also so that team members are satisfied with the group environment and teamwork results

(satisfaction) and also are able to develop capabilities to work together in the future (viability).

As described by Hackman and Walton (1986) the functional approach states that it is the leader's responsibility to arrange whatever is necessary for the group to accomplish their objectives, so if a leader takes care of all critical situations in order to ensure task accomplishment and group maintenance, then the leader was successful in his role and did his job well.

This approach highlights different aspects in the role of a team leader. One of them is that leadership is supposed to link teams with the broader environment, since most team's problems originate from the outside, the leader is required to be aware of external circumstances and events (Katz and Kan, 1978; Ancona, 1987; Ancona and Cadwell, 1988), in order to better understand their developments inside the workplace and its impact on the work that needs to be done so he can pass it on to the team. The used definitions for these leadership behaviors are sensemaking and sensegiving, which will be further explained on the next chapters.

Leadership and Sensemaking

Sensemaking, as defined by Weick (1995: 6), is "the placement of items into frameworks, comprehending, redressing surprise, constructing meaning, interacting in the pursuit of mutual understanding". In other words, it can be interpreted as the capacity of making sense of environmental cues by placing it in a performance context in order to be able to predict future situations and possible impacts on activities, which are vital when the conditions the team needs to make sense of might be disruptive to team functioning and performance (Morgeson *et al.*, 2010).

Further studies have explored the importance of sensemaking, not only as an individual process but at a team level. Klein *et al.* (2010: 304) in his study of team sensemaking, describes it as "the process by which a team manages and coordinates its efforts to explain the current situation and to anticipate future situations, typically under uncertain or ambiguous conditions". If successful, team sensemaking can promote a shared understanding of the circumstances which can facilitate communication and cooperation among team members, by making decisions more obvious and simpler to be taken.

Still according to Klein *et al.* (2010) there are three different authority structures of team sensemaking: it can be hierarchical, collaborative and opportunistic. In the first one, the leader is the focal point, receiving information from different sources, putting them all together, processing them and then passing it on to the team. The second one, collaborative, individuals make different assessments of the information and then discuss the different views together to compare impressions and conclusions. Finally, the last one, opportunistic, the information comes from a higher level, even though each individual is responsible for processing the information and taking their own conclusions. These three forms of sensemaking are possible depending on the team members' skills and demands. Also, the author states that sensemaking is a process other than a state, and therefore is different from situation awareness. Sensemaking has an external focus, which is assessing and understanding external events and possible outcomes.

Leadership Sensegiving and Team Effectiveness

As important as the leader making sense of these environmental cues, it is equally important the leadership capacity of elaborating the meaning of these cues into a coherent framework and how he communicates it to the team, the so-called leadership sensegiving.

If sensemaking is the process of construct meaning, then sensegiving, as described in Gioia and Chittipeddi, (1991: 442) is "the process of attempting to influence how other people construct meaning toward a preferred redefinition of organizational reality".

In their analysis of triggers and enablers of sensegiving in organizations, Maitlis and Lawrence (2007) conclude that sensegiving from the leader is triggered by perceived gaps in sensemaking, for example in complex sensemaking environments, with ambiguous and unpredictable events and involving several stakeholders with different interests.

It is also important to mention, that in the same research, Maitlis and Lawrence (2007) found that team members might assume a sensegiving position themselves whenever they perceive a problem as highly important and the leader to be incompetent regarding that same problem. In these situations, sensegiving is triggered in team members.

Based on the described above, an important aspect of leader sensegiving is the ability of the leader not only to communicate, but his level of influence over the team. Zaccaro *et al.* (2010) mentions that a critical step of leadership sensemaking and sensegiving processes, as

predictors of team performance, is the communication to the team. Gioia and Chittipeddi (1991) also claim that the level of influence the leader has over the team can facilitate leadership sensegiving, as they believe sense is not given but rather negotiated, and the perception of the team as whether the leader is capable will influence on their willingness to accept the leader's directions.

Researches have proven that by influencing team members perceptions and attitudes the leader can enhance their commitment to the organizations goals and therefore promote a more optimistic and enthusiastic reaction when facing the need to adapt to external events or changes, rather than show resistance (Foldy *et al.*, 2008).

A study conducted by Marks, Zaccaro and Mathieu (2000), in which they manipulated the quality of leader communications to a team performing multiple missions of a computer simulated military task requiring adaptation, have shown that team members relied on an effective verbal exchange of information in order to overcome the challenges and achieve success in their performance.

Therefore, shaping how people understand themselves, the work they do, and others involved in that work is a critical leadership task, that will enhance team performance. Based on the research, and on the conceptual framework explained previously, the first hypothesis was defined:

Hypothesis 1: Leadership sensegiving is positively related to team effectiveness.

Leadership Promotion of Sensemaking

As defined in Gioia and Chittipeddi (1991: 444), ""Sensegiving-for-others" is the process of disseminating new understandings to audiences to influence their "sensemaking-for-self"". In this article, the authors present a very clarifying model explaining how leadership sensegiving will result in stakeholder's sensemaking, by examining mutual dynamics in strategic organizational change processes.

Basically, they characterize four different stages, being stage 1) Leadership sensemaking (envisioning), when leader process all external information and create interpretations of his own; Stage 2) Leadership sensegiving (signaling) when the leader communicates his interpretations to the team; Stage 3) Stakeholder's sensemaking (re-visioning), when the team is processing the information received and interpreting it in their own way; And stage 4)

Stakeholder's sensegiving (energizing), when the team members are able to understand the views and also start to influencing other stakeholders, but it is also shows an organization-wide commitment to action toward the vision.

Figure 1 below, shows the general idea:



Figure 1 - Gioia and Chittipeddi (1991), model of sensemaking and sensegiving stages

Weick (1993) describes a team of smoke jumpers who died in a rescue attempt when they encountered a novel situation and were unable to make sense of their environment. This and other studies show the importance of sensemaking, and therefore the importance of leadership promotion of sensemaking through sensegiving.

Intragroup Conflicts and Team Effectiveness

So far the role of the leader in achieving team effectiveness has been discussed, and two important leadership behaviors have been introduced as impacting on the results of teamwork. However as mentioned before, besides leadership, team members interactions are also a key factor for either success or failure to achieve team effectiveness, therefore, the importance of studying these interactions.

It is not possible, however to talk about team members interactions, or individuals without mentioning intragroup conflicts, and due to the broader deployment of groups in

organizations, researches for understanding and explaining intragroup conflicts have increased.

Intragroup conflict has been broadly defined as the process emerging from perceived incompatibilities or differences among group members or perceptions by the parties involved that they hold discrepant views or have interpersonal incompatibilities (Wit, Greer and Jehn, 2012; Boulding, 1963).

Jehn (1995) starts his research by saying that although conflicts are inevitable within a workgroup due to complexity and interdependence of organizational life researchers still differ about whether intragroup conflicts are harmful or beneficial to organizations.

Indeed, empirical research on the effects of conflict in groups and teams has reflected the contradictions found in the theoretical literature. While some defend that conflict is negatively related to team performance and group satisfaction and therefore, detrimental to organizational functioning (Pondy, 1967; Gladstein, 1984; Wall and Nolan, 1986), most recent studies show that, under some specific circumstances, conflict can be beneficial, by improving quality in decision making and in strategic planning, enhancing financial performance, and supporting organizational growth (Bourgeois, 1985; Schweiger, Sandberg, and Rechner, 1989; Eisenhardt and Schoonhoven, 1990).

In his research, Jehn (1995) concludes that there are several aspects that influence when discussing intragroup conflicts effects, such as the type of conflict, the profile of the group, and the environment in which they are inserted and that depending on the arrangements and combinations of those aspects, conflicts can be either beneficial or detrimental to team effectiveness.

Types of conflicts

Initially only two forms of intragroup conflict were distinguished: relationship conflict and task conflict, only later, evidences suggested other types of conflict such as process conflict and temporal conflict, for example. However in the context of this study only task and relationship conflict types were considered.

In order to examine the effects of the different types of intragroup conflicts on group outcomes, Wit, Greer and Jehn (2012) have considered two different types of outcomes: 1) Distal group outcomes, focused on team performance; and 2) proximal group outcomes,

focused on group emergent states, such as trust and cohesion and viability, as explained before the member's intentions to remain working together, other than satisfaction and commitment.

With the purpose of evaluating Team Effectiveness, in this model, only performance dimension was considered, and therefore, the focus of conflicts effects will be on the distal group outcomes.

Relationship conflict

As defined by Jehn and Bendersky (2003), relationship conflict involves disagreements among group members about interpersonal issues, such as personality differences or differences in norms and values.

This type of conflict is generally found to have negative impacts both on proximal and distal group outcomes (Amason, 1996; Jehn, 1995). Focusing on the distal outcomes, according to De Dreu (2006) and Evan (1965) relationship conflict can harm team performance because it reduces collaborative problem solving and because team members spend a lot of time discussing and responding to non-task-related issues, time that could be spent more efficiently in task accomplishment.

Nevertheless, recent theories are exploring the conditions in which relationship conflict can have a positive impact on distal group outcomes, such as when there are effective conflict management strategies implemented (De Dreu and Van Vianen, 2001; Jehn, 1997; Murnighan and Conlon, 1991; Tekleab *et al.*, 2009).

Task conflict

Jehn and Bendersky (2003) define task conflict as the disagreements among group members about content and outcomes of the task being performed.

This type of conflict is seen as a potential benefit for group outcomes, such as performance (Amason, 1996; Jehn, 1995). Some of the positive impacts of task conflict are the increased understanding of the task in hand and a more critical evaluation of each other's ideas, therefore, helping avoid biases in group decision making (Amason, Thompson, Hochwater and Harrison, 1995; Nemeth, 1995).

The findings of negative outcomes in group performance suggests that high levels of task conflict interfered with group performance as members became overwhelmed with the amount of information and continuously became side-tracked, losing sight of the main or original goal of the discussion (Jehn, 1995; Carnevale and Probst, 1998), although on lower levels it was necessary for effectively delegating tasks and allocating resources.

Leadership Sensegiving, Promotion of Sensemaking and Conflicts

The direct effects of leadership sensegiving on different types of conflicts have not been much researched. However, Jehn and Bendersky (2003) research entails leadership importance on managing intragroup conflicts and although they have not defined leadership sensegiving, they do mention the importance of leader framing conflicts and the desired outcomes of projects in order to place it to the team.

The study emphasizes the challenges that leadership faces when managing conflicts in a workgroup, as the study shows that an action from the leader can have positive and negative impacts on group outcomes at the same time, considering different kinds of conflicts. They give the example of a situation in which the leader acts to solve all conflicts, the negative effects of relationship conflict will be reduced, but also the positive effects of task conflict will be repressed as well.

Therefore, the authors point out the importance of leadership distinguishing between different types of conflicts and relating it to the team members. Also, leaders must carefully consider which group outcomes are the most important in each situation and define the most adequate way for addressing and dealing with them and pass it on to the team.

Based on the research and previous conceptual framework, the second hypothesis was defined:

Hypothesis 2: The relationship between leadership sensegiving and team effectiveness is mediated by conflicts.

Hypothesis 2a: The relationship between leadership sensegiving and team effectiveness is mediated by task conflict.

Hypothesis 2b: The relationship between leadership sensegiving and team effectiveness is mediated by relationship conflict.

Moreover, supporting the above theory that leadership has a key role in managing conflicts, Havermans *et al.* (2015) researched the importance of language and leadership framework of conflicts when managing projects. He then mentions the importance not only of the leadership sensegiving, but the substantial influence it has on collective sensemaking processes and how it can impact results and behaviors.

As Havermans et al. (2015: 8) describes:

"As the issues that arise can be dealt with in a number of different ways, the way in which leaders construct their narrative can affect collective sensemaking and the decisions and actions that flow from this process (Bartel and Garud, 2009; Deuten and Rip, 2000)".

The research is based on three different narratives projects and team leaders that had dissimilar interpretations and actions when they faced complex emergent situations and how that impact on development of collective sensemaking and thus potentially in the success of the project.

One of the narratives shows that deciding the goals of one project and specifically defining the groups that will benefit from it might actually end up enhancing tensions between groups. Also, by letting groups discuss and develop understanding of different perspectives by their own, can help enabling them to develop new ways of collaborating (Reed *et al.*, 2009). Finally, by shaping the group's mindset in this way, he will induce them to respond the same way every time they encounter potentially conflicting demands.

Another narrative relates to the way that leaders interpret and give sense of conflicting perspectives in the process of solving issues among the group. Several researches point out the negative effects of conflicting views and highlight the importance of an aligned collective way of thinking in complex emergent problem situations and the undesirable outcomes such as dissatisfaction, unlikely viability (Jehn, 1995; Jehn and Mannix, 2001). Other studies on the other hand, affirm that a shared mental mode might prevent the team from sensemaking adaptation and could lead to biases of group thinking and decision making as all team members think alike in an environment that is continuously changing (Bogner and Barr, 2000; Uitdewilligen, Waller and Zijlstra, 2010). Therefore, some investigations support that leaders can emphasize the value of conflicting perspectives since it can have positive outcomes in task conflict, such as creativity, adaptation, innovation and performance (De Dreu, 2006;

Farh, Lee and Farh, 2010; Jehn and Mannix, 2001; Uhl-Bien, Marion and McKelvey, 2007). Finally, Havermans *et al.* (2015) conclude by saying that by stimulating both, conflicting and aligned perspectives, leaders can make it possible for the team to work both flexibility and efficiently. This theory is supported by the work of Beck and Plowman (2009) and also Gebert, Boerner and Kearney (2010).

All the researches mentioned above support the fact that leadership sensegiving and leadership promotion of sensemaking are related to conflicts in different levels and ways, however there is the need to further explore this arrangements of variables in order to better understand the further impacts they both have in the different types of conflicts and how it can impact team performance.

Based on the studies and previous conceptual framework the third hypothesis was defined:

Hypothesis 3: Leadership promotion of sensemaking moderates the relationship between leadership sensegiving and conflicts.

Hypothesis 3a: Leadership promotion of sensemaking moderates the relationship between leadership sensegiving and relationship conflict.

Hypothesis 3b: Leadership promotion of sensemaking moderates the relationship between leadership sensegiving and task conflict.

Proposed Model

With the objective of incrementing the little existing literature on the discussed topics mentioned before, leadership sensegiving and leadership promotion of sensegiving are being analysed and tested as supposed moderators of possible impacts, negative or positive, on different types of intragroup conflicts on team effectiveness.

In order to give a better understanding of the variables under study, the following model, presented in figure 2, was proposed, in which, leadership sensegiving is the independent variable, leadership promotion of sensemaking is the moderator, intragroup conflicts are the mediators and team effectiveness is the dependent variable.

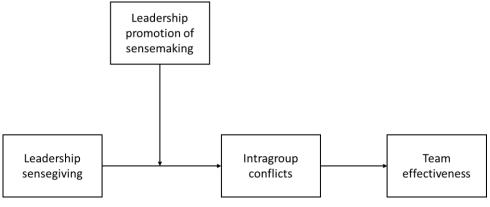


Figure 2 - Proposed Model

In order to analyse the model, the last hypothesis was defined:

Hypothesis 4: The conditional indirect effects of leadership sensegiving in predicting team effectiveness via intragroup conflicts is stronger for those teams with high levels of leadership promotion of sensemaking.

Hypothesis 4a: The conditional indirect effects of leadership sensegiving in predicting team effectiveness via relationship conflicts is stronger for those teams with high levels of leadership promotion of sensemaking.

Hypothesis 4b: The conditional indirect effects of leadership sensegiving in predicting team effectiveness via task conflicts is stronger for those teams with high levels of leadership promotion of sensemaking.

Part II - Empirical Research

Methodology

Participants

In the course of this investigation, 55 teams from different companies and sectors were asked to answer two questionnaires, one developed for team members, with a total of 210 participants and a second one developed for the respective team leaders, with a total of 55 participants. The objective of the research was to analyse different dimensions and behaviors inside teams, having two points of view, from within the team members and from the direct team leaders. Therefore, Table 1 shows a description of the sample collected in both

dimensions. Later on, the focus will be only on the variables strictly necessary for the analysis of the defined hypotheses.

Table 1 - Sample characterization

	Т	Seam Memb	ers		Team Lead	lers
Gender		%	Valid %		%	Valid %
Male	101	48.1%	48.6%	34	61.8%	61.8%
Female	107	51.0%	51.4%	21	38.2%	38.2%
NI	2	1.0%		0	0.0%	
Age		%	Valid %		%	Valid %
<30	137	65.2%	66.8%	5	9.1%	9.1%
30 - 44	62	29.5%	30.3%	41	74.5%	74.5%
45-59	6	2.9%	2.9%	8	14.5%	14.6%
>60	0	0.0%	0%	1	1.8%	1.8%
NI	5	2.4%		0	0.0%	
Average	28			38		
Seniority		%	Valid %		%	Valid %
< 1 year	92	43.8%	44.7%	5	9.1%	9.1%
1-3 years	62	29.5%	30.1%	11	20.0%	20.0%
3-5 years	32	15.2%	15.5%	9	16.4%	16.4%
5-7 years	5	2.4%	2.4%	6	10.9%	10.9%
>7 years	15	7.1%	7.3%	24	43.6%	43.6%
NI	4	1.9%		0	0.0%	

Regarding the respondents in the leadership segment, of the 55 individuals who answered the questionnaire, there is a clear predominance of males (61.8%), to the detriment of females (38.2%). Aged between 26 and 62 but with an average of 38 years, these leaders seem to be mostly in the company for over 7 years (43.6%), which reflects certain longevity of these respondents within their companies. Also noteworthy is the relative predominance of leaders who work in the companies for 1 to 3 years, although their percentage weight is not the most predominant. It is concluded that most leaders assessed are found to be male and have in fact been working for the same organization for some time, but there is also some focus on young professionals.

As for those who answered the questionnaire as team members (210 respondents), the percentage of males and females is already much more balanced, with a slight predominance of women in this sector (51.4% females versus 48.6% male). Looking at the age dispersion of

respondents, it appears that, compared to the leaders, in these teams there are younger individuals, given that the minimum age (18 years) and the maximum age (53) are lower, but also the average age of this group of respondents is 28 years. Regarding the seniority in the company, it is also concluded that these respondents turn out to be more recent in the company (44.7% have been working for less than a year), but it should also be noted that, once again, respondents working from 1 to 3 years also have a relative predominance in this group (30.1%).

Procedure

In order to gather data for this study two questionnaires were developed, one aiming team members and another one for the respective team leaders. Each questionnaire had all the necessary instructions for its correct completion, as well as a brief introduction about the study and a reference to the anonymous character of the results. They have been personally delivered to each team member and team leader by all the students that participated in this work. In order to allow a cross-reference analysis of the answers of the leaders and the team, each questionnaire was associated to a number, so it was possible to identify each team's leader and members.

Variables Operationalization

For this study four main variables were considered: team effectiveness, leadership sensegiving, leadership promotion of sensemaking and intragroup conflicts.

Team Effectiveness

Team Effectiveness was analysed under the performance dimension, by considering Leaders' responses to the performance of each team. Participants indicated how often these situations occurred in the team, using a 7-point Likert scale (1 - Strongly Disagree to 7 - Strongly Agree). It was based in 2 items, adapted from González-Romá, Fortes-Ferreira, and Peiró (2009) work ("My team has a good performance" and "My team is effective").

Leadership Sensegiving and Leadership promotion of sensegiving

These two variables were measured by the team members' point of view and operationalized based on the work of Morgeson, DeRue and Karam (2010). Participants indicated how often these situations occurred in the team, using a 7-point Likert scale (1 - Strongly Disagree to 7 - Strongly Agree).

Leadership sensegiving was measured in 6 items ("Assists the team in interpreting events and situations", "Facilitates the team's understanding of events and situations", "Explain to the team the meaning of ambiguous events or situations", "What the leader says changes the way the team interprets events or situations", "What the leader says changes the way the team thinks about events or situations" and "What the leader says modifies the way the team thinks about events or situations").

Leadership promotion of sensemaking was also measured in 6 items ("Encourages the team to interpret together what happens to the team", "Promotes team discussion of different perspectives on events / situations that the team faces", "Encourages team members to give their point of view on events / situations", "Promotes the development of a shared understanding among team members about events and situations that the team faces", "Encourages the team to collectively make sense of ambiguous situations" and "Encourages team members to look from different perspectives on events / situations").

Intragroup conflicts

Intragroup conflicts were analysed considering team members responses on two distinct types of conflicts: relationship, and task. They were both based on the intragroup conflict scale of Jehn (1995). Participants indicated how often these situations occurred in the team, using a 7-point Likert scale (1 - Never to 7 - Always).

Relationship conflict was measured in 3 items ("There are personal conflicts among team members", "There is friction among team members" and "Personal conflicts are evident").

Task conflict was also measured in 3 items ("There is a conflict of ideas among team members", "There is a confrontation of opinions about work" and "There is disagreement in the team about opinions expressed by some members").

Results

Aggregation

To start the analysis phase, all the answers obtained in the leader's questionnaire were processed. The first variable was created for team performance, as perceived by the leaders. In order to aggregate the answers, since this variable was measured in 2 items, the correlation between the items was tested and Pearson's was 0.8, showing a good level of significance.

Regarding the team members questionnaire, all the individual answers obtained have been aggregated to allow an analysis in a team level. To create the four variables that came from the team members questionnaire (1 – Leadership Sensegiving; 2 – Leadership Promotion of Sensemaking; 3 – Relationship Conflict; and 4 – Task Conflict), since all of them were measured in 3 or more items, the first step was to test their reliabilities. Since all the Cronbach's alphas were higher than 0,9 (table in annex) and, therefore, results indicate excellent reliability (Hinton *et al.*, 2004).

In order to allow a correct aggregation, the rwg have been computed for the previously mentioned four variables with multiple item scales, so it was possible to identify the level of agreement within the groups and confirm the validity of the variables. A mean value of rwg equal or higher to 0.70 was applied (James, Demaree and Wolf, 1993) and as a result, relationship conflict have the rwg mean value of .71, task conflict have the rwg mean value of .76, leadership sensegiving a rwg mean value of .79 and leadership promotion of sensegiving a rwg mean value of .80, as can be seen in Table 2.

Hypothesis testing

In order to start the hypothesis testing, all correlations between variables were tested and presented in Table 2 together with the descriptive statistics (mean values and standard deviations).

Positive correlations were found between leadership sensegiving and team performance (r=.30; p<0,05), between leadership promotion of sensegiving and team performance (r=.30; p<0,05), also, as expected, between task conflict and relationship conflict (r=.61; p<0,01) and between leadership sensegiving and leadership promotion of sensemaking (r=.86; p<0,01). Negative correlations were found between relationship conflict and team performance, between task conflict and team performance, relationship conflict and leadership sensegiving,

relationship conflict and leadership promotion of sensemaking, task conflict and leadership sensegiving, task conflict and leadership promotion of sensemaking.

 Table 2 - Descriptive Statistics and Study Variable Correlations

Variables	rwg	Mean	SD	1	2	3	4
1. Team performance by leader		5.80	.74				
2. Relationship conflict	.71	2.14	.87	19			
3. Task conflict	.76	3.16	.84	04	.61**		
4. Leadership sensegiving	.79	5.47	.63	.30*	43**	15	
5. Leadership promotion of sensemaking	.80	5.51	.77	.30*	47**	16	.86**

Note: N= 55

The expected positive correlation found between leadership sensegiving and team performance proves **hypothesis 1** to be true, therefore, enabling the following hypotheses to be tested.

To test hypotheses 2, 3 and 4, PROCESS macro for SPSS was used. PROCESS is a computational tool used to analyse conditional process models, such as mediations, moderations and moderated mediations. It uses OLS regression to estimate coefficients and allows the use of bootstrap analysing. The advantages, according to the author are that it allows the analysis of multiple mediations simultaneously, doesn't require the assumption of a normal sampling distribution, among others.

Hypothesis 2 says that the relationship between leadership sensegiving and team effectiveness, in this study represented by team performance alone, is mediated by conflicts, therefore, the need to test two different processes: 2a) the mediation of the relationship between leadership sensegiving and team performance by relationship conflicts and 2b) the mediation of the relationship between leadership sensegiving and team performance by task conflicts.

As said before, the PROCESS macro for SPSS by Andrew F. Hayes was used to test hypotheses 2a and 2b. The model 4, for simple mediation, was applied, and the bootstrapping method with 5000 bootstrap samples. The confidence intervals of 95% were used.

^{*}p< 0.05

^{**} p< 0.01

In testing the mediation effect of relationship and task conflicts on the relationship between leadership sensegiving and team performance, no significant effects were found. Tables 18 and 19 in annex E, show the results found, supporting that there are no mediation effects of conflicts of any type on the interaction between leadership sensegiving and team performance, not for relationship conflict (B = .04; 95% CI: -.08 to .28) nor for task conflict (B = .01; 95% CI: -.05 to .06). In both cases, the direct interaction was stronger than through the mediation, proving that hypothesis 1 is true, but hypotheses 2a and 2b are rejected.

Hypothesis 3 states that leadership promotion of sensemaking moderates the relationship between leadership sensegiving and conflicts. Therefore, the need to test two different processes: 3a) Leadership promotion of sensemaking moderates the relationship between leadership sensegiving and relationship conflict; and 3b) Leadership promotion of sensemaking moderates the relationship between leadership sensegiving and task conflict.

The PROCESS macro for SPSS by Andrew F. Hayes was used to test hypotheses 3a and 3b. The model 1, for simple moderation, was applied, and the bootstrapping method with 5000 bootstrap samples. The confidence intervals of 95% were used.

As presented in Table 3, a positive significant moderation effect of leadership promotion of sense giving was found in the interaction between leadership sense giving and relationship conflict (B = .5, t(51) = 2.49, p = 0.2). In order to further analyse this effect, a scatterplot graph was plotted, presented below.

Table 3 - Results of Moderation Analysis (Hypothesis 3a) – Relationship conflict

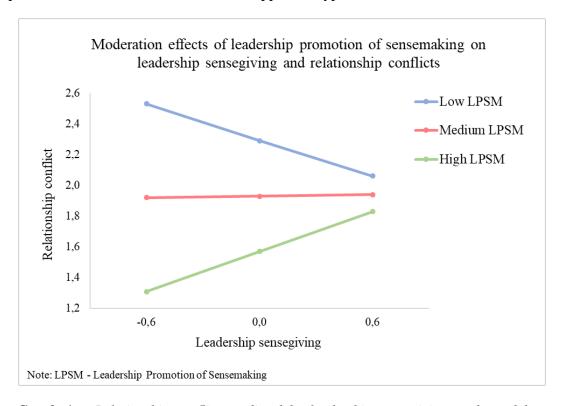
Predictor	В	SE	t	p
	Relationship conflict			
Constant	1.93	.13	14.80	.01
Leadership promotion of sensemaking (LPSM)	`47	.26	`-1.80	.08
Leadership sensegiving (LSG)	.02	.32	.06	.96
Interaction LPSM x LSG	.51	.20	2.49	.02
Leadership promotion of sensemaking	Boot indirect effect	Boot SE	Boot z	Boot p
´-1 SD (-0.77)	`37	.34	`-1.10	.28
<i>M</i> (-0.01)	`.02	.32	.06	.96
`+1 <i>SD</i> (0.77)	`.41	.38	1.08	.28

Note: N=55. Bootstrap sample size = 5000.

Through Graph 1 it is possible to see that leadership promotion of sensemaking has unexpected effects on the relationship between leadership sensegiving and relationship conflict and three important observations can be made:

- 1) Whenever leadership sensegiving was low and leadership promotion of sensemaking was high, relationship conflict was on the lowest level;
- 2) Whenever leadership sensegiving was low and leadership promotion of sensemaking was also low, relationship conflict was on the highest level;
- 3) Whenever leadership sensegiving was high, the level of relationship conflict was always medium, independently of the level of leadership promotion of sensemaking.

The previous results and statements offer support to hypothesis 3a.



Graph 1 – Relationship conflict predicted by leadership sense giving moderated by leadership promotion of sense making.

When analysing the moderations effect of leadership promotion of sensemaking on the interaction between leadership sensegiving and task conflict, there was no significant moderation effect (B = .06, t(51) = .25, p > .05). Therefore, hypothesis 3b was rejected. Results are presented on Table 20 in Annex F.

Finally, **hypothesis 4** proposes that the indirect effects of leadership sensegiving in predicting team effectiveness via intragroup conflicts is stronger for those teams with high levels of

leadership promotion of sensemaking, in other words, leadership promotion of sensemaking interacts with leadership sensegiving such that in teams with higher promotion of sensemaking, the levels conflicts should be lower.

Again, he PROCESS macro for SPSS by Andrew F. Hayes was used to test hypotheses 4a and 4b. The model 7, moderated mediation, was used, and the bootstrapping method with 5000 bootstrap samples. The confidence intervals of 95% were used.

Hypothesis 4a tested the model considering relationship conflict, however, no significant interactions were found (B = -.04; 95% CI: -.26 to .08), there is no moderated mediation and therefore, hypothesis 4a was rejected, the results are presented on Table 21 in Annex G.

Hypothesis 4b tested the model considering task conflict, however, no significant interactions were found (B= -.01; 95% CI: -.10 to .06), there is no moderated mediation and therefore, hypothesis 4b was rejected. The results are presented on Table 22 in Annex G.

Conclusion

Discussions

The objective of this study was to analyse the combined effects of leadership sensegiving and leadership promotion of team sensemaking on the relationship between conflicts and team effectiveness. The intention was to identify leadership desirable behaviors that could help leadership manage conflicts within the teams, by diminishing negative impacts and enhancing the positive ones of both conflict types, relationship and task conflicts, in order to enhance team performance.

Regarding the mediation hypothesis, it was expected for the different types of conflicts analysed (relationship and task) to mediate the relationship between leadership sensegiving and team effectiveness. Nevertheless, the results showed that, opposite from what was expected, this mediation does not exist and the direct effects of leadership sensegiving on team effectiveness are higher than the indirect effects through intragroup conflicts. That is unexpected, especially when considering the study of Jehn and Bendersky (2003), which suggests the importance of leadership distinguishing between different types of conflicts and desired outcomes and relating it to the team members.

In the moderation testing, the results did not show significant moderating effects of leadership promotion of sensemaking on the relationship between leadership sensegiving and task conflict. However, when considering relationship conflict there was significant moderating effects. Leadership sensegiving can be an important factor for managing relationship conflicts within the teams, however, it must be applied with caution, since results show that combined with the promotion of team sensemaking it can either enhance or diminish this type of conflict.

Since relationship conflict is frequently considered detrimental to team performance (Amason, 1996; Jehn, 1995), the best combination of these variables is when leadership sensegiving is low, and the promotion of sensemaking is high, that is when relationship conflicts are found to be in the lowest level. Also, leadership sensegiving in higher levels has resulted in medium levels of relationship conflict, regardless of the level of leadership promotion of sensemaking, which might indicate that in situations with this type of conflict, telling people what to do might be more harmful than helpful. On the other hand, relationship conflict was on the highest level when both leadership sensegiving and leadership promotion of sensemaking were low, meaning that the absence of these leadership behaviors on the management of relationship conflict is the worst case scenario, and therefore they are important practices to be put to use by leaders, with the attention to the combination of both.

In relation to the existing literature, although there is not much considering leadership sensegiving and promotion of sensemaking in conflicts situations, these results support the work of Havermans (2015), in which, one of the findings is that leadership defining goals and who will benefit from it might end up enhancing tensions among members, additionally, letting them discuss among themselves can enable new ways of collaborative work and less tensions.

In the moderated mediation test no significant results were found, therefore, although significant result was found on the moderation of leadership promotion of sensemaking on the relationship between leadership sensegiving and relationship conflict, it does not have a significant effect on tem performance, which is explained by the absence of significant results for the mediation of conflicts in the relationship between leadership sensegiving and team performance.

Although the results were not as expected, the moderation findings regarding relationship conflict hold important implications for today's organizations and leaders. By conditioning leaders in recognizing the suitability of sensegiving and promotion of sensemaking functions

and also by guiding team members to develop sensemaking of their own, significant benefits for handling relationship conflicts within the teams may be accomplished.

Limitations and future research

The results did not show significant effects of leadership sensegiving and leadership promotion of sensemaking on team effectiveness in intragroup conflict situations, however the findings, presented above, do encourage further research around this theme.

Results might been influenced by limitations of this research, such as a limited sample size of 55 teams, the different number of members within the teams, the way the questionnaires were developed and also the simplicity of the studied model, which considers one type of conflict at a time and only performance for measuring team effectiveness.

The questionnaire was developed for a group of students that was collecting data for several variables, therefore the size of the questionnaires, specially the team members', might have influenced on the way respondents have answered to each situation, which could have increased the risk of common method variance bias of results (Fuller *et al.*, 2016).

The simplicity of the researched model is also a limitation, as it was tested for one type of conflict at a time, and only for task and relationship conflicts, when in real environments in conflict situations, all types of conflicts are happening simultaneously and therefore, also have impacts on each other's. Additionally, for simplicity of analysis, the measure for team effectiveness was based only in team performance, however if other dimensions were considered, there could have been significant results, such as for team satisfaction and viability.

Future research should focus on deepening the knowledge of leadership sensegiving and promotion of sensemaking in conflict situations, due to the lack of existing literature currently. Ideally a bigger sample size should be considered and so should other measures of team effectiveness, such as viability and satisfaction. Furthermore, in order to have a more realistic view of conflict environment situations, future researches should consider the influences of different types of conflict simultaneously.

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Annexes

Annex A – Questionnaire for team members

QUESTIONÁRIO AOS COLABORADORES

- Este questionário insere-se num projeto de investigação levado a cabo por um grupo de investigadores do ISCTE-Instituto Universitário de Lisboa, focado na eficácia do trabalho em equipa em contexto de empresas de consultoria e auditoria. O principal objetivo deste projeto é identificar os fatores relacionados com o trabalho em equipa que contribuem para a eficácia dos projetos realizados e para a satisfação, quer dos clientes, quer dos próprios consultores.
- 2. Os dados recolhidos serão exclusivamente analisados pela equipa de investigação, estando garantido o anonimato.
- 3. As perguntas estão construídas de modo a que apenas tenha de assinalar a resposta que lhe parecer mais adequada. Procure responder sem se deter demasiadamente em cada questão.
- 4. Não há respostas certas ou erradas. O que nos interessa é exclusivamente a sua opinião pessoal.
- 5. Para cada pergunta existe uma escala. Pode utilizar qualquer ponto da escala desde que o considere adequado.
- 6. Responda a todo o questionário de seguida, sem interrupções.

Para qualquer esclarecimento, ou para receber informação adicional sobre o estudo por favor contacte: Prof.ª Doutora Ana Margarida Passos (ana.passos@iscte-iul.pt).

Obrigado pela sua colaboração!

Para responder a este questionário pense no projeto de consultoria/ auditoria em que está atualmente envolvido e na equipa em que está a trabalhar

1. As questões que a seguir se apresentam procuram descrever os **comportamentos da equipa**. Indique em que medida concorda com cada uma delas utilizando a escala de resposta:

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

A nossa equipa é eficaz...

1.	A levar a cabo ações criativas para resolver problemas para os quais não há respostas fáceis ou diretas.	1	2	3	4	5	6	7
2.	A encontrar formas inovadoras de lidar com situações inesperadas.	1	2	3	4	5	6	7
3.	Em ajustar-se e lidar com situações imprevistas, mudando rapidamente de foco e tomando as medidas adequadas.	1	2	3	4	5	6	7
4.	A desenvolver planos de ação alternativos, num curto espaço de tempo, para lidar com imprevistos.	1	2	3	4	5	6	7
5.	Na procura e desenvolvimento de novas competências para dar resposta a situações/ problemas.	1	2	3	4	5	6	7
6.	A ajustar o estilo pessoal de cada membro ao da equipa como um todo.	1	2	3	4	5	6	7
7.	Na melhoria das relações interpessoais tendo em consideração as necessidades e aspirações de cada membro.	1	2	3	4	5	6	7
8.	A manter o foco mesmo quando lida com várias situações e responsabilidades.	1	2	3	4	5	6	7

2. As seguintes afirmações referem-se a **sentimentos** que algumas equipas têm **em relação ao seu trabalho**. Utilize, por favor, a mesma escala apresentada anteriormente.

1.	Quando estamos a trabalhar sentimo-nos cheios de energia.	1	2	3	4	5	6	7
2.	Sentimo-nos com força e energia quando estamos a trabalhar.	1	2	3	4	5	6	7
3.	Estamos entusiasmados com este trabalho.	1	2	3	4	5	6	7
4.	Este trabalho inspira-nos.	1	2	3	4	5	6	7
5.	Durante o trabalho, temos vontade de participar nas diversas atividades.	1	2	3	4	5	6	7
6.	Somos felizes quando estamos envolvidos neste trabalho.	1	2	3	4	5	6	7
7.	Estamos orgulhosos com o nosso trabalho nesta consultora.	1	2	3	4	5	6	7

8.	Estamos imersos no trabalho desta consultora.	1	2	3	4	5	6	7
9.	"Deixamo-nos levar" pelas atividades deste trabalho.	1	2	3	4	5	6	7

3. As questões que se seguem dizem respeito à forma como a sua **equipa trabalha e funciona**. Utilize, por favor, a mesma escala.

Nós, enquanto equipa...

1.	Debatemos entre todos sobre a melhor forma de realizar o trabalho.	1	2	3	4	5	6	7
2.	Reunimos com frequência para assegurar uma cooperação e comunicação efetiva.	1	2	3	4	5	6	7
3.	Temos o cuidado de dar uns aos outros informação relacionada com o trabalho.	1	2	3	4	5	6	7
4.	Antecipamos o que cada membro da equipa faz/precisa em determinado momento	1	2	3	4	5	6	7
5.	Ajustamos o comportamento para nos anteciparmos às ações dos outros membros	1	2	3	4	5	6	7
6.	Sincronizamos o trabalho entre nós, reduzindo a comunicação ao mínimo indispensável	1	2	3	4	5	6	7
7.	Temos a mesma forma de pensar	1	2	3	4	5	6	7
8.	Possuímos o mesmo conhecimento e competências	1	2	3	4	5	6	7
9.	Vemos o mundo da mesma forma	1	2	3	4	5	6	7
10.	Estamos de acordo acerca do que está certo e errado	1	2	3	4	5	6	7

4. As questões que se seguem dizem respeito à **forma como a sua equipa funciona enquanto grupo**. Indique, por favor, com que **frequência** cada uma destas situações se verifica na realização do vosso trabalho. Utilize, por favor, a seguinte escala:

Nunca	Raramente	Poucas vezes	Às vezes	Muitas vezes	Quase sempre	Sempre
1	2	3	4	5	6	7

1.	Existem conflitos pessoais entre os membros da equipa.	1	2	3	4	5	6	7
2.	Existe atrito entre os membros da equipa.	1	2	3	4	5	6	7
3.	Existe conflito de ideias entre os membros da equipa.	1	2	3	4	5	6	7
4.	Existe desacordo entre os membros sobre a forma de distribuir o tempo disponível na realização de tarefas.	1	2	3	4	5	6	7
5.	Existe confronto de opiniões sobre o trabalho.	1	2	3	4	5	6	7
6.	Existe desacordo na equipa em relação às ideias expressas por alguns membros.	1	2	3	4	5	6	7
7.	Existe desacordo entre os membros sobre o tempo que é necessário despender para realizar as tarefas.	1	2	3	4	5	6	7
8.	Os conflitos pessoais são evidentes.	1	2	3	4	5	6	7
9.	Os membros da equipa estão em desacordo em relação à rapidez com que as tarefas devem ser realizadas.	1	2	3	4	5	6	7

5. As questões que se seguem dizem respeito ao **comportamento do líder**. Utilizando a mesma escala, indique, com que **frequência** o líder manifesta cada um dos seguintes comportamentos:

1.	Relembra os membros sobre prazos importantes/a data limite para tomarem uma decisão	1	2	3	4	5	6	7
2.	Estabelece prioridades para as tarefas e distribui o tempo para cada uma	1	2	3	4	5	6	7
3.	Prepara e desenvolve atempadamente planos para contingências para ultrapassar eventuais problemas.	1	2	3	4	5	6	7
4.	Insiste para os membros terminarem as tarefas a tempo	1	2	3	4	5	6	7
5.	Estabelece prazos para avaliar o progresso da equipa	1	2	3	4	5	6	7
6.	É eficaz a coordenar a equipa de forma a cumprir os objetivos e os prazos estabelecidos	1	2	3	4	5	6	7
7.	Acompanha a equipa para que o trabalho seja concluído dentro do prazo							

6. Pense agora na forma como a **sua equipa trabalha** e indique em que medida concorda com cada uma das seguintes afirmações. Utilize, por favor, a escala seguinte:

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

1.	Partilhamos entre nós os relatórios e documentos oficiais relacionados com o trabalho desenvolvido	1	2	3	4	5	6	7
2.	Aplicamos o conhecimento que temos que deriva da nossa experiência	1	2	3	4	5	6	7
3.	Fornecemos os manuais e metodologias de trabalho aos restantes membros da equipa.	1	2	3	4	5	6	7
4.	Utilizamos o nosso conhecimento para resolver novos problemas	1	2	3	4	5	6	7
5.	Partilhamos a nossa experiência ou conhecimento do trabalho com os restantes membros da equipa	1	2	3	4	5	6	7
6.	Aplicamos o conhecimento que desenvolvemos para resolver novos problemas.	1	2	3	4	5	6	7

7. Pense agora na forma **como a sua equipa funciona**. Indique em que medida concorda com cada uma das seguintes afirmações. Continue, por favor, a utilizar a mesma a escala.

1.	Discutimos regularmente em que medida a equipa está a ser eficaz no seu trabalho.	1	2	3	4	5	6	7
2.	Alteramos os objetivos quando as circunstâncias assim o exigem.	1	2	3	4	5	6	7
3.	. Os métodos de trabalho da equipa são discutidos frequentemente.				4	5	6	7
4.	Os objetivos são revistos com frequência.	1	2	3	4	5	6	7
5.	Revemos com frequência a forma de abordar os problemas.				4	5	6	7

8. Por favor, pense agora nos resultados do trabalho da sua equipa. Continue, por favor, a utilizar a mesma a escala.

	period agora neo recanados do masamo da cada equipar continuas, p		,					
1.	A minha equipa tem um bom desempenho.	1	2	3	4	5	6	7
2.	Estamos satisfeitos em trabalhar nesta equipa.	1	2	3	4	5	6	7
3.	A minha equipa é eficaz.	1	2	3	4	5	6	7
4.	Não hesitaria em trabalhar com esta equipa em outros projetos.	1	2	3	4	5	6	7
5.	Esta equipa poderia trabalhar bem em futuros projetos.	1	2	3	4	5	6	7
6.	A minha equipa é boa a gerar novas ideias	1	2	3	4	5	6	7
7.	Somos bons a encontrar formas criativas de resolver os problemas	1	2	3	4	5	6	7
8.	A minha equipa tem confiança que somos capazes de produzir novas ideias/ soluções	1	2	3	4	5	6	7
9.	A minha equipa tem o conhecimento e as competências para desenvolver um bom trabalho.	1	2	3	4	5	6	7

9. As questões que se apresentam de seguida referem-se à forma como **a sua equipa planeia o trabalho**. Utilize, por favor, a seguinte escala:

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

A/Na minha equipa:

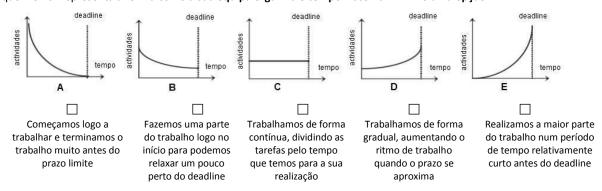
1.	Desenvolve um plano claro antes de iniciar qualquer projeto.	1	2	3	4	5	6	7
2.	2. Identifica as tarefas que devem ser realizadas e decide quem as realiza durante				4	5	6	7
	o projeto.							
3.	Clarifica as expetativas dos membros sobre os seus papéis na equipa.	1	2	3	4	5	6	7
4.	1. Utiliza a lógica "if-then" no desenvolvimento dos projetos onde estou inserido.				4	5	6	7
5.	Especifica alternativas de ação a serem utilizadas caso o plano inicial não	1	2	3	4	5	6	7
	funcione.							
6.	Comunica planos de backup (Plano B) com antecedência.	1	2	3	4	5	6	7

10. As questões que se seguem dizem respeito ao **funcionamento da sua equipa**. Indique em que medida concorda ou discorda com cada uma delas. Por favor, continue a utilizar a mesma escala.

1.	Sempre que fazemos uma nova tarefa, paramos para pensar e questionamo-		2	3	4	5	6	7
	nos sobre o nosso desempenho							
2.	No decorrer do trabalho, fazemos uma pausa regularmente para verificar	1	2	3	4	5	6	7
	nossa compreensão do problema ou situação em questão.							

3.	No final de uma tarefa, perguntamo-nos sobre o que aprendemos com a sua realização.	1	2	3	4	5	6	7
4.	Quando a informação não é clara, paramos e voltamos a analisá-la com cuidado	1	2	3	4	5	6	7

11. Pense no trabalho realizado pela sua equipa. Analise os seguintes modelos, veja a descrição de cada um deles e indique o que melhor representa a forma como a sua equipa organiza o tempo. Escolha APENAS uma opção.



12. Pense agora no projeto em que a sua equipa está envolvido e no suporte tecnológico (e.g., sistema de intranet, de email, de armazenamento de conhecimento e/ou de comunicação) que têm à disposição para realizar o trabalho. Indique em que medida concorda ou discorda com cada afirmação, utilizando para tal a escala seguinte:

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

O suporte tecnológico que temos à disposição:

	iporte techologico que terrios a disposição.							
1.	Permite-nos realizar um trabalho conjunto independentemente da altura e do	1	2	3	4	5	6	7
	local.							
2.	Permite-nos comunicar eficazmente entre membros da equipa	1	2	3	4	5	6	7
3.	Permite-nos pesquisar e aceder à informação sempre que necessário	1	2	3	4	5	6	7
4.	Permite-nos armazenar o trabalho de forma contínua	1	2	3	4	5	6	7
5.	É adequado às tarefas diárias da minha equipa	1	2	3	4	5	6	7
6.	É bastante útil.	1	2	3	4	5	6	7

13. Pense agora no **projeto em que a sua equipa está envolvida.** Indique em que medida concorda ou discorda com cada afirmação, utilizando para tal a escala seguinte:

	Discordo Totalmente	Discordo muito	Discordo em parte	Não concordo nem discordo	Concordo em parte		Concordo muito		Concordo Totalmente					
	1	2	3	4	5		6		6 7		7			
1.	1. Conhecemos em detalhe o ambiente em que o projeto se desenvolve						2	3	4	5	6	7		
2.	Sabemos clara	amente as variáve	is que influencia	am o sucesso do p	rojeto	1	2	3	4	5	6	7		
3.	Identificamos rapidamente as alterações que podem influenciar o nosso trabalho					1	2	3	4	5	6	7		
4.	Temos inform	ação clara sobre a	s tarefas/ projeto que estamos a desenvolver				2	3	4	5	6	7		

14. Pense agora no **comportamento de liderança** da sua chefia. Indique em que medida concorda com cada uma das afirmações. Por favor, utilize a escala seguinte:

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

O <u>líder</u> da nossa equipa...

1.	Revê resultados de desempenho relevantes com a equipa.	1	2	3	4	5	6	7
2.	Monitoriza a equipa e o desempenho dos colaboradores.	1	2	3	4	5	6	7
3.	Diz à equipa como interpretar eventos ou situações com que a equipa se	1	2	3	4	5	6	7
	depara.							

4.	Diz à equipa como compreender (dar sentido a) eventos ou situações.	1	2	3	4	5	6	7
5.	Explica à equipa o significado de eventos ou situações ambíguas.	1	2	3	4	5	6	7
6.	Fornece feedback positivo quando a equipa tem um bom desempenho.	1	2	3	4	5	6	7
7.	Contribui com ideias concretas para melhorar o desempenho da equipa.	1	2	3	4	5	6	7
8.	Repara em falhas nos procedimentos ou trabalho desenvolvido pela equipa.	1	2	3	4	5	6	7
9.	Comunica o que é esperado da equipa.	1	2	3	4	5	6	7
10.	Participa na resolução de problemas com a equipa.	1	2	3	4	5	6	7
11.	Assegura que a equipa tem objetivos claros de desempenho.	1	2	3	4	5	6	7
12.	Encoraja a equipa a interpretar em conjunto o que acontece à equipa.	1	2	3	4	5	6	7
13.	Promove a discussão, em equipa, de diferentes perspetivas sobre eventos /situações com que a equipa se depara.	1	2	3	4	5	6	7
14.	Encoraja os membros da equipa a dar o seu ponto de vista sobre eventos/ situações.	1	2	3	4	5	6	7
15.	Promove o desenvolvimento de um entendimento partilhado entre os membros da equipa acerca de eventos e situações com que a equipa se depara.	1	2	3	4	5	6	7
16.	Encoraja a equipa a, coletivamente, dar sentido a situações ambíguas.	1	2	3	4	5	6	7
17.	Encoraja os membros da equipa a olhar de diferentes perspetivas para eventos/ situações	1	2	3	4	5	6	7
18.	O que o líder diz, muda a forma como a equipa interpreta eventos ou situações com que se depara.	1	2	3	4	5	6	7
19.	O que o líder diz, altera a forma como a equipa pensa sobre eventos ou situações com que se depara.	1	2	3	4	5	6	7
20.	O que o líder diz, modifica a forma como a equipa pensa sobre eventos ou situações com que se depara.	1	2	3	4	5	6	7

15. Pense agora na forma como os membros da sua equipa **trabalham uns com os outros** na realização dos projetos em que estão envolvidos. Por favor, continue a utilizar a mesma escala de resposta.

1.	Partilhamos abertamente os nossos conhecimentos uns com os outros.		2	3	4	5	6	7
2.	Consideramos cuidadosamente todos os pontos de vista, esforçando-nos para criar soluções ótimas.	1	2	3	4	5	6	7
3.	Consideramos cuidadosamente as informações fornecidas por cada elemento.	1	2	3	4	5	6	7
4.	Desenvolvemos ideias e soluções melhores do que desenvolveríamos individualmente.	1	2	3	4	5	6	7
5.	É seguro correr riscos dentro da minha equipa	1	2	3	4	5	6	7
6.	Os membros da minha equipa não toleram os erros uns dos outros	1	2	3	4	5	6	7
7.	Ninguém da minha equipa atuaria deliberadamente de forma a prejudicar um membro da equipa	1	2	3	4	5	6	7

Para terminar, gostaríamo questionários:	os de lhe solicitar al	guns dados sociodem	ográficos, indispensávei	s ao tratamento estatístico dos
1.Sexo: □Masculino	☐ Feminino		2. Idade:	anos
3. Função que exerce na e	mpresa:			
4. Há quanto tempo traba	lha nesta Empresa?	•		
☐ Menos de 1 anos	\square 1 a 3 anos	☐ 3 a 5 anos	☐ 5 a 7 anos	☐ Mais de 7 anos
5.Número de pessoas que	trabalham na sua e	equipa:	 MUITO OBRIG	GADO PELA SUA PARTICIPAÇÃO!

Annex B - Questionnaire for team leaders

QUESTIONÁRIO AO LÍDER

- 7. Este questionário insere-se num projeto de investigação levado a cabo por um grupo de investigadores do ISCTE-Instituto Universitário de Lisboa, focado na eficácia do trabalho em equipa em contexto de empresas de consultoria/ auditoria. O principal objetivo deste projeto é identificar os fatores relacionados com o trabalho em equipa que contribuem para a eficácia dos projetos realizados e para a satisfação, quer dos clientes, quer dos próprios consultores/auditores.
- 8. Os dados recolhidos serão exclusivamente analisados pela equipa de investigação, estando garantido o anonimato.
- 9. As perguntas estão construídas de modo a que apenas tenha de assinalar a resposta que lhe parecer mais adequada. Procure responder sem se deter demasiadamente em cada questão.
- 10. Não há respostas certas ou erradas. O que nos interessa é exclusivamente a sua opinião pessoal.
- 11. Para cada pergunta existe uma escala. Pode utilizar qualquer ponto da escala desde que o considere adequado.
- 12. Responda a todo o questionário de seguida, sem interrupções.

Para qualquer esclarecimento, ou para receber informação adicional sobre o estudo por favor contacte: Prof.ª Doutora Ana Margarida Passos (ana.passos@iscte-iul.pt).

Obrigado pela sua colaboração!

Para responder a este questionário pense na EQUIPA e no projeto específico que está a liderar

1. As questões que a seguir se apresentam procuram descrever os comportamentos da equipa. Indique em que medida concorda com cada uma delas utilizando a escala de resposta seguinte:

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

1.	A equipa tem um bom desempenho.	1	2	3	4	5	6	7
2.	Os membros estão satisfeitos por trabalhar na equipa.	1	2	3	4	5	6	7
3.	A equipa é eficaz.	1	2	3	4	5	6	7
4.	Não hesitaria em trabalhar com esta equipa em outros projetos.	1	2	3	4	5	6	7
5.	Esta equipa poderia trabalhar bem em futuros projetos.	1	2	3	4	5	6	7

2. Pense agora no seu comportamento enquanto líder da equipa. Por favor, utilize a mesma escala.

1.	Revê resultados de desempenho relevantes com a equipa.	1	2	3	4	5	6	7
2.	Monitoriza a equipa e o desempenho dos colaboradores.	1	2	3	4	5	6	7
3.	Diz à equipa como interpretar eventos ou situações com que a equipa se depara.	1	2	3	4	5	6	7
4.	Diz à equipa como compreender (dar sentido a) eventos ou situações.	1	2	3	4	5	6	7
5.	Explica à equipa o significado de eventos ou situações ambíguas.	1	2	3	4	5	6	7
6.	Fornece feedback positivo quando a equipa tem um bom desempenho.	1	2	3	4	5	6	7
7.	Contribui com ideias concretas para melhorar o desempenho da equipa.	1	2	3	4	5	6	7
8.	Repara em falhas nos procedimentos ou trabalho desenvolvido pela equipa.	1	2	3	4	5	6	7
9.	Comunica o que é esperado da equipa.	1	2	3	4	5	6	7
10.	Participa na resolução de problemas com a equipa.	1	2	3	4	5	6	7
11.	Assegura que a equipa tem objetivos claros de desempenho.	1	2	3	4	5	6	7
12.	Encoraja a equipa a interpretar, em conjunto, o que acontece à equipa.	1	2	3	4	5	6	7
13.	Promove a discussão, em equipa, de diferentes perspetivas sobre eventos /situações com que a equipa se depara.	1	2	3	4	5	6	7
14.	Encoraja os membros da equipa a dar o seu ponto de vista sobre eventos/ situações.	1	2	3	4	5	6	7

15.	Promove o desenvolvimento de um entendimento partilhado entre os membros da equipa acerca de eventos e situações com que a equipa se depara.	1	2	3	4	5	6	7
16.	Encoraja a equipa a, coletivamente, dar sentido a situações ambíguas.	1	2	3	4	5	6	7
17.	Encoraja os membros da equipa a olhar de diferentes perspetivas para eventos/ situações.	1	2	3	4	5	6	7
18.	O que o líder diz, muda a forma como a equipa interpreta eventos ou situações com que se depara.	1	2	3	4	5	6	7
19.	O que o líder diz, altera a forma como a equipa pensa sobre eventos ou situações com que se depara.	1	2	3	4	5	6	7
20.	O que o líder diz, modifica a forma como a equipa pensa sobre eventos ou situações com que se depara.	1	2	3	4	5	6	7

Para terminar, gostaríamo questionários:	os de lhe solicitar a	guns dados sociode	emográficos, indispensá	áveis ao tratamento estatístico dos
1.Sexo: Masculino	☐ Feminino		2. Idade:	anos
3. Função que exerce na e	empresa:			
4. Há quanto tempo traba	alha nesta Empresa	•		
☐ Menos de 1 anos	☐ 1 a 3 anos	☐ 3 a 5 anos	☐ 5 a 7 anos	☐ Mais de 7 anos

MUITO OBRIGADO PELA SUA PARTICIPAÇÃO!

Annex C – Items list per variable

1) Team Effectiveness – Leader's questionnaire

1.1) Team performance

- My team has a good performance
- My team is effective

2) Leadership Sensegiving

- Assists the team in interpreting events and situations
- Facilitates the team's understanding of events and situations
- Explain to the team the meaning of ambiguous events or situations
- What the leader says changes the way the team interprets events or situations
- What the leader says changes the way the team thinks about events or situations
- What the leader says modifies the way the team thinks about events or situations

3) Leadership Promotion of Sensemaking

- Encourages the team to interpret together what happens to the team
- Promotes team discussion of different perspectives on events / situations that the team faces
- Encourages team members to give their point of view on events / situations
- Promotes the development of a shared understanding among team members about events and situations that the team faces
- Encourages the team to collectively make sense of ambiguous situations
- Encourages team members to look from different perspectives on events / situations

4) Conflicts

4.1) Relationship conflict

- There are personal conflicts among team members
- There is friction among team members
- Personal conflicts are evident

4.1) Relationship conflict

- There is a conflict of ideas among team members
- There is a confrontation of opinions about work
- There is disagreement in the team about opinions expressed by some members.

Annex D – Reliabilities and Correlations

1) Team performance

 Table 4 - Descriptive statistics for team performance

Descriptive Statistics

	Mean	Std. Deviation	N
P1_1	5,96	,607	55
P1_3	5,63	,958	54

 Table 5 - Correlations for team performance

Correlations

		P1_1	P1_3
P1_1	Pearson Correlation	1	,780**
	Sig. (2-tailed)		,000
	N	55	54
P1_3	Pearson Correlation	,780**	1
	Sig. (2-tailed)	,000	
	N	54	54

^{**.} Correlation is significant at the 0.01 level (2-tailed).

2) Leadership sensegiving

Table 6 – Cronbach's alpha for leadership sensegiving

Reliability Statistics

Cronbach's	
Alpha	N of Items
,909	6

Table 7 – Item statistics for leadership sensegiving

Item Statistics

	Mean	Std. Deviation	N
P14_3	5,60	1,151	208
P14_4	5,60	1,220	208
P14_5	5,49	1,243	208
P14_18	5,30	1,246	208
P14_19	5,31	1,249	208
P14_20	5,33	1,240	208

 Table 8 - Item-Total statistics for leadership sensegiving

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
P14_3	27,03	27,149	,725	,896
P14_4	27,03	26,550	,726	,896
P14_5	27,13	26,590	,704	,899
P14_18	27,33	26,047	,752	,892
P14_19	27,31	25,559	,796	,886
P14_20	27,29	25,764	,784	,888,

3) Leadership promotion of sensemaking

Table 9 - Cronbach's alpha for leadership promotion of sensemaking

Reliability Statistics

Cronbach's Alpha	N of Items
,932	6

 Table 10 - Item statistics for leadership promotion sensemaking

Item Statistics

	Mean	Std. Deviation	Ν
P14_12	5,38	1,319	207
P14_13	5,30	1,487	207
P14_14	5,66	1,219	207
P14_15	5,50	1,257	207
P14_16	5,43	1,188	207
P14_17	5,51	1,288	207

 Table 11 - Item-Total statistics for leadership promotion of sensemaking

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
P14_12	27,39	31,667	,793	,920
P14_13	27,47	29,639	,824	,918
P14_14	27,11	33,212	,746	,926
P14_15	27,27	31,392	,867	,911
P14_16	27,34	32,654	,820	,918
P14_17	27,26	32,281	,769	,924

4) Relationship Conflict

Table 12 - Cronbach's alpha for relationship conflict

Reliability Statistics

Cronbach's	
Alpha	N of Items
,924	3

 Table 13 - Item statistics for relationship conflict

Item Statistics

	Mean	Std. Deviation	N
P4_1	2,23	1,364	210
P4_2	2,38	1,390	210
P4_8	1,86	1,255	210

 Table 14 - Total statistics for relationship conflict

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
P4_1	4,24	6,099	,891	,851
P4_2	4,09	6,265	,829	,903
P4_8	4,61	6,966	,819	,911

5) Task Conflict

 Table 15 - Cronbach's alpha for task conflict

Reliability Statistics

Cronbach's	
Alpha	N of Items
,857	3

 Table 16 - Item statistics for task conflict

Item Statistics

	Mean	Std. Deviation	N
P4_3	3,25	1,266	203
P4_5	3,40	1,412	203
P4_6	2,82	1,243	203

 Table 17 - Total statistics for task conflict

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
P4_3	6,22	6,025	,702	,825
P4_5	6,06	5,209	,743	,791
P4_6	6,65	5,902	,752	,781

Annex E – Mediation analysis results

Table 18 - Results of mediation analysis (hypothesis 2a) – relationship conflict

Steps	В	SE	t	p
Path c - team performance regressed on leadership sensegiving	.35	.16	2.25	.03
Path a - relationship conflict regressed on leadership sensegiving	56	.17	-3.25	.01
Path b - team performance regressed on relationship conflict, controlling for leadership sensegiving		.13	57	.57
Path c´- team performance regressed on leadership sensegiving, controlling for relationship conflict		.17	1.80	.08
Unstandardized value	SE	LL 95% CI	UL 95% CI	
Bootstrap results for indirect effect				
.04	.09	08	.28	

Note: N=54. LL = lower limit; CI = confidence interval; UL = upper limit. Bootstrap sample size = 5000.

Table 19 - Results of mediation analysis (hypothesis 2b) – task conflict

Steps	В	SE	t	p
Path c - team performance regressed on leadership sensegiving	.35	.16	2.25	.03
Path a - task conflict regressed on leadership sensegiving	13	.17	.73	.47
Path b - team performance regressed on task conflict, controlling for leadership sensegiving	01	.13	06	.96
Path c'- team performance regressed on leadership sensegiving, controlling for task conflict	.35	.16	2.21	.03
Unstandardized value	SE	LL 95% CI	UL 95% CI	
Bootstrap results for indirect effect				
.01	.03	05	.06	

Note: N=54. LL = lower limit; CI = confidence interval; UL = upper limit. Bootstrap sample size = 5000.

$\label{eq:AnnexF-Moderation} Annex \ F-Moderation \ analysis \ results$

Table 20 - Results of moderation analysis (hypothesis 3b) – task conflict

Predictor	В	SE	t	p
	Task conflict			
Constant	3.14	.15	20.9	.001
Leadership promotion of sensemaking (LPSM)	`16	.30	`53	.60
Leadership sensegiving (LSG)	`02	.37	`04	.97
Interaction LPSM x LSG	.06	.23	.25	.81
Leadership promotion of sensemaking	Boot indirect effect	Boot SE	Boot z	Boot p
´-1 <i>SD</i> (-0.77)	`06	.39	`15	.88
M(-0.01)	`02	.37	`04	.97
`+1 <i>SD</i> (0.77)	`.03	.43	.07	.95

Note: N=55. Bootstrap sample size = 5000.

Annex G – Moderated mediation analysis results

Table 21 - Results of moderated mediation analysis (hypothesis 4a) – Relationship conflict

Predictor variable	В	SE	t	p
DV: Relationship conflict				
Constant	1.95	.13	14.87	.001
Leadership sensegiving (LSG)	.01	.32	.04	.97
Leadership promotion of sensemaking (LPSM)	`45	.26	`-1.72	.09
Interaction LPSM x LSG	.53	.20	2.61	.01
DV: Team performance				
Constant	5.95	.29	20.59	.001
Relationship conflict	`07	.13	`57	.57
Leadership sensegiving (LSG)	.31	.17	1.80	.08

Leadership promotion of sensemaking (LPSM)	Unstandardized boot indirect effects	SE	LL 95% CI	UL 95% CI
Conditional indirect effect at LPSM = $M \pm 1$ SD				
´-1 <i>SD</i> (-0.77)	.28	.08	`07	.30
M(-0.01)	`001	.05	´12	.11
`+1 <i>SD</i> (0.77)	´03	.08	`29	.07

Note: N=55. DV = Dependent variable. Bootstrap sample size = 5000.

All predictor variables were mean-centered.

Table 22 - Results of moderated mediation analysis (hypothesis 4b) – task conflict

Predictor variable	В	SE	t	p
DV: Task conflict				
Constant	1.95	.13	14.87	.001
Leadership sensegiving (LSG)	.01	.32	.04	.97
Leadership promotion of sensemaking (LPSM)	`45	.26	`-1.72	.09
Interaction LPSM x LSG	.53	.20	2.61	.01
DV: Team performance				
Constant	5.95	.29	20.59	.001
Task conflict	`07	.13	`57	.57
Leadership sensegiving (LSG)	.31	.17	1.80	.08

Leadership promotion of sensemaking (LPSM)	Unstandardized boot indirect effects	SE	LL 95% CI	UL 95% CI
Conditional indirect effect at LPSM = $M \pm 1$ SD				
´-1 <i>SD</i> (-0.77)	.28	.08	`07	.30
M(-0.01)	`001	.05	´12	.11
`+1 <i>SD</i> (0.77)	´03	.08	`29	.07

Note: N=55. DV = Dependent variable. Bootstrap sample size = 5000.

All predictor variables were mean-centered.