Interpersonal Emotion Regulation in Teams: Understanding its Influence on Team Dynamics and Performance

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Abstract

Interpersonal emotion regulation (IER) has been defined as the strategies used by people to initiate, maintain or change the occurrence and intensity of others' affect. Previous research has shown that IER can influence important employee outcomes, such as their performance and sense of well-being. However, this interpersonal phenomenon has not been empirically studied among team members in work teams, which is surprising given its common occurrence in team dynamics and the importance placed on this phenomenon in models of team effectiveness. The current research represents an effort to remedy this lack of empirical research in the area. As such, the main aim of this thesis is to determine whether team member IER is related to teamwork. Specifically, based on the inputs – processes – states – outputs (IPSO) framework of team effectiveness, I propose a multilevel mediation model in which team member IER strategies act as an input, influencing team outputs, such as team performance and team member well-being, through its effects on team dynamics (i.e., team relationship conflict, team members' quality of relationship (TMX), and intrateam trust). Furthermore, I propose that team-level IER strategies have an effect over and above individual-level strategies, and that the diversity in these strategies negatively impacts team dynamics and outcomes. In order to achieve this objective, a quantitative cross-sectional research design was adopted. Data were collected in three Chilean and Latin American organisations (Study 1: 985 employees, 113 teams, Study 2: 4,659 employees, 697 teams, Study 3: 856 employees, 187 teams) using team members' ratings of team IER, conflict, TMX, trust, and well-being and team leaders' ratings of team performance in two separate surveys. This thesis's findings show that not all team member IER strategies have the same impact on team dynamics and team outcomes. Additionally, team-level IER strategies show stronger effects than individual-level IER strategies, and the heterogeneity in the perception of team-level IER has an overall negative impact on team dynamics and team outcomes. These findings extend interpersonal emotion regulation, team effectiveness, and diversity literature, by applying this concept to team member interactions, and by developing, analysing, and testing a multilevel model which shows a number of mechanisms by which team IER influences team outcomes.

Declaration

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Dedicatory

This thesis is dedicated to my mother and father whom were born in an environment of adversity and lack of opportunity and did their best to raise my siblings and me with effort and love.

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CHAPTER 1. THESIS INTRODUCTION

Almost everyone has experienced working in a team: on a school project, in a sports team, or in the workplace. Working in a team, you may have experienced the value of a colleague's advice when you felt nervous – or a feeling of joy, when a teammate remarked on your strengths. These experiences may have influenced your relationship with that colleague, or even affected your or the whole team's performance. Rapidly, we recognise the fundamental impact of the social regulation of emotions in our daily group interactions. Imagine, for example, the particular case of a kitchen team in a restaurant. To serve the dishes on time, the team has to divide and integrate their work, following strict, and very often, difficult procedures. John, a team member, fails at one preparation, putting in jeopardy the completion of several plates and the performance of the whole team. As a result of this, John feels very anxious, upset, and guilty. Those negative feelings might harm his future performance. Then, Sara, a team colleague, realises John's mistake and tells him not to worry because he did well all night and only made one mistake in this particular preparation. Sara's words focus John's attention on a more pleasant and positive stimulus, in this case, his skills and a previous record of good performance. Thus, thanks to Sara's advice, John feels calmer and more confident now. Other members also hear that, and the situation boosts the performance of the whole team, accomplishing the high-performance standards of this restaurant.

Here, we can see how team members can actively change other members' emotions to cope with difficulties, which may facilitate social processes, such as interpersonal trust, and avoid conflict. Consider what might have happened if John's anxiety had spread through the team and other members had started a conflict because of it! These types of situation, in which team members try to modify other members' emotions, are common in a wide range of teams, from sports teams to top management teams (Barsade, Ward, Turner, & Sonnenfeld, 2000; Campo, Sanchez, Ferrand, Rosnet, & Friesen, 2016; Palmateer & Tamminen, 2018). The psychological

phenomenon underlying these actions is known as interpersonal emotion regulation and is defined as the strategies used by individuals to initiate, maintain, or change the occurrence and intensity of others' emotions (Eisenberg, Fabes, Guthrie, & Reiser, 2000; Gross, 2015).

Previous research on interpersonal emotion regulation has recognised this construct as an important concept for understanding affect dynamics in organisations, such as employee's quality of relationship, customer service satisfaction, and employee well-being (Lawrence, Troth, Jordan, & Collins, 2011; Troth, Lawrence, Jordan, & Ashkanasy, 2018). Specifically, in the work team context, studies have focused on interpersonal emotion regulation strategies used by leaders to manage followers' emotions (Little, Gooty, & Williams, 2016; Madrid, Totterdell, Niven, & Vasquez, 2018). However, no previous study has investigated interpersonal emotion regulation phenomenon among team members, which is surprising given its common occurrence in teams and also the importance placed on affective processes in models of group emotions (Barsade & Gibson, 2012), and team effectiveness (Marks, Mathieu, & Zaccaro, 2001). Whilst focusing on leader interpersonal emotion regulation might be beneficial because of the major impact of leaders on team members' behaviours due to their status or power within a team (Sy & Choi, 2013), this approach results in an incomplete picture of the phenomenon, neglecting team members' efforts at regulating their colleagues' emotions. Thus, the first and main aim of this thesis is to examine interpersonal emotion regulation from team members' perspective and to determine whether team member interpersonal emotion regulation is related to teamwork.

From the standpoint of the research into team effectiveness, theoretical reviews have considered the importance of team member interpersonal emotion regulation (also referred as team member affect management in these models) as a key interpersonal process by which team members may impact team dynamics and team performance (Marks et al., 2001). These models have appealed to primitive emotional contagion – the automatic process by which affect is quickly transmitted among group members – as the main mechanism through which team members influence others' affect (Ashkanasy & Humphrey, 2011; Barsade, 2002; Ilies, Wagner, & Morgeson, 2007; Sy & Choi, 2013). It is clear that emotions can be easily 'caught' among members via emotional contagion. However, individuals are not simply passive

receivers of others' emotions; they are, instead, agents. They can strategically modify their own and others' emotions in order to match a situation's requirements. Furthermore, these strategic actions will have an impact on team member social dynamics and performance (Marks et al., 2001). Therefore, the second objective of the research is to establish whether team member interpersonal emotion regulation has an effect on other team processes, team performance, and team member well-being.

Previous research on team processes and its effects on other variables has acknowledged the advantages of considering the multilevel nature of teams (Kozlowski, 2015). When work teams are considered as a unit of analysis, within-person, between-person, and interpersonal interactions, as well as team-level effects, can be accounted for (Ashkanasy & Dorris, 2017). Specifically related to interpersonal emotion regulation, systematic literature reviews have emphasised the importance of considering these multilevel effects (Troth et al., 2018). However, to date, little is known about team-level effects of interpersonal emotion regulation. This presents a limitation for the study of this phenomenon in the team context, in which there are numerous sources of influence including the dyadic interpersonal relationships between members and the social influence of the collective as a whole. Consequently, a more comprehensive understanding of team members' efforts in shaping, sustaining, or changing other members' emotions should pay attention to not only the individual (and dyadic), but also team-level effects (Collins, Lawrence, Troth, & Jordan, 2013; Mathieu, Gallagher, Domingo, & Klock, 2019). Therefore, the third objective of this thesis is to determine whether team interpersonal emotion regulation has an effect over and above individual team member actions on other team processes and outcomes.

Regarding team-level influences, a traditional way to understand team-level effects is conceptualising the team as a unit of analysis, considering the average of team members attributes or behaviours (Chan, 1998). This assumes that team members display similar interpersonal emotion regulation behaviours. However, in practice, individuals having different levels of various psychological attributes or behaviours make up work teams (Horwitz & Horwitz, 2007; Joshi & Roh, 2009). Thus, it is highly probable that individual members of a group will have differences in, for example, the strategies they use in order to manage others' emotions or the extent to which they use them. In the case of the kitchen team, it is very likely that Sara will display certain behaviours to regulate her colleagues' emotions, while John uses others. This

heterogeneity could have a specific and variable impact within the teams, for both emergent states and team processes, such as trust or conflict, which could even be extended to team performance. Thus, a comprehensive view of emotion regulation in teams should pay attention not only to the average collective effect of these behaviours on team processes and outputs but also to within-group variation, namely the differing contribution of each member to the team. Thus, the fourth and final objective of this research is to explore team interpersonal emotion regulation diversity and its effects on other team processes and performance.

In order to achieve these aims, this research proposes a mediation model, using the inputs–processes–states–outputs (IPSO) team effectiveness framework to organising the study variables (Ilgen, Hollenbeck, Johnson & Jundt, 2005; Marks et al., 2001). Traditionally, interpersonal emotion regulation has been considered a key interpersonal process in these models. Specifically, according to this framework, team processes (e.g. goal specification, coordination or affect management) play a central role in the model and represent the means by which team members utilise various resources or inputs (e.g. expertise, personality traits) to yield meaningful outcomes (e.g. team performance, team member satisfaction). Also, these models suggest that team processes may act as inputs for other processes in order to translate teamwork into team outputs (Marks et al., 2001). Within team processes, interpersonal processes such team member affect management are essential to facilitate the necessary social integration to perform team tasks. Based on this, this research proposes that team member interpersonal emotion regulation has an effect on team performance and member well-being through its influence on other team dynamics (such as team conflict, trust, and quality of relationship).

Figure 1.1 depicts the conceptual model of this research, in which, through interpersonal emotion regulation behaviours, team members can modify undesirable emotional states or enhance desirable emotional states in their teammates in order to foster positive states (e.g. trust) and diminish negative processes (e.g. conflict) to achieve team outcomes (e.g. performance, team member sense of well-being) (Marks et al., 2001). This model includes such potential team-level effects as team average and diversity. Following the previous kitchen team example, team members behaviours, such as the one used by Sara, may have an individual effect on other members or a team-level effect when her behaviours are considered together with

those of the other members as a whole. Such effects may increase the quality of team members' interpersonal relationships and trust and soften potential interpersonal frictions or conflict among members. This may facilitate team performance. Thus, thanks to the IPSO framework, we have a clear heuristic to understand the influence of these behaviours on team processes and outcomes.

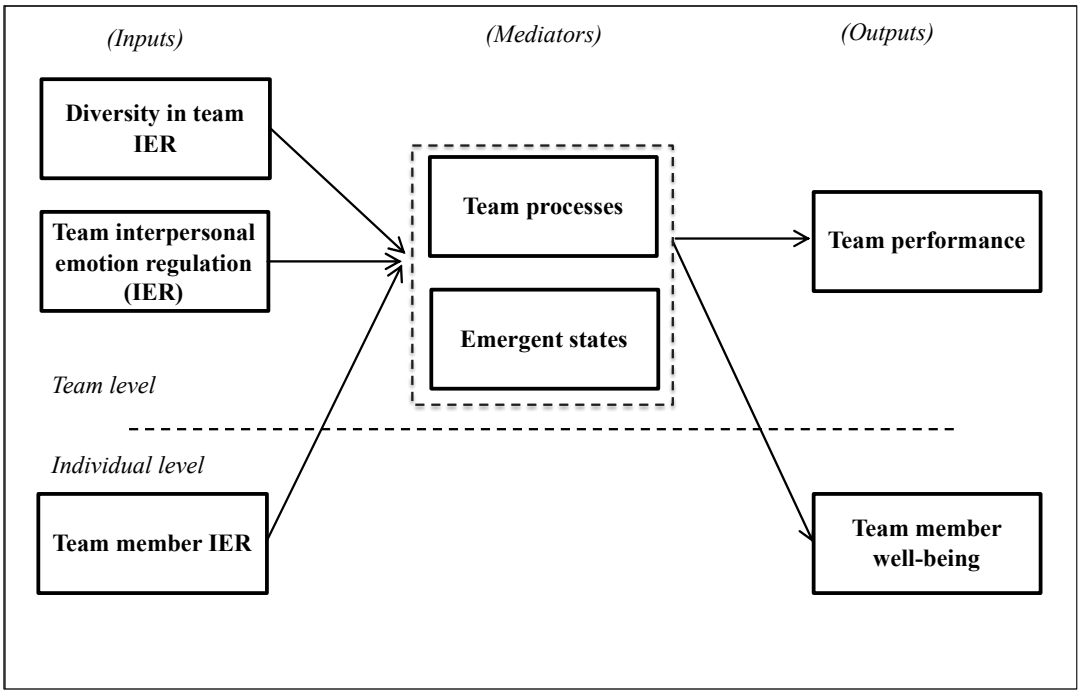


Figure 1.1. General theoretical model of this thesis, based on IPSO models of team effectiveness

To empirically address the aims of the study, I undertook a series of quantitative cross-sectional studies to investigate the role of team member interpersonal emotion regulation in teamwork. In three separate studies, performed in Chile, data were collected using two independent surveys. Firstly, team members responded to a survey measuring interpersonal emotion regulation strategies used in their team, together with a measure of team relationship conflict, team trust, quality of relationship, and team member emotional exhaustion; these served as an indicator of team member well-being. Secondly, team leaders completed a survey measuring team performance.

The present research explores, for the first time, the effects of interpersonal emotion regulation on teamwork. Thereby, this thesis offers four major theoretical, empirical and practical contributions to the discipline of organisational behaviour.

First, in terms of advances in theory, this research extends our knowledge of social aspects of interpersonal emotion regulation (e.g., Dixon-Gordon, Bernecker, & Christensen, 2015; Reeck, Ames, & Ochsner, 2016) by applying this construct to the work team context and describing a series of strategies used by team members to regulate their colleagues' negative emotions. This contributes to having a more comprehensive understanding of the role of interpersonal emotion regulation in teams, complementing the findings of prior research, which mainly focused on the use of these interpersonal strategies by team leaders (Little et al., 2016; Madrid, et al., 2018; Thiel, Connelly & Griffith, 2012). This also contributes to the contemporary theory in group emotions (Barsade and Knight, 2015; Collins et al., 2013) by establishing a specific mechanism by which team members can influence each other's feelings. Additionally, this research contributes to multilevel theory applied to organisational behaviour (e.g., Ashkanasy & Dorris, 2017) by studying interpersonal emotion regulation at the individual- and team-level of analysis.

Second, this research contributes to our theoretical and empirical understanding of team effectiveness models by developing, testing, and supporting a model that analyses the mechanisms by which team member affect management is related to team performance and team member well-being. In theoretical terms, this research extends previous knowledge of team effectiveness models by an in-depth development of team member affect management, integrating the understanding of emotion regulation literature (Marks et al., 2001; Ilgen et al., 2005). In empirical terms, this thesis shows the differential impact of antecedent-focused IER strategies and response-focused IER strategies on other team processes, emergent states and outcomes. These contributions extend previous conceptualisations of team effectiveness models by showing that not all team members' interpersonal actions to regulate others' emotions have the same effects on other team processes and outputs (Marks et al., 2001; Mathieu et al., 2019).

Third, this research contributes to the diversity literature by providing an empirical examination of within-team variation in a team process (team interpersonal emotion regulation) and showing how different team uniform and non-uniform

configurations are related to the team relationship conflict and performance. Particularly, based on prior research in team diversity (e.g., González-Romá et al., 2002; Liu et al., 2011) and LMX differentiation (e.g., DeRue et al., 2010; Li & Liao, 2014, Seo et al., 2017), this research presents two alternatives to conceptualise and analyse team interpersonal emotion regulation (IER) diversity: one using team-level standard deviation (within-team IER variation) and another based on team-level shape of the distribution (team IER configurations). This contributes to current advances in team diversity research, highlighting the importance of accounting for both team member agreement and disagreement to reach a more comprehensive understanding of a team-level phenomenon (van Knippenberg and Mell, 2016).

Fourth, team member strategies to regulate colleagues' emotions represent behaviours that can be potentially modified by learning and training (Quoidbach & Gross, 2015). Therefore, the findings of this thesis make an important contribution in practical terms by showing that as team members interpersonal emotion regulation behaviours are related to team dynamics, performance and members' well-being, it is crucial that organisations foster them. Specifically, due to the multilevel nature of this research, this thesis contributes to managers and practitioners by proposing several alternatives of interventions in interpersonal emotion regulation at the individual, team and organisational level of analysis. This is in line with current organisational interventions research (e.g., Martin, Karanika-Murray, Biron, & Sanderson, 2016), highlighting the benefits of considering a multilevel approach to improving employee well-being.

1.1. Thesis structure

This thesis is composed of nine chapters. Chapter 2 reviews the literature on interpersonal emotion regulation and distinguishes this construct from other interpersonal concepts used in the workplace. Specifically, this chapter first defines interpersonal emotion regulation under Gross's (1998) process model of emotion regulation. Then, it compares this approach to alternative conceptualisations of emotion regulation adopted by researchers throughout history to analyse this phenomenon in the workplace. Examples include affect management and the emotion

regulation of others and self (EROS) framework, emotional labour, and emotional intelligence.

Chapter 3 presents a literature review of previous studies of interpersonal emotion regulation in the team context. This chapter summarises and organises previous research in terms of the level of analysis - at the individual, dyadic, and team level. The second part of this chapter defines the main construct of this research, team interpersonal emotion regulation using the literature on team composition models (Chan, 1998), elaborating this construct in terms of an additive, consensus, referent-shift, and dispersion composition model.

Chapter 4 reviews the literature on team effectiveness. The first part of the chapter provides a description of the history of the IPSO model of team effectiveness and their initial focus on team social dynamics and performance. Then, the second part of the chapter is focused on interpersonal processes within the IPSO model. The final part of the chapter addresses the relationships between the different processes and emergent states provided by these models, and their effects on team outcomes.

Chapter 5, using the IPSO model as an organising framework, describes and justifies the concrete operationalisation of the theoretical model in terms of variables, and proposes specific hypotheses regarding the relationship between these variables. Particularly, based on interpersonal behaviour and social aspects of conservation of resources theory, a multilevel mediation model is proposed, in which team interpersonal emotion regulation strategies have an effect over and above individual strategies on other team processes and emergent states, such as relationship conflict, trust, and TMX, and, in turn, on team performance and team member well-being.

Chapter 6 describes the methodology adopted in this thesis to address the hypotheses proposed in the previous chapter. The first section of the chapter describes the philosophical assumptions of the research design and quantitative approach implemented. Then, it provides information about the procedure to collect the data, a description of the sample of the studies, and a list of the measures utilised. Particularly, this research collects information in the course of three different studies and tests different models, which increase in complexity. Study 1 corresponds to an initial study performed in a public organisation in Chile and designed to understand the general relationships between the research variables at the team level, specifically, team

interpersonal emotion regulation, relationship conflict, and team effectiveness. The sample of this first study comprises 985 workers sitting in 113 teams. Study 2 tests the multilevel nature of the data with a larger multinational Latin American organisation, involving 4659 employees sitting in 697 teams, assessing the relationships between team members' interpersonal emotion regulation, team conflict, team effectiveness, and team member well-being. Study 3 expands the model to other processes (team trust and TMX) and compares individual and team-level effects in a sample of 856 employees sitting in 187 teams, in a third, educational organisation located in Chile. The final section of this chapter describes in detail the strategy used to analyse the data collected in the three studies.

Chapter 7 describes the results of the three studies. First, this chapter describes the results of Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), which offer evidence for the construct validity of the team-level interpersonal emotion regulation measure used in this thesis. Then, the results of each study are presented separately as follows. First, the results of inter-rater reliability and agreement analysis. Then, the results of CFA that compares alternative measurement models, and the results of Structural Equation Modelling (SEM) and Multilevel Structural Equation Modelling (MSEM) analysis that test study hypotheses. The last part of the chapter integrates the findings of the three studies and provides an initial discussion of their implications.

Chapter 8 is especially dedicated to exploring team interpersonal emotion regulation (IER) diversity. Unlike previous chapters, this chapter has its own theoretical framework, hypotheses, methodology, and results. This strategy was selected to facilitate the clarity of the exposition and since it adds a layer of complexity to the mediation models already explored. Particularly, this chapter analyses the data of Study 2 (this being the study with the larger sample size) and operationalises two forms of diversity in team IER, namely, within-team IER variation and team IER configurations. The former refers to an indicator of team member heterogeneity using the team-level standard deviation. The latter compares teams in terms of the uniformity and non-uniformity of the distribution of team member responses. Then, it tests a more complex model related to the moderating role of diversity in team IER in the mediational relationship between team IER, team relationship conflict, and team performance.

Finally, Chapter 9 integrates and discusses the results of all three studies. The first section offers a detailed discussion of the role of team interpersonal emotion regulation in team dynamics and outputs, highlighting the theoretical, empirical, and practical implications of the thesis's findings. This chapter then addresses the potential limitations of this research, providing recommendations for future research in the area. The final part of the chapter summarises and concludes the thesis with a reflexion on the role of team member interpersonal emotion regulation in team dynamics, performance, and member well-being.

CHAPTER 2. EMOTION REGULATION

2.1. Chapter Overview

As this thesis focuses on interpersonal emotion regulation in teams, it is important to clarify first what we already know about the study of emotion regulation. This chapter is designed to achieve that objective. In the following sections, I review different perspectives to conceptualise interpersonal emotion regulation (IER) in the workplace. In this review, I will focus primarily on Gross's (1998) process model of emotional regulation as this will be the framework adopted in this thesis to examine the effects IER on teams. In order to ground the selection of this model over alternatives perspectives, in the subsequent sections I compare the process model to other approaches.

First, I address alternative models that have particularly examined IER at work, such as the affect management framework (Niven, Totterdell, Stride, & Holman, 2011; Parkinson & Totterdell, 1999), social sharing of emotions (Rimé 2007; 2009) and intrinsic/extrinsic IER (Zaki & Williams, 2013). Second, I review a number of phenomena that, while distinct from emotion regulation, represent ways in which IER has been addressed by previous research, such as emotional labour (Grandey, 2000), emotional intelligence (Salovey & Mayer, 1990), and emotional contagion (Elfenbein, 2014). Throughout this review, I seek to demonstrate that Gross's (1998) process model is the most comprehensive and parsimonious alternative for studying the effects of interpersonal emotion regulation at work (Gross, 2015; Troth et al., 2018; Webb, Totterdell, & Ibar, 2015).

2.2. The Study of Emotions in the Workplace

In recent decades, the study of employees' behaviour at work has undergone what has been referred to as an affective revolution (Barsade, Brief, Spataro, & Greenberg, 2003). This revolution has shed light on the fact that workplaces are full

of affective events and employees' perceptions of job events shape their feelings and behaviour (Lawrence et al., 2011). Previous research in the area has established that events at work impact employees' affective reactions, and these feelings influence a variety of outcomes, such as job attitudes and performance (e.g. see Weiss & Cropanzano's, 1996, Affective Events Theory). In general terms, affective states refer to an overarching concept that involves *moods* – longer lasting and lower intensity feelings with an unclear point of generation; and *emotions* – short, quick, and intense feelings with a known cause. Thus, this affective revolution emphases the importance of understanding affective dynamics in the workplace.

Often, in the workplace, moods and emotions need to be managed when they have direct bearing on an important goal or when they do not fit with a situational requirement. Imagine, for example, how badly feelings of anger can affect the outcome of an employee-customer or a leader-member interaction. These regulatory efforts made by individuals to modify an emotional response have been termed emotion regulation. Specifically, emotion regulation has been defined as a set of behaviours by which individuals influence emotions that they have. This process involves changes in the occurrence, intensity, and duration of individuals' affective states (Eisenberg et al., 2000; Gross, 2015). Frequently, people seek to regulate their own emotions; scholars have designated this as intrinsic or intrapersonal emotion regulation. On other occasions, individuals attempt to regulate others' emotions, which has been referred to as extrinsic- or inter-personal emotion regulation.

2.3. Process Model of Emotion Regulation

This model of emotion regulation has its roots in the work of James Gross and colleagues in the 1990s (Gross & Levenson, 1993; Gross, 1998; Gross & Muñoz, 1995). The key characteristic of this model lies in describing a conceptual analysis of the process underlying diverse regulatory acts. Thus, within this model, acts of emotion regulation may have their impact at different points in the emotion generation process. In its initial conceptualization, this model focused primarily on how individuals regulate their own emotions (Gross, 1998), but it has gradually been expanded to individuals' attempts to regulate others' emotions (Gross, 2015). Thus, I

first describe *intra*-personal emotion regulation, and then I move the argumentation to *inter*-personal emotion regulation.

2.3.1. Intrapersonal emotion regulation

In his seminal work, Gross (1998) distinguishes five sets of general strategies that people use in order to manage their own emotions. These strategies are organised sequentially in what Gross named the *Process Model of Emotion Regulation*, differentiating several stages in the emotion generation process (see Figure 2.1). According to this model, emotion regulation comprises a series of strategies involved in "the process by which individuals influence which emotions they have, when they have them and how they experience and express these emotions" (Gross 1998, p. 275). This model was constructed based on previous distinctions made in terms of *antecedent-focused* and *response-focused* strategies, distinguishing between those which are directed to influencing the causes of the emotions or antecedents, versus those which are directed to modifying the emotional response itself (Gross, 1998).

In general terms, antecedent-focused strategies involve regulatory efforts from actors to select or modify situations, deploy attention, or re-evaluate a situation to alter their feelings, whereas in response-focused strategies, regulators attempt to manipulate their experienced emotions, alter their facial expressions, or monitor their physiological responses (Gross, 2015). Thereby, according to Gross (2015), a process-oriented approach may be better able to aid understanding of the causes, consequences, and underlying mechanisms of the emotion generation process. The set of five strategies described in Gross's (1998) process model are: (1) situation selection, (2) situation modification, (3) attentional deployment, (4) cognitive change, and (5) response modulation; the first four are focused on the antecedents of the emotional response and the last centres on the emotional response itself (see Figure 2.1.b). Thus, this temporal dimension and the distinction between two overarching set of strategies, namely, antecedent-focused and response-focused strategies, are the main distinctive characteristics of the model in relation to alternative frameworks.

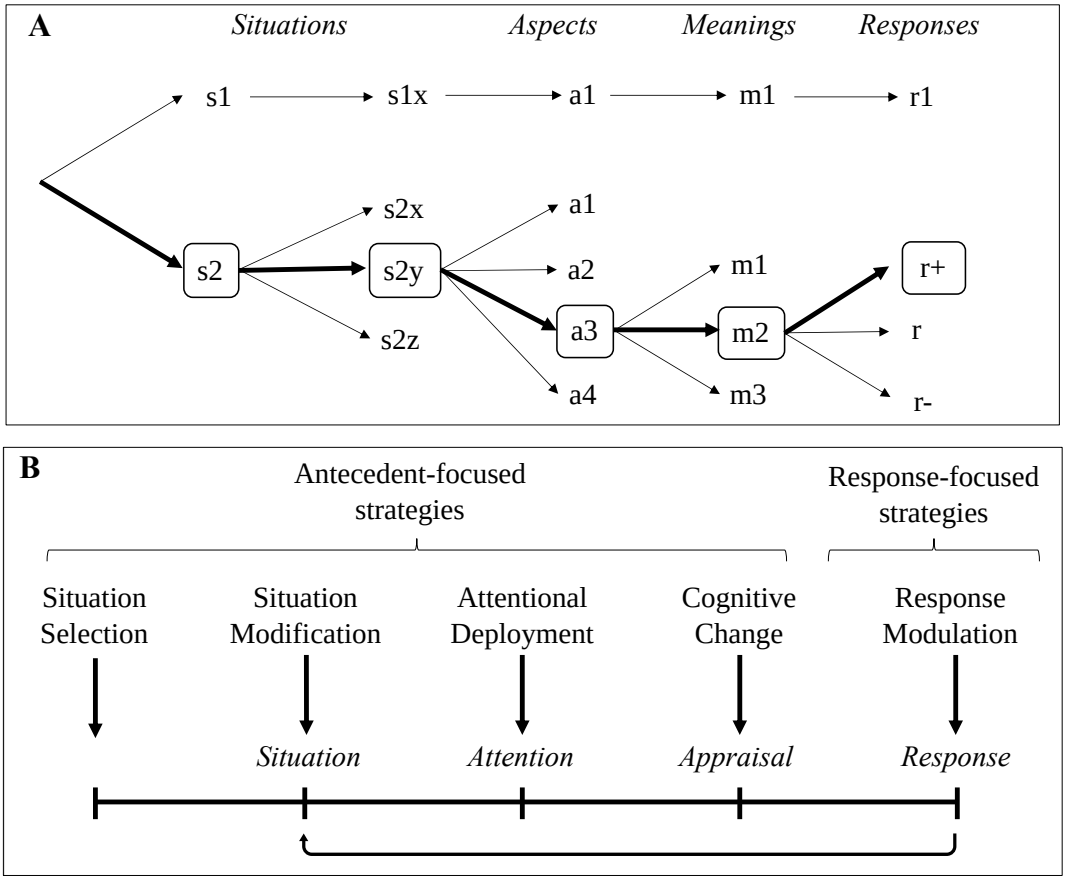


Figure 2.1. Process Model of Emotion Regulation. a) Depiction of how a person might make a series of emotion regulation choices at different points in the emotion-generative process. b) The process model of emotion regulation was derived by identifying each of the major points in the model at which the emotion-generative process might be altered. Adapted from Gross (2015).

Situation selection refers to active efforts individuals make to influence the situation they will encounter: approaching or avoiding certain people, places, or objects in order to regulate their emotions – for instance, when an employee avoids participating in a presentation to avoid feeling anxious. Similarly, *situation modification* consists of people actively attempting to change the features of a situation that is causing them undesirable emotions, thus changing its emotional impact – for example, when an employee makes changes to a presentation in order to feel more confident. These two strategies involve individuals' behaviours to alter the situation that is generating the emotions they desire to regulate.

Attentional deployment refers to a change in attentional focus from the features of the situation in order to alter its emotional impact. These strategies may include distraction, such as focusing attention on non-emotional aspects of the situation; concentration, for instance, the capacity to absorb cognitive resources and apply them within a situation; and rumination, in which attention is directed to feelings and their consequences, for example, when employees try to manage their anxiety, focusing their attention on a more pleasant situation, such as a past good experience.

Cognitive change consists of trying to modify the situation's evaluation or meaning in order to alter its emotional impact. A classic example of cognitive change is reappraisal: this involves cognitively transforming the situation to alter the way in which people feel – for instance, when employees manage their negative emotions through analysing their problems from a different perspective. Together with attentional deployment, these two strategies are directed to changing people's mental processes in relation to the situation that is generating the emotions that they want to regulate.

Response modulation refers to individuals' actions to directly influence the physiological, experiential, or behavioural features of their emotional response. In contrast to the emotion regulation processes described above, response modulation occurs late in the emotion generation process, after response tendencies have been initiated. Alcohol and drug use, and physical exercise, have been classified as examples of response modulation. A typical case of response modulation, widely studied in research, is known as suppression of the expression of the emotion, in which individuals try to suppress their feelings in order to regulate their emotional responses (Gross, 2015). For example, when employees are anxious or upset about some work-related issue, they decide not to show these negative emotions and display a big smile instead. Besides the suppression of the expression of emotions, workers can also suppress the experience of emotion (Webb, Miles, & Sheeran, 2012). For instance, when employees tell themselves not to feel too stressed this time because they need to finish a task soon.

Numerous studies have explored the effects of intrapersonal emotion regulation on a range of variables relevant in the work context, such as affective states, social relationships, job performance, and well-being (Lawrence et al., 2011;

Quoidbach, Berry, Hansenne, & Mikolajczak, 2010; Scheibe & Zacher, 2013; Schutte, Manes, & Malouff, 2009; Totterdell & Holman, 2003; Webb et al., 2012). In general terms, research has shown opposite associations between antecedent- and response-focused emotion regulation strategies and other variables. For instance, regarding social outcomes, previous research has found a general positive effect of antecedent-focused strategies such as cognitive reappraisal on quality of relationship and seeking social support (Gross & John, 2003; Richards & Hackett, 2012). Also, previous studies have shown that suppression of emotions is associated with poorer interactions and reduced social support and sympathy from their social partners (Butler et al., 2003).

Concerning job performance, the majority of the research has been centred on describing the effects of two analogous concepts, called deep and surface acting in the emotional labour literature, and their effects on employee performance (Grandey, 2000; Grandey & Melloy, 2017). This particular evidence will be discussed in the specific section dedicated to emotional labour in the following pages of this chapter. Despite the research into emotional labour, a number of studies have demonstrated the effects of Gross's (1998) process strategies on memory, positive emotions, attention, and task performance (Gross, 2015; Lee et al., 2016; Leroy, Grégoire, Magen, Gross, & Mikolajczak, 2012; Ortner, Zelazo, & Anderson, 2013; Wallace, Edwards, Shull, & Finch, 2009; Webb et al., 2012). For example, Wallace and colleagues (2009) found that employees of a call centre who have a tendency to use cognitive reappraisal versus suppression show an increase in performance via their capacity to be focused on the task. Similarly, Ortner et al. (2013) observed that whilst both cognitive reappraisal and suppression involve the use of attentional resources, suppression has a higher detrimental effect. Contrarily, Yeung & Fung (2012), in a study involving older workers, found a positive effect of suppression on sales indicators.

Similar to job performance, one of the most studied variables related to the effects of intrapersonal emotion regulation has been employee well-being. Specifically regarding the effects of the strategies in Gross's (1998) model, evidence has revealed the impact of situation selection and modification on well-being (e.g. avoiding a 'mean' co-worker, Aspinwall & Taylor, 1997). Likewise, using conservation of resources theory (COR; Hobfoll, Freedy, & Lane, 1990), studies have shown the positive effects of cognitive reappraisal on people's sense of well-being (Gross &

John, 2003; Haga, Kraft, & Corby, 2009; Livingstone & Srivastava, 2012; McRae, Jacobs, Ray, John, & Gross, 2012), and negative effects of response-focused strategies on well-being (Grandey, 2000; Gross & John, 2003; Haga et al., 2009). Taken together, these studies support the notions that emotion regulation is a regular activity in the workplace and that engaging in this kind of behaviour has important effects on people's performance and sense of well-being.

2.3.2. Interpersonal emotion regulation

As the title of this thesis suggests, its main objective is to determine the role of interpersonal emotion regulation in the team context. Thus, the next sections of this chapter will concentrate on this phenomenon. Although the study of emotion regulation started out by primarily focusing on intrapersonal processes (Gross, 2015), research interest in its interpersonal side has progressively increased in recent years (Dixon-Gordon, Bernecker, & Christensen, 2015; Niven et al., 2009a; Reeck et al. 2016; Zaki & Williams, 2013). So far, mention has only been made of how people can regulate their own emotions, but, as indicated previously, it is also likely that individuals manage other people's emotions.

Overall, interpersonal emotion regulation has been described as the social process in which people try to change the nature, duration, or intensity of the emotional experience and emotion expression of a target individual (Eisenberg et al., 2000; Reeck et al., 2016). As there are similar processes that involve the social influence of other's emotions, such as emotional contagion, social sharing of emotions, emotional labour, and emotional intelligence, Niven (2017) developed a framework which describes the four key characteristics of interpersonal emotion regulation. Unlike similar constructs, interpersonal emotion regulation – as its name suggests – is a process of regulation (i.e., it is about maintaining or changing another person's state of feeling with some kind of goal in view). Second, it has an affective target, which means that the associated cognitive or behavioural outcomes of regulatory attempts are not the main objectives of the regulation. Third, it is a deliberative behaviour, thus involving intentional, controlled, resource-intensive activities to regulate others' feelings. Fourth, it involves a regulator, who is engaging in the act, and a social target, whose emotions are being regulated. This means that the affective states that are the object of the regulation do not belong to the regulator. These four characteristics will

be utilised in the next sections when interpersonal emotion regulation is compared to other similar affective processes studied in the workplace.

In a similar way to the intrapersonal process, interpersonal emotion regulation can be translated into a number of strategies or behaviours that people can use to attempt to modify the emotions of others (Reeck et al., 2016). Applied to the workplace, this interpersonal version of Gross's (1998) framework includes practically the same dimensions as the original model, albeit with a few modifications. The main modification made by scholars (cf. Little, Kluemper, Nelson, & Gooty, 2012; Williams, 2007) has been to combine situation selection and situation modification into one dimension (situation modification). This is mostly as cases in which one individual selects a situation for another are scarce in the work context and depend on the extent of regulators' knowledge of the target's behaviours and affective reactions. These cases may also depend on the power imbalance of the relationship, in terms of the extent of control over another's behaviours in order to select a situation for them. For example, when parents select a particular situation for their children, such as not going to the cinema, because they know their reactions well in a diverse set of circumstances. In this case, they know their son is not going to be comfortable and have the power to 'control' their children's behaviour, avoiding the cinema. Although situations of this kind are possible in the workplace, they are not very likely, especially in the team context, considering that team members have more horizontal relationships.

The same distinction between antecedent-focused strategies and response-focused strategies can be applied to interpersonal regulation (see Figure 2.2 for an interpersonal adaptation of Figure 2.1.b). Therefore, applied to the interpersonal context, *situation modification* refers to attempts on the part of an individual to remove or alter a situation in order to reduce the emotional impact on the target individual. For instance, the leader of an institution dealing with anger and frustration felt by employees works behind the scenes in order to reduce workers frustration and not impact customers (Little et al., 2012).

Attentional deployment refers to actions performed by an individual to direct the target's attention away of the stimulus, frequently something more pleasant. A consultant, for example, might redirect attention away from the issue if a client

becomes upset (Williams, 2007). *Cognitive change* refers to people's attempts to show different possible meanings in assessing a situation or problem for a target individual. For instance, a manager might cognitively reframe a pay cut as a way to mitigate potential job losses (Williams, 2007).

Response modulation involves actions that suppress or assuage the experience or expression of an emotional response in a target individual; for example, to calm down an employee when upset, a supervisor may say something like 'relax' or 'it's not that big of a deal' or 'please calm down' (Little et al., 2012). Following Gross's (1998) model, the first three strategies are focused on the antecedents, and the last on the emotional response itself (Figure 2.2).

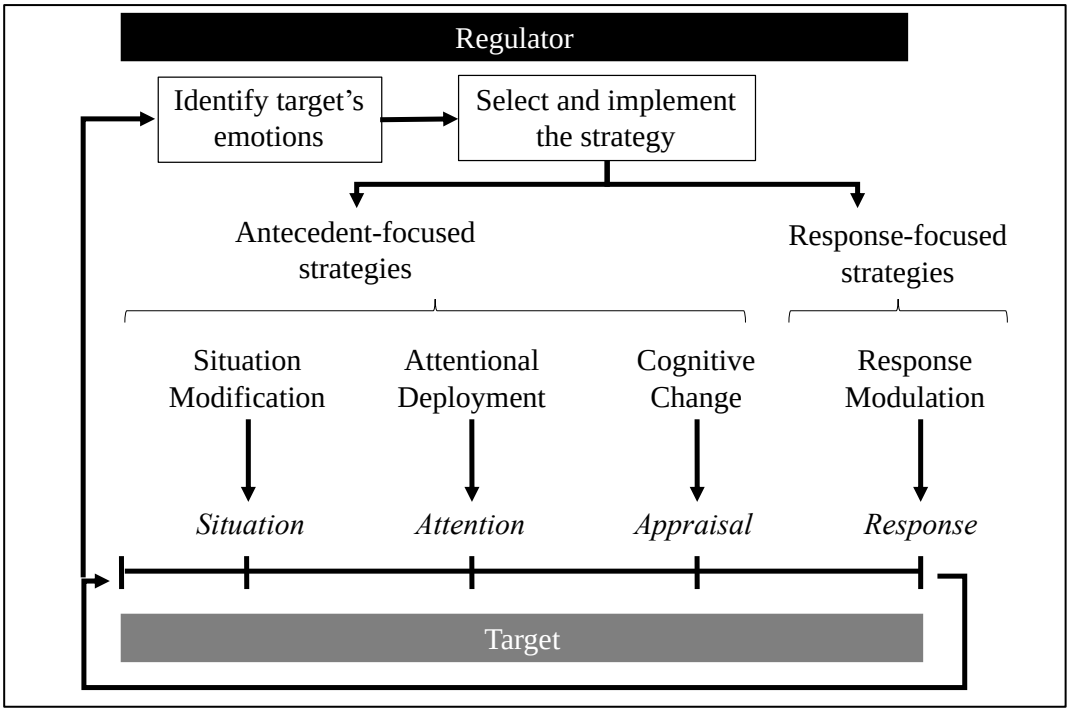


Figure 2.2. Process Model applied to Interpersonal Emotion Regulation. This model describes how an individual acting as a regulator may influence a target's feelings using different strategies in the emotion generation process. Adapted from Reek et al. (2016).

This model has been applied to the interpersonal context in several studies and has been associated with a number of work-related variables such as job satisfaction, leadership, interpersonal trust, and job performance (Little et al., 2016; Little et al., 2012; Thiel et al., 2012; Williams, 2007; Williams & Emich, 2014). For example,

Little and colleagues (2016), following Gross's (1998) model of emotion regulation, describe a series of strategies that leaders use with the purpose of regulating followers' emotions which is directly related to their quality of relationship and indirectly to employees' extra-role behaviours. In relation to job performance, Thiel and colleagues (2012), using an experimental design, show how leaders can improve employees' performance, regulating their anger via cognitive reappraisal. In a similar vein, Vasquez, Niven, & Madrid (2020) found in a field study that leaders' use of strategies to improve followers' emotions, such as cognitive reappraisal and attentional deployment, are associated with followers' positive feelings and improved performance.

This section has attempted to provide a brief summary of the literature relating to emotion regulation following Gross's (1998) process model. From here, it is easy to imagine a situation in the workplace in which team members interpersonally manage each other's emotions in their daily group interactions. Thus, Gross's (1998) framework provides a theoretically grounded basis for examining a range of emotion regulation strategies and identifying how they shape the experience and expression of emotions in the workplace. However, before examining the impact of team member IER in the team context, I will review alternative frameworks that have examined this phenomenon in the workplace and compare them to Gross's (1998) process model.

2.4. Alternative Models and Perspectives on Emotion Regulation

This section reviews alternative models and perspectives on interpersonal emotion regulation, comparing them with Gross's (1998) Process Model addressed in the previous section. In order to carry out this comparison, I employ Niven's (2017) framework concerning the four key characteristics of interpersonal emotion regulation to assess each perspective in terms of its understanding of this phenomenon. Specifically, first I review the affect management approach (also known as EROS; Niven et al., 2009, 2011; Parkinson & Totterdell, 1999) because it is the main alternative model to understand interpersonal emotion regulation and has been widely used in previous studies, especially in relation to the workplace. For this reason, this section is more detailed than those following. Then, I briefly refer to Rimé's (2007) and Zaki & Williams' (2013) accounts of interpersonal emotion regulation, because

they represent two contemporary conceptualisations of the social implications of this construct. Finally, I briefly review three phenomena that, while different from IER, represent ways in which this phenomenon has been previously studied in the work context, namely, emotional labour (Grandey, 2000), emotional intelligence (Mayer, Salovey & Caruso, 2008), and emotional contagion (Elfenbein, 2014). Table 2.1 summarises the main characteristics, dimensions, advantages, and limitations of each of these approaches.

2.4.1. Affect management: Emotion regulation of others and self (EROS) framework

Around the late 1990s, Parkinson and Totterdell (1999) developed a detailed description of the frequency of use of a large number of deliberate strategies for improving unpleasant affect and classified them in a double entry matrix. Through this methodology, they distinguish between strategies which are cognitively (e.g. thinking something) and behaviourally (e.g. doing something) guided, and those aimed at diversion (e.g. avoiding) or engagement (e.g. taking care) in the situation that generates the emotions. Therefore, individuals can use strategies, such as cognitive-diversion 'thinking something else', behavioural-diversion 'doing something relaxing', cognitive-engagement 'thinking about how to solve the problem', and behavioural-engagement 'taking actions to solve the problem', in order to regulate their 'negative' or 'unpleasant' feelings. These categories represent overarching concepts under which various specific strategies, such as behavioural distraction, venting, rationalisation, reappraisal, and social support can be classified.

Table 2.1. Main Approaches to Understand Interpersonal Emotion Regulation

Approach	Description	Main Dimensions	Advantages	Limitations [a]
Process Model of Emotion Regulation	Process-oriented approach in which emotion regulation comprises a series of strategies to regulate other's emotions at different points in the emotion generative process.	• Antecedent focused strategies (e.g., situation section and modification, attentional deployment and cognitive change). • Response focused strategies (e.g., response modulation).	• Comprehensive and parsimonious. • Take into account the regulation of emotions in different stages of the emotion generation process.	• General and abstract overarching categories. Concrete examples can be a mix of specific strategies. • Fulfil all four IER characteristics.
Affect Management (EROS)	Describe a set of distinct behaviours that people use to manage their own and others' affect. These behaviours can be distinguished according to the general motive behind their use (improve or worsen affect).	• Intended change in affect: Affect improving and affect worsening. • Implementation medium: Cognitive or behavioural. • Mechanism: engaging or diverting the target's attention/behaviour on an issue or feeling.	• Comprehensive and parsimonious. • Includes specific strategies to worsen other's affect.	• It does not include response-focused strategies. Thus, does not achieved completely the first and second characteristic, namely, it is a form of regulation with an affective target state.
Interpersonal emotion regulation: social sharing of emotions	Analyse interpersonal processes related to emotion regulation with a special emphasis on individuals social sharing of emotions.	• Interpersonal expression of emotions (positives or negatives). • Cognitive and socio-affective modes of sharing emotions.	• Detailed account of potential 'antecedents' of interpersonal emotion regulation. • Includes social sharing and motives.	• Includes the effects of social sharing of emotions. Thus, it fails to fulfil the first and second characteristic related to regulate others' affective states.
Interpersonal intrinsic and extrinsic emotion regulation	Interpersonal extension of Gross's process model, including motivations and changes in both interaction partners (regulator and target).	• Intrinsic IER (when an individual initiates social contact in order to regulate his own experience). • Extrinsic IER (when a person attempts to regulate another person's emotion). • Distinguished between response-dependent and response-independent processes.	• Specific application of Gross's process model to the interpersonal domain. • Highlight the importance of feedback processes in the interpersonal regulation of emotions.	• Includes intrinsic interpersonal emotion regulation (i.e., regulator use an interpersonal interaction to target its own emotions). Thus, it does not satisfy the fourth characteristic, namely, having a social target.

Table 2.1. (continued)

Approach	Description	Main Dimensions	Advantages	Limitations [a]
Emotional labour	Complex work context phenomenon in which employees have to express certain emotions (frequently positive ones) to adhere to certain emotional display rules established by organisations.	• Deep acting: employees work to change feelings to appear more genuine in the performance, but perhaps losing their true feelings in the process. • Surface acting: employees mask their own feelings and "paste on" the expected expressions by the workplace.	• Specifically describe emotion regulation in the work context. • Includes strategies to regulate individuals' own emotional expression to influence 'clients' feelings.	• Includes behaviours that exceed interpersonal emotion regulation. It is limited in terms of the specific regulatory goal (e.g., fulfil a work-related motive), and social target (e.g., involves the regulation of people's own affect as well).
Emotional Intelligence	Refers the general individuals' ability (or traits) to identify and modify self and others' emotions.	• Includes four set of abilities [b]: – Perceiving emotions. – Using emotions to facilitate thought. – Understanding emotions. – Managing emotions.	• Widely applied to the work context. • Useful to understand emotion regulation as an individual difference.	• Includes behaviours that exceed interpersonal emotion regulation, such as perceiving, understanding and using emotions. Thus, fails to support the first, second and third characteristic.
Emotional Contagion	Automatic process through which emotions are quickly transmitted between individuals.	• Convergent linkage (e.g., when individuals share the same point and interpretations of evocative stimuli). • Divergent linkage (e.g, when people shared the same point but different interpretations). • Complementary linkage occurs when the other person is itself the stimulus.	• Explain interpersonal emotional influence in terms of rudimentary psychological processes and mechanisms.	• As it can be an automatic and unconscious process, does not fulfil the third criteria of IER, namely, it is a deliberative behaviour.

Note. [a]This table uses Niven (2017) four characteristics of interpersonal emotion regulation as a main input to assess the limitations of similar constructs to study interpersonal emotion regulation in the work context. Specifically, interpersonal emotion regulation is presented as a process of (1) regulation, that (2) has an affective target, (3) is deliberate, and (4) has a social target. [b] The number and term of the overarching categories vary depending on the conceptualisation of the construct. Here I used the original Mayer, Salovey, Caruso, and Sitarenios (2003) terminology. IER = Interpersonal emotion regulation

Following the same framework and methodology used by Parkinson and Totterdell (1999) to understand intra-personal emotion regulation, Niven and colleagues (2009a) have extended the model to include the down-regulation of positive affect and incorporate interpersonal regulation. Specifically, Niven et al. (2011) in their Emotion Regulation of Others and Self (EROS) framework describe a set of distinct behaviours that people use to manage their own and others' affect. These behaviours can be distinguished according to the general motive behind their use: whether they are directed to maintaining positive emotions or changing negative emotions (i.e. affect-improving), or whether they are instead directed towards sustaining negative emotions or altering positive emotions (i.e. affect-worsening). Likewise, on a lower level, strategies can be differentiated in terms of their implementation medium (e.g. cognitive or behavioural) and the way in which they operate (engaging or diverting the target's attention on an issue or feeling).

Applied to the work context, numerous studies have demonstrated the effects of employees' intrapersonal and, especially, interpersonal emotion regulation on quality of relationship (Niven, Holman, & Totterdell, 2012; Niven, Macdonald, & Holman, 2012), well-being (Niven, Totterdell, & Holman, 2009; Niven, Totterdell, Holman, & Headley, 2012), and performance (Holman & Niven, 2019; Vasquez et al., 2020). Also, applied to the leadership context, several studies have shown how, when leaders engage in improving interpersonal emotion regulation strategies, they foster positive affect, citizenship behaviours, and innovation in their teams (Madrid et al., 2018; Madrid, Niven, & Vasquez, 2019).

The advantages of this approach are that it reflects individuals' spontaneous understanding of emotion regulation and it involves concrete examples of actions that people perform to manage their own emotions. Also, the overarching categories seem to be parsimonious (e.g. cognitive/behavioural, or improving/worsening feelings), and in accordance with basic motivational systems described by previous research (see approach and avoidance, Carver, Avivi, & Laurenceau, 2008; Carver & White, 1994). Specifically regarding the EROS approach, the classification has the benefit of providing an integrative framework for organising and understanding prior studies of interpersonal affect regulation and similar processes. Another important benefit of the approach of Niven et al. (2011) is that it includes not only behaviours related to

improving other people's emotions, but also behaviours directed towards worsening individuals' feelings.

Nevertheless, this kind of classification can be subject to individuals' salient representations and neglect aspects that are not evident to laypeople's understanding. Besides, whereas this classification appears to consider four general hierarchical categories –in the case of Pakinson and Totterdell's (1999) model – the authors of this model ultimately generate a long list of strategies (numbering around 15) which do not easily fit a specific overarching category (e.g. the use of physical exercise). In that sense, many of the strategies described by Parkinson and Totterdell (1999) as behavioural engagement and disengagement can be classified as 'situation selection' or 'situation modification' in terms of Gross's (1998) model. Something similar occurs with cognitive strategies in Parkinson and Totterdell's (1999) model, which can be clearly classified either as 'attentional deployment' or as 'cognitive change' in Gross's (1998) model.

Moreover, while the EROS framework meets almost all Niven's (2017) key criteria of interpersonal emotion regulation, it fails to include response-focused strategies, leaving the first and second characteristic, namely, it is a form of regulation with an affective target state, partially addressed. This situation occurs because Parkinson and Totterdell's (1999) model was originally focused on situations that generate individuals' emotional responses, or antecedent-focused strategies in Gross's (1998) terminology, more than the capacity of individuals to regulate the emotional expression itself. Likewise, whereas conceptualising worsening behaviours might be beneficial for a more comprehensive study of emotion regulation, the EROS framework does not fully distinguish those seeking to change the emotional state of a target individual because this person needs it, versus those seeking to change another's affect only by make them feel worse (e.g. a workplace harassment or bulling situation).

2.4.2. Interpersonal emotion regulation: social sharing of emotions

One way in which people may interpersonally regulate others' emotions is through social sharing their affective states. Rimé (2007; 2009) developed an account of interpersonal emotion regulation which emphasises the social effects of sharing our emotions with other people. By sharing their emotions with other people, individuals increase their feelings of similarity, unity, and empathy, which has an impact on their

mutual understanding, support, and quality of relationship (Rimé, Bouchat, Paquot, & Giglio, 2020; Rime, Mesquita, Boca, & Philippot, 1991; Zech & Rimé, 2005). As a consequence, when individuals share their emotions, they have emotional 'material' to interpersonally regulate them.

According to Rimé's (2009) account, there are two types of sharing mode. One is a cognitive mode, which stimulates antecedent-focused strategies from interaction partners, particularly, interpersonal cognitive reappraisal. Moreover, people may share their emotions via a socio-affective mode, which generates emotional support responses, related to consolation, empathy, and bonding, more akin to response-modulation strategies. In this regard and in line with Gross's (1998) process model, this approach proposes that when individuals use the socio-affective route in the absence of any cognitive route the relieving effects, reducing negative feelings, are only temporary (Rime, 2009).

Therefore, this theoretical account of interpersonal emotion regulation suggests valuable information about the 'antecedents' of the use of interpersonal emotion regulation by individuals. These antecedents are the social sharing of emotions and the motives underlying such behaviours. Indeed, as Niven's (2017) approach of the four key characteristics of interpersonal emotion regulation suggests, before engaging in any regulatory attempt, individuals need to know the affective states of others. However, this focus on some antecedents of interpersonal emotion regulation has a detrimental effect in terms of the explanation of the mechanisms by which individuals actually regulate others' emotions. Therefore, this approach does not satisfy two important characteristics of interpersonal emotion regulation, namely, it is a regulatory behaviour that has a social target (Niven, 2017). In fact, according to this view, very often, individuals engage in social sharing of emotions in order to obtain validation and then to regulate their own emotions more than focusing on regulating others' feelings.

2.4.3. Interpersonal intrinsic and extrinsic emotion regulation

A contemporary and fruitful way to understand interpersonal emotion regulation can be found in Zaki and Williams' (2013) approach. This approach is an interpersonal extension of Gross's (1998) process model of emotion regulation. Specifically, Zaki and Williams (2013) realise the fact that emotion regulation does

not occurs in isolation. In fact, almost since its conception (see Gross, 1998), emotion regulation researchers have recognised the social functions of this process for individuals. Following this line of reasoning, the authors define interpersonal emotion regulation as the 'space' in which individuals use an interpersonal regulatory episode to regulate their own or another person's emotions. Accordingly, they propose two main forms of interpersonal emotion regulation, namely, intrinsic and extrinsic. Intrinsic interpersonal emotion regulation occurs when an individual initiates social contact in order to regulate his own experienced emotions. Conversely, extrinsic interpersonal emotion regulation happens when a person attempts to regulate another person's emotions (Zaki & Williams, 2013).

In addition, being social in nature, Zaki and Williams (2013) argue that interpersonal regulatory attempts are dependent on or independent of interaction partners' response. This can have a particular effect on affiliation and perceived social support from interaction partners (Williams, Morelli, Ong, & Zaki, 2018). This means that individuals may engage in social regulation of their or others' emotions with or without the expectation of a response from a counterpart. For example, intrinsic interpersonal emotion regulation (individuals using an interpersonal interaction to regulate their own emotions) can be either response-independent (e.g. when people share their experiences to label their emotions and so be able to regulate them), or response-dependent (e.g. when individuals' expect validation or support from their interaction partners). A similar situation can occur with extrinsic interpersonal emotion regulation. In this case, these regulatory behaviours can be response-independent (e.g. when individuals engage in prosocial behaviours directed to regulating negative experiences in others without expecting something in return) or response-depended (e.g. when individuals seek some kind of feedback from their interaction partners to assess whether or not their emotions were successfully regulated). These distinctions have been described as important to consider in order to achieve a more comprehensive understanding of the antecedents and consequences of IER in the workplace (Troth et al., 2018).

This way of conceptualising interpersonal emotion regulation has the advantage of considering the whole interpersonal situation in which these regulatory processes are occurring. Also, it highlights the importance of considering the role of

feedback mechanisms when emotions are interpersonally regulated. However, similar to Rimé's (2009) account, as it includes regulator engagement in interpersonal situations to regulate the actor's own emotions, does not fulfil the fourth characteristic of Niven's (2017) framework to categorise IER. The fourth characteristic relates to behaviours exclusively directed to regulating the emotions of a social target. Thus, it surpasses interpersonal emotion regulation by including intrapersonal consequences.

So far, this thesis has focused on describing three specific approaches to emotion regulation in the current literature. The following section will concisely discuss three additional alternatives, namely, emotional labour, emotional intelligence, and emotional contagion. However, unlike the previous alternatives, these three approaches involve a broader phenomenon than emotion regulation, incorporating, for instance, emotional display rules, the awareness and recognition of emotions, and automatic affective transference between individuals. Regardless of this, these approaches represent similar concepts commonly used in the workplace, so it seems important to address them before examining the effects of IER within the team context, especially considering the fact that most of the previous research into emotion regulation in teams appeals in some extent to these concepts.

2.4.4. Emotional labour

Research into emotional labour has a long history. The construct of emotional labour was first articulated by Hochschild (1983) in her sociological studies, and describes the phenomenon whereby employees have to intrapersonally regulate their own emotions in order to adhere to certain emotional display rules established by organisations, mainly regarding customer interactions (Steinberg & Figart, 1999). Specifically, this construct has been defined as the emotion regulation process by which people show a particular emotion (frequently a positive one) according to the requirements of the workplace (Grandey & Melloy, 2017). This is evident in the case of customer service workers, who are asked to show positive emotions independently of how they really feel. Classically, researchers on this topic have described two types of emotional labour, namely, deep acting and surface acting. Deep acting corresponds to people's genuine attempts to conscientiously modify emotions felt to match expressed emotions. Conversely, surface acting refers to people's attempts to fake emotions which are unfelt and suppress the expression of emotions.

In this context, a number of researchers have integrated emotional labour research into Gross's (1998) process model of emotion regulation (Grandey, 2000; Grandey & Melloy, 2017). Particularly, scholars have identified deep acting with Gross's (1998) antecedent-focused strategies, such as reappraisal, and surface acting with response-focused strategies, particularly suppression (Grandey, 2000). Furthermore, some researchers have recognised that emotional labour can be conceptualised as an interpersonal emotion regulation process as well (Becker & Cropanzano, 2015; Coté, 2005). In this interpersonal form, agents shift the expression of their emotions (via surface or deep acting) in order to change or regulate the emotions of other individuals, for example, a customer service worker trying to make an angry client feel better (Totterdell & Holman, 2003).

Although emotional labour was one of the first attempts to study emotion regulation in the work context, and numerous studies have shown its effects on employees' performance and well-being (Bono & Vey, 2005; Brotheridge & Grandey, 2002; Grandey, 2003; Hülsheger & Schewe, 2011), its effects nowadays can be easily understood as a specific application of Gross's (1998) model to employee-customer interactions in the work context (Diefendorff, Richard, & Yang, 2008; Grandey, 2000). By contrast, Gross's (1998) model is a better fit for researchers who wish to examine the generation, experience, and expression of emotion in relation to a wider range of work contexts, incorporating broader ER strategies and/or how ER strategies relate to different instrumental goals. Likewise, in terms of Niven's (2017) four characteristics of emotion regulation, emotional labour generally fulfils the four characteristics to a certain degree. However, as this complex behaviour also includes individuals' efforts in regulating their own emotions, its intrinsic features exceed the fourth characteristic of Niven's framework, specifically that interpersonal emotion regulation is a process mainly focusing on sustaining or modifying a social target's emotions.

2.4.5. Emotional intelligence

Another, more recent approach whereby emotion regulation has been applied to the work context is under the concept of emotional intelligence. Although these concepts have several similarities, they should not be confused. Emotional intelligence proposes the management of emotions as one of its components, which involves the

general ability to identify and modify one's own and others' emotions to effect greater adaptation (Hong, Catano, & Liao, 2011; Koman & Wolff, 2008; O'Boyle, Humphrey, & Pollack, 2011; Sy, Tram, & O'Hara, 2006). In contrast, emotion regulation specifically refers to the set of behaviours or strategies that people engage in to modify or sustain the intensity, frequency, or valence of an emotional expression (Gross, 2015). Regarding emotional intelligence and depending on the way this construct has been conceptualised, some academics have suggested that emotion regulation corresponds to Mayer and Salovey's emotion management branch (Kafetsios, Athanasiadou, & Dimou, 2014). However other authors (e.g. see Ashkanasy & Daus, 2005; Lawrence et al., 2011; Troth et al., 2018), claim that the distinction between the two concepts goes further, one being an ability and the other a behaviour, and that individuals with high EI abilities are able more effectively to use particular emotion regulation strategies, depending on a specific situation.

Therefore, the disadvantage of understanding emotion regulation under the overarching concept of emotional intelligence lies mainly in its problems of construct definition, including personality traits and skills, or a mix of both (e.g. see Ashkanasy & Daus, 2005, and the notion of different streams in EI research) and measurement problems, for example, several scales with different results (Matthews, Emo, Roberts, & Zeidner, 2006). These criticisms extend to the associated branches of EI, such as some being intrapersonal and others interpersonal, and others related to awareness and understanding of emotions. They extend especially, as was noted, to whether, for example, emotion regulation corresponds to either a specific branch or an ability associated with the use of particular strategies. These issues are even emphasised if we consider the concept of emotion regulation flexibility from Gross's process model, which specifically refers to individuals' ability to adapt and to use a particular strategy depending on the situation, circumstances, or context (Aldao, Sheppes, & Gross, 2015; Bonanno & Burton, 2013; Gross, 2015). Therefore, it is clear that emotional intelligence is a more complex concept than interpersonal emotion regulation, because it tries to integrate, in a single idea, individual differences that can be considered as an antecedent of a particular interpersonal emotion regulation behaviour. Thus, this construct goes beyond the first, second, and third characteristics of Niven's (2017) model.

2.4.6. Emotional contagion

Unlike all other perspectives addressed in this section, emotional contagion corresponds to a completely different phenomenon from emotion regulation. However, emotional contagion has been one of the most studied phenomena regarding how people can influence in others affective states, especially in organisational behaviour (Barsade, 2002; Sy & Choi, 2013). Also, highly important for this research, it has been the main mechanism by which group or team affect researchers have explained interpersonal affective influences among group members (Barsade & Knight, 2015; Collins et al., 2013). As its name suggests, emotional contagion corresponds to the process by which emotions are quickly transmitted between interaction partners, even without their awareness. There are several mechanisms by which affect can be transmitted between people, such as primitive mimicry, social comparison, emotional interpretation, and empathy (see Elfenbein, 2014 for an in-depth review). Such mechanisms are very useful to understand why sometimes people converge or diverge in affect. For example, through primitive mimicry - the tendency to automatically mimic and synchronise facial expressions, vocalizations, postures and movements with those of another person - people can share or converge on the same affective state (Elfenbein, 2014).

Thus, although emotional contagion can be a way to understand interpersonal emotion regulation, in the sense that an individual can actually regulate interaction partners' emotions via contagion, interpersonal emotion regulation corresponds to a different phenomenon. The main difference lies in the latter being a conscious and voluntary process, in which individuals modify other people's emotions in the pursuit of some kind of underlying goal. Therefore, emotional contagion does not meet the third characteristic of Niven's (2017) framework, related to being a deliberative process. Whilst this characteristic has been questioned by some research (see Webb et al., 2015), proposing the idea that interpersonal emotion regulation can occur without the individuals being aware of it, it is closer to a procedural automatised process than an entirely involuntary phenomenon. Therefore, although IER can be automatic to a certain degree, it corresponds to a different phenomenon from emotional contagion.

2.5. Chapter Summary

This section has reviewed several theoretical accounts to understand the phenomenon of emotion regulation, particularly as applied to the work context. Whilst almost all of the frameworks explored have some advantages, for example, the conceptualisation of the antecedent of interpersonal emotion regulation, the associated social feedback processes, or the mutual influence of intrapersonal and interpersonal emotion regulation. I will use the Process Model of Emotion Regulation (Gross, 1998) as my main theoretical framework to understand interpersonal emotion regulation in the team context for a number of reasons. First, it is a simple and comprehensive conceptualisation of interpersonal emotion regulation, which includes the regulation of both the antecedent of an emotion and the emotional response itself. Second, has been labelled as one of the more parsimonious frameworks developed for understanding the emotion regulation processes and has considerable empirical support (e.g. see Lawrence et al., 2011; Troth et al., 2018; Webb et al., 2012). Third, unlike other conceptualisations, Gross's (1998) Process Model of Emotion Regulation meets all four characteristics of interpersonal emotion regulation described by Niven's (2017) framework because it clearly distinguishes the intrapersonal and interpersonal sides of this process. These reasons overcome its limitations, related to categories being described as abstract, and difficult to use when categorising individual people reports (Campo et al., 2016), especially considering the existence of valid quantitative measures directed to assess such strategies (e.g., Little et al., 2912; Gross and John, 2003). In the next section, I will review the evidence for this phenomenon in the team context and distinguish several ways to conceptualise interpersonal emotion regulation when these behaviours occur within teams.

CHAPTER 3. TEAM MEMBER INTERPERSONAL EMOTION REGULATION IN THE TEAM CONTEXT

3.1. Chapter Overview

The purpose of this chapter is to define the main construct of this thesis, namely, team interpersonal emotion regulation (IER). With this objective in mind, the first section introduces the topic of team IER and describes several forms which this phenomenon can take in the team context. Then, the following sections examine previous research in the topic, setting out the multilevel structure that the IER phenomenon may adopt in teams (e.g. Ashkanasy & Dorris, 2017; Troth et al., 2018). Specifically, the second section reviews prior research in IER in the team context at the individual level of analysis. Then, I address IER at the dyadic level, examining research that has considered how social ties and feedback mechanisms influence IER between individuals. Lastly, I analyse the previous literature at the team level of analysis. In this section, I use Chan's (1998) composition model framework to examine prior research and describe different alternative ways of conceptualising team-level IER (e.g. additive, direct consensus, referent shift, and dispersion models). This distinction is essential since the third objective of this research is to determine whether team IER has an effect over and above individual team member actions. This chapter concludes with a brief summary and justification of the composition models selected in this thesis to study team IER. Table 3.1 summarises several options for studying IER at different levels.

Table 3.1 Alternatives to Study Interpersonal Emotion Regulation in Teams Depending on the Level of Analysis

Level	Description	Behavioural expression	Implications	Examples of studies
Individual	Team member IER strategies engaged by specific employees to regulate other colleagues' negative emotions.	• Team member A engage in actions to regulate his/her colleagues' emotions. • Team member B engage in independent actions to regulate his/her colleagues' emotions.	• Exploring how team members use certain strategies over others to regulate their colleagues' emotions when they work in teams.	- Leader IER and follower behaviour, or quality of relationship (Little et al., 2016; Thiel et al., 2015; Vasquez et al., 2020). - Qualitative studies (Campo et al., 2016; Tamminen & Crocker, 2013).
Dyadic	Team member IER strategies engaged by employees to regulate specific partners emotions (e.g., close friends).	• Team members A and B engage in particular actions to regulate each other emotions versus the rest of the team.	• Exploring how team members use certain strategies over others (and its frequency) to regulate the emotions of particular team members depending on specific dyadic relationships when they work in teams.	- No specific studies of IER in team context. - Variation of employee IER depending on specific interaction partners (Niven et al., 2012). - Co-regulation in couples (Butler & Randall, 2013).
Team				
Additive	Team average of IER strategies engaged by team members to regulate other colleagues' negative emotions. The meaning of the construct is based on how prevalent these behaviours within teams are.	• Team IER: Team average (or summation) of IER behaviours performed by team members A, B and C (or more).	• Comparing teams in terms of how frequent their members engage in actions to regulate colleagues' emotions.	- No specific studies of IER in team context. - Team member intrapersonal emotion regulation and team conflict (Thiel et al., 2019). - Team emotional intelligence (Barczak et al., 2010; Chang et al., 2012; Jordan et al., 2016; Troth et al., 2012).

Table 3.1 (cont.)

Level	Description	Behavioural expression	Implications	Examples of studies
Team				
Direct consensus	Team average of IER strategies engaged by specific team members to regulate other colleagues' negative emotions. Unlike additive model, the meaning of team level construct is based on team member agreement.	• Team IER: Team average of IER behaviours performed by team members A, B and C (or more). • It is required certain level of agreement regarding team members A, B and C (or more) report.	• Comparing teams in terms of how frequent their members engage in actions to regulate colleagues' emotions. • Also it is considered the influence of team membership by assessing team member agreement.	- No specific studies of team member IER in team context. - Leader IER and team emotions or behaviour (Madrid et al., 2019; 2018). - Team emotional intelligence (Lee & Wong, 2019).
Referent shift	Team average of collective IER strategies engaged by 'team members' or 'the team' as a whole to regulate colleagues' negative emotions. It is also necessary assess team member agreement. The meaning of team level construct is based on team member agreement.	• Team IER: Team average of IER behaviours performed by team members A, B and C (or more). • Team members report what the team 'as a whole' do to regulate team members emotions. • It is required certain level of agreement regarding team members A, B and C (or more) report.	• Comparing teams in terms of how frequent their members engage in actions to regulate colleagues' emotions. • Team members specifically assess team reality. • Also it is considered the influence of team membership by assessing team member agreement.	- No specific studies of team member IER in team context. - Team emotional intelligence (Curşeu et al., 2015; Koman & Wolff, 2008).
Dispersion	Variation of IER strategies engaged by team members to regulate other colleagues' negative emotions. It is not necessary assess team member agreement. The meaning of the construct is based on team member heterogeneity or dispersion.	• Dispersion in team IER: Team-level representation of the differences in IER behaviours performed by team members A, B and C (or more).	• Comparing teams in terms of how dissimilar their members are engaging in actions to regulate colleagues' emotions. • Assess how the variation of IER among members can influence team level scores.	- No specific studies of team member IER in team context. - Group affect and team affective climate (Barsade et al., 2000; González-Romá et al., 2009) - Team emotional intelligence Collins et al. (2016).

Note. The complete references of these studies can be found in the References section at the end of the thesis.

3.2. Team Interpersonal Emotion Regulation

Throughout this thesis, the term Team Interpersonal Emotion Regulation (IER) is used to refer to a set of controlled processes by which team members influence other members' emotions. Following the Gross's (1998) process model, team members can regulate the antecedents of others' emotions or their emotional response it-self. This involves changes in the occurrence, intensity, and duration of members' states of feeling. In that regard, work teams have been defined as "collectives who exist to perform organisationally relevant tasks, share one or more common goals, interact socially, exhibit task inter-dependencies, maintain and manage boundaries, and are embedded in an organisational context" (Kozlowski and Bell, 2013, p.334). Frequently, team members engage in such IER behaviours in order to match their feelings with the situational requirements in the team context (Campo et al., 2016; Coté, 2005; Gross, 2015). As mentioned, in this team context, IER may occur at different levels of analysis, for instance, at individual, dyadic, and team level. The characteristics of IER at each level can be observed in the following example.

Imagine a project team formed of five team members. Four members are in the office working on their respective tasks. Member five – Alex – is just arriving from a meeting and he is very distressed. John – another team member – tells Alex not to worry because he has the necessary skills to do the job well, showing him a different perspective to attenuate his anxiety. Emma hears the conversation between Alex and John, and supports them with a past example in which they effectively coped with a difficult situation. Later that day, another team member, Maria, quickly realises that Alex's anxiety has likely affected several members, so she tells them a funny story from the previous night's television in order to make all her colleagues feel better. In this case, Alex approached John first (and not Emma or Maria) because he is his friend, and they have worked together for a long time in the same project. However, Emma and Maria's support also contributes to reassuring him that he can count on all team members' support when he needs it. As a result, Alex and his colleagues are now calmer and are focusing their entire effort on the team task.

From this case we can see how interpersonal emotion regulation operates at several levels of analysis in the team context (see Figure 3.1). At the individual level, we can consider specific IER behaviours engaged by particular members: John, Emma

or Maria. At the dyadic level, we can consider that John and Alex may regulate each other's emotions more frequently than other members since they have a closer relationship. At the team level, we can consider all team members' behaviours together. For example, Alex and John's team might be higher in team interpersonal emotion regulation than, let us say, another team in the vicinity, simply because those in the former team, on average, express more interpersonal emotion regulation behaviours than those in the latter. Having defined what is meant by team IER, I will now move on to review prior research that has investigated IER at each level in teams.

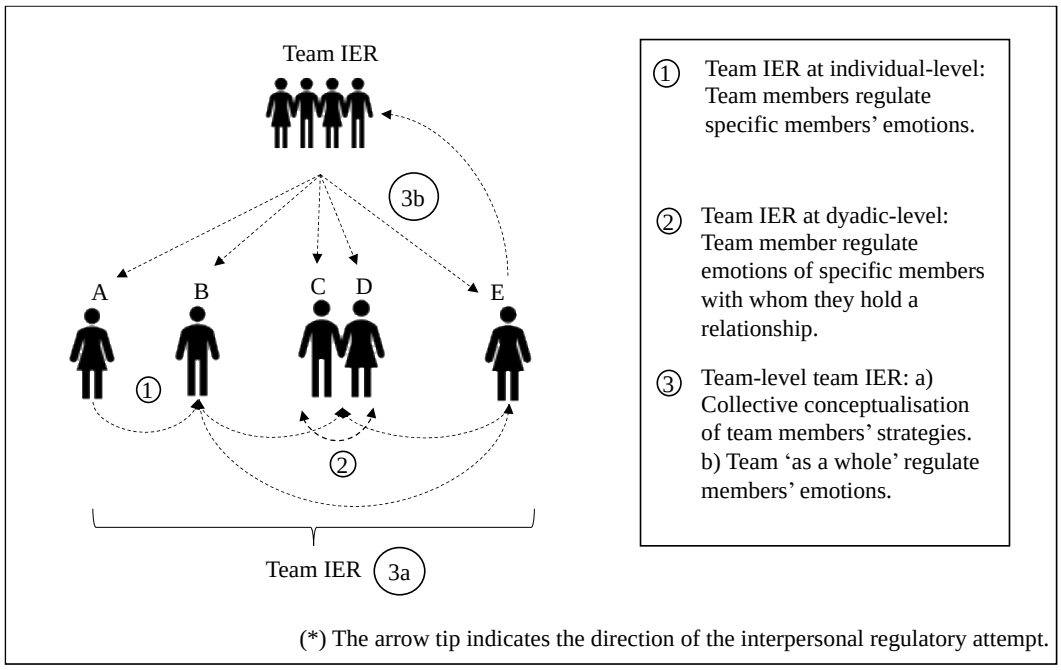


Figure 3.1. Graphic representation of team member IER at different levels in a team.

3.3. Conceptualising Team IER at the Individual Level

Examining interpersonal emotion regulation at the individual level may seem counterintuitive at first glance because, as the name of this construct suggests, it is inherently social and interpersonal (Menges & Kilduff, 2015; Reeck et al., 2016; Rimé, 2009). However, following Troth and colleagues' (2018) review of IER in the workplace, IER can be conceptualised at the individual level when the focus is on particular employee actions to regulate others' emotions, considering the one direction from regulator to target(s). This is especially true when these behaviours are analysed independently of the potential feedback given by interaction partners, for example, as the direction of the arrow suggests in Figure 3.1.

In the work team context, IER has been studied previously at the individual level mainly in the context of leadership. Particularly, several studies have attempted to understand how leaders can manage or influence the emotions of their followers (Little et al., 2016; Thiel, Griffith, & Connelly, 2015; Vasquez et al., 2020). In general, these studies have demonstrated that interpersonal emotion regulation strategies used by leaders have an impact on particular team members' emotional states, which in turn can influence team outcomes. For instance, the study performed by Little and colleagues (2016) shows that leaders' interpersonal emotion regulation strategies influence the level of quality of the relationship between them and their teams (LMX), which in turn has an effect on team members' organisational citizenship behaviours and their job satisfaction. In a similar vein, some studies have shown a positive relationship between leaders' interpersonal emotion regulation and followers' emotions and performance (Vasquez et al., 2020), These studies have explained the effect of IER on performance, appealing to changes in affect and the quality of the relationship between interaction partners due to leaders' use of IER strategies. However, none of them has analysed the role played by team members in regulating each other's emotions and how this can influence team dynamics and performance.

It is important to note here that whereas team leaders can be conceptualised as team members, in this thesis leaders are excluded from the definition of team members. This for three reasons. Firstly, they have a special and distinctive role in organising and controlling team tasks; in fact, team models traditionally locate leaders as an input for teamwork (Marks, et al., 2001). Secondly, there is a clear difference in terms of role, power, and status between leaders and the rest of the team (Magee & Galinsky, 2008). Thirdly, this thesis is more interested in analysing the social dynamics between team members than in an external and common influence on all of them.

For an understanding of the specific impact of team members in regulating colleagues' emotions, there are the studies developed by Campo and colleagues (2016), and Tamminen and Crocker (2013) in the sports team context. These studies analysed interpersonal emotion regulation behaviours in a rugby and a curling team respectively. Both studies show several behavioural examples of how individual-level team member IER strategies can be observed in real life situations in a team context.

Specifically, Tamminen and Crocker (2013) describe the use of feedback and humour as the main strategies to regulate emotions within the team, for example, when a team member failed a shot or when the team had a bad performance in a match. Likewise, the study by Campo et al. (2016) shows specific examples of behaviours classified under Gross's (1998) model dimensions. For instance, "[a team member] explained that, after the opponents had scored a try, he felt guilty and anxious, but that these unpleasant emotions decreased when teammates told him that he had no responsibility in this given action (i.e. extrinsic regulation using cognitive change)" (p. 7). Although these studies bring valuable evidence of how team members engage in specific actions to regulate other members' emotions at the individual level, and how this may be related to team performance, they are qualitative designs and specifically apply to the sports context. Such expositions are insufficient to aid the understanding of interpersonal emotion regulation in work teams because they are difficult to generalise to other contexts due to their specificity.

3.4. Conceptualising Team IER at the Dyadic Level

At the dyadic level, team members engage in actions attempting to regulate each other specific member's emotions, which may entail patterns of mutual co-regulation. A key element for understanding IER at the dyadic level is the feedback mechanism from targets associated with the regulatory behaviours of regulators. From the above example, John may have been concerned about his colleague's behaviour, not just because he is a team colleague, but because he is his best friend in the team, and cares about what happens to him. This is represented in Figure 3.1 with the double-tipped arrow. A strong body of research has supported the idea that people engage in particular intrapersonal and interpersonal emotion regulation strategies when they are with close co-workers, friends, and couples (Bloch, Haase, & Levenson, 2014; Cheung, Gardner, & Anderson, 2015; Gable, Reis, Impett, & Asher, 2004; Glasø & Einarsen, 2008; Niven et al., 2012; Williams, 2007). From this, it is clear that emotion regulation has a reciprocal effect on individual quality of relationship and trust, enhancing social bonds (Barbalet, 2011; Ryan, La Guardia, Solky-Butzel, Chirkov, & Kim, 2005; Webb et al., 2012; Williams, 2007).

Interestingly, people's actions to regulate others' emotions also have positive effects on their own perceived intrapersonal emotion regulation capabilities (Doré, Morris, Burr, Picard, & Ochsner, 2017). Thus, these processes can entail a virtuous circle with reciprocal positive effects for each interaction partner. Specifically, Butler & Randall (2013) have proposed that interaction partners show an oscillating process of affective arousal and deactivation that dynamically maintains an optimal state called co-regulation. Co-regulation may represent a form of interpersonal emotion regulation in which both members of a dyad actively engage in reciprocal behaviours directed towards maintaining or changing affective states in each other. This may be understood as a self-regulation system at the interpersonal dyadic level in which both members' regulatory efforts and feedback processes (intra- and interpersonal) maintain and change each other's emotions in oscillating patters towards stability (Butler, 2015; Reed, Barnard, & Butler, 2015).

While this thesis is not particularly interested in examining IER in dyadic relationships, it seems important to analyse these previous studies concerning this level as a way to understand IER when the number of potential targets and regulators increase in a social setting. Particularly, in this thesis, it is argued that a similar interpersonal principle to that used in dyadic relationships might be applied to work team relationships. This is especially the case in close relationships when, for example, team colleagues have a common identity and support each other to cope with work demands (Prayag, Mills, Lee, & Soscia, 2020). Social identity theory (Hogg & Terry, 2000) explains this movement from the interpersonal, dyadic level to the group or team level. Specifically, when employees self-categorise as belonging to social aggregates such as groups and teams, they assimilate the collective's identity into their own self-concept (Mael & Ashforth, 1992), and thereby expand their selves to include closer ones (Aron & McLaughlin-Volpe, 2001). Those identifying with a particular group will exhibit positive bias towards group members and discriminate against outsiders.

Taken together, these studies suggest that when they belong to teams, team members can use IER in order to sustain positive affect and regulate the emotions of close members. Having defined what is meant by interpersonal emotion regulation at the dyadic level, I will now move on to discuss four ways of understanding team level

interpersonal emotional regulation. To do this, I will use Chan's (1998) composition model framework to support my arguments regarding the relationship between individual- and team-level constructs.

3.5. Conceptualising Team IER at the Team Level

To date, research into interpersonal emotion regulation at the group level is still barely developed (Parkinson & Manstead, 2015; Troth et al., 2018; Van Kleef & Fischer, 2016). One possible cause for this is that the study of interpersonal emotion regulation strategies can be one of many ways to analyse the influence of emotions at group level, and academic research has been more focused on describing other processes, for instance, attachment styles, social support, and emotional contagion (Dixon-Gordon et al., 2015; Reeck et al., 2016). Considering the scarcity of research in the area, this section will review the evidence on IER together with other related constructs, such as emotional intelligence. In order to describe the different ways in which it is possible to conceptualise a team-level phenomenon from individual-level perceptions, I use Chan's (1998) framework of composition models. Composition models specify the functional relationships among the elements that make up the team-level construct in situations in which data from a lower-level are used to establish the higher-level construct (Chan, 1998). The basic team IER forms of composition models described below are: (a) additive, (b) direct consensus, (c) referent-shift consensus, and (d) dispersion.

3.5.1. Additive model of team IER

A primary way to conceptualise interpersonal emotion regulation at the team level is to use an additive model. In this kind of model, the higher-level construct, for example, team IER, can be understood as the summation or average of lower-level units (individual level team members' interpersonal emotion regulation behaviours). The rationale underlying this form of composition model is basically the greater the number of behaviours shown by team members, the more the team can be categorised as higher in that attribute or behaviour (Chan, 1998). In this kind of configuration, the extent of agreement among members is not imperative because the team-level phenomenon takes on meaning due to the addition or average of individual behaviours.

Previous studies using an additive model have shown that collective *intra*-personal emotion regulation in teams, specifically cognitive reappraisal and suppression, act as a moderator of the negative effects of team relationship conflict (Thiel, Harvey, Courtright, & Bradley, 2019). Similarly, more related to the interpersonal regulation of team members' emotions, Barczak, Lassk, and Mulki (2010), using an additive model, show how team member emotional intelligence is associated with team trust and creativity. Likewise, previous studies have reported a positive relationship between team emotional intelligence (in terms of an additive model) and team performance (Chang, Sy, & Choi, 2012; Collins, Jordan, Lawrence, & Troth, 2016; Troth, Jordan, Lawrence, & Tse, 2012). Therefore, a first way to conceptualise team-level interpersonal emotion regulation is to consider the summation or average of team members' individual interpersonal emotion regulation behaviours. In the previous example, an additive model considered that Alex and John's team might be higher in team IER than another team, because the members of this team express (in average or summation) more IER behaviours than the other. For instance, in Figure 3.1, an additive model of IER can be described if the average of individual strategies performed by team members A-E is calculated. Thus, team IER could be high or low if the average of individuals' IER is high or low.

However, this account does not specifically consider the existence of a team reality or group norm which acts upon members and increases the likelihood of some behaviours while inhibiting others. Also, this alternative does not take into account whether team interpersonal emotion regulation is simply the collective aggregation of individual or dyadic behaviours or something else. In order to understand this team-level social influence it is necessary to consider whether in teams there exists a shared perception of the interpersonal emotion regulation behaviours used by members. According to Chan's (1998) group compositional model conceptualisation, there are two alternatives, one following a direct consensus model, and another, similar but stronger, a referent-shift consensus model.

3.5.2. Direct consensus model of team IER

This model propose that the meaning of the higher-level construct (e.g. team interpersonal emotion regulation) is in the consensus among lower-level units (e.g. team members). Specifically, these models base their meaning on the degree of

agreement about the group's shared reality. In the case of emotion regulation at the team level, a direct consensus model involves there being an agreement between team members on the extent, frequency, or choice of strategies that team members use to regulate others' emotions. Returning to the previous example, the existence of a team phenomenon relating to interpersonal emotion regulation might be possible only if there is agreement among members of a certain team in their individual perceptions of this interpersonal phenomenon. For example, John and Alex's behaviours to regulate their own and other team members' emotions are similar in terms of extent or frequency to the behaviours engaged in by those other members.

Therefore, following Figure 3.1, this configuration not only takes into account the summation or average of the individual behaviours of team members A-E, but also the level of agreement as to the prevalence of these behaviours within those members. The direct consensus model of team interpersonal emotion regulation represents thus a first form (albeit weak) of team-level emotion regulation. Its key characteristic is that the team interpersonal emotion regulation construct only makes sense if there is agreement among members about what occurs in the team. Some scholars have supported the idea that team members may share a common reality as to how each member regulates their emotions (e.g. in terms of team emotional intelligence: Becker & Cropanzano, 2015; Lopes, Salovey, Côté, & Beers, 2005). For instance, previous studies in team emotional intelligence, using a consensus model, have shown how this construct relates to performance (Lee & Wong, 2019). Similarly, Madrid and colleagues (2018), using a consensus model, show how team members can assess their leaders' use of interpersonal behaviours directed to improving or worsening followers' emotions. Thus, in order to support the notion that team members share a common perception of leaders' behaviours, the authors provide evidence of inter-rater agreement.

3.5.3. Referent-shift consensus model of team IER

This model is similar to direct consensus composition models in terms of agreement among the lower-level components. However, these models add nuances to the consideration of this agreement, claiming that a team-level phenomenon have meaning only if a shift in the referent prior to the consensus assessment is made. This shift in the referent represents team members conceptually reporting their perception

of the higher level of analysis, in this case the team (cf. research on team efficacy DeRue, Hollenbeck, Ilgen, & Feltz, 2010; Gully, Incalcaterra, Joshi, & Beaubien, 2002). Therefore, referent shift team interpersonal emotion regulation refers to convergence among team members in terms of their perception of emotion regulation from the team as a whole. This shared perception of a team-level reality means that other team members agree on the extent to which the team regulates its own affective states. Also, this may represent a social norm of managing team members' negative emotions, which may have a 'stronger' team-level influence on individual members' behaviours.

Previous studies developed by Curşeu, Pluut, Boros and Meslec (2015), and Koman and Wolff (2008) investigated the role of emotional intelligence in interactions between team members and how this can stimulate social integration within groups and influence team effectiveness, utilising a referent shift consensus model. For example, Curşeu et al. (2015) described the effects of the strategies used by a team to manage the emotions of team members at a team level of analysis on team relationship conflict. Specifically, their study shows how two dimensions of emotional intelligence, emotional awareness within the group (e.g. 'We knew how everyone felt just by looking at each other') and group emotion regulation (e.g. 'We made each other feel better when we were down'), both have a significant impact on team cohesion and relationship conflict. However, as mentioned in Chapter 2 of this thesis, a disadvantage of these studies is that the emotional intelligence construct is an amalgam between intrapersonal and interpersonal emotion regulation and the ability to recognise others' emotions. This disadvantage is especially evident when we consider the fact that these studies depict their results in terms of the average team emotional intelligence score and not each specific branch of the construct. Thus, the specific effect of interpersonal emotion regulation in the team context still remains obscure. Notwithstanding, these studies show a way to conceptualise team IER in terms of a referent shift model. For example, in Figure 3.1, team members A-E could report how they perceive that 'team members' or 'the team' engage in actions to regulate members' emotions (situation 3b).

3.5.4. Dispersion model of team IER

Finally, dispersion models obtain their meaning in the variation or heterogeneity that can be observed among team members. Specifically, as team members may vary in terms of the strategies that they use to regulate colleagues' emotions and the frequency with which they engage in these actions, it is important to analyse this effect as well. For example, in terms of how this variation impacts other processes or the general team level of interpersonal emotion regulation. Imagine, for example, how different the team dynamics that may occur in Alex's team could be, if only he and Emma frequently engaged in regulatory actions with their colleagues, versus a situation in which all members actively engage in IER strategies to regulate their colleagues' negative emotions. Previous evidence on diversity in affect or perceptions of team affective climate (e.g. Barsade et al., 2000; González-Romá, Fortes-Ferreira, & Peiro, 2009) shows examples of how within-team variation in IER can be studied. Also, Collins et al. (2016) explore the effect of within-team variation in emotional intelligence as a control variable, and suggest possible ways to conceptualise a dispersion model of team IER. The specific evidence regarding this particular team-level composition model, and its relationship with other team constructs, will be developed in Chapter 8 of this thesis.

3.6. Chapter Summary

This chapter has attempted to provide a brief summary of the literature relating to IER in the team context, which has been organised in terms of different levels of analysis: the individual, dyadic, and team level (Ashkanasy & Dorris, 2017; Troth et al., 2018). As this research is interested in analysing team-level effects, the literature on IER at the dyadic level was only examined to show the possibility of a transition from the individual to the team level of analysis. Furthermore, with regard to IER at the team level, four composition models were examined, which represent different ways to analyse team IER (Chan, 1998). As the main objective of this thesis is to examine the IER phenomenon in teams, and its relationship with other team processes, emergent states, and outcomes, it will use a referent-shift consensus model to understand this construct at the team level of analysis. This is for two main reasons. First, the referent-shift consensus model allows this research to examine team-level

effects in a strong sense, i.e., having information about how each member assesses the behaviours and actions that occur within their teams in terms of IER. This is unlike additive or consensus models, which only conceive team-level constructs based on the average of individual-level behaviours (with and without considering members' agreement). Second, understanding team IER as a referent-shift consensus model will make it possible to clearly differentiate team- and individual-level effects of team member IER upon other constructs, which is the third objective of this thesis. Thus, team IER corresponds to the individual member's perception of the strategies that team members use to influence other members' negative emotions within their team as a whole.

This conceptual distinction is important because it clearly separates the effects of team membership in terms of IER behaviours and individual members' strategies. As a consequence, this also facilitates the interpretation of the results in terms of comparisons at the between- and within-team level. However, before describing the specific relationships between team IER and other team processes, emergent states, and outcomes, it is important to analyse how team member IER has been analysed in the literature on team effectiveness. Therefore, the next chapter, using the team effectiveness framework, describes how interpersonal emotion regulation has been conceptualised in team research, which brings an organised framework to the empirical studies made by this research.

CHAPTER 4. TEAM IER IN TEAM EFFECTIVENESS MODELS

4.1. Chapter Overview

As pointed out in the previous chapters, the main objective of the present research is to understand whether team interpersonal emotion regulation (IER) is related to team dynamics and outcomes. The purpose of this chapter is to provide a conceptual framework for this research in terms of the effects of team IER on other team processes and performance. Thus, in the following pages, I will present IER from the perspective of research on teams. Specifically, the main argument will centre on the Inputs–Processes–States–Outputs (IPSO) team effectiveness framework due to its being one of the most used models in team research for organising the relationship between team-level variables. In that regard, the first section of this chapter briefly reviews the historical roots of IPSO models. Then, I will focus the discussion on locating IER in the IPSO framework. The final part of this chapter describes from a theoretical standpoint how this phenomenon is related to other team processes, emergent states, and outputs in a mediation model.

4.2. A Brief History of Team Effectiveness Models: from the IPO to the IPSO model

Work teams have been a focus of organisational psychology research since almost the very beginning of the discipline in the Hawthorne studies in the 1930s (Mathieu, Hollenbeck, van Knippenberg, & Ilgen, 2017). Specifically, the study of groups as a separate field in psychology emerged in the United States under the leadership of Kurt Lewin (Cartwright & Zander, 1968). From an historical point of view, primary research on teams was focused predominantly on team tasks and social factors that may positively (and more especially negatively) influence teams' good

performance (McGrath, 1964). It is only since the work of Hackman and Morris that the study of work teams, including antecedents, processes, and outcomes, gained momentum. In their influential examination of team research, Hackman and Morris (1975) shaped the classic Inputs-Process-Outputs (IPO) framework of team effectiveness adapted from work undertaken by Joseph McGrath (1964). In this framework, group interaction process refers to all interpersonal behaviour that occurs within the team and acts to mediate input-performance relationships.

Turning now to more recent developments in team research, during the past 20 years much more information has become available on team processes (Kozlowski, 2018; Mathieu et al., 2019). These recent works include the review by Marks and colleagues (2001), which popularises the IPO model and describes in detail several team processes. Later in the same decade, Ilgen and colleagues (2005) expanded the original model by explicitly including team emergent states, in what was known as the IPSO model (also referred as IMOI). In this version, the authors highlight the mediator role of processes and emergent states, replacing the 'P' of Process' by a 'PS' of Process and Emergent States or an 'M' of Mediators.

As can be seen in Figure 4.1, the IPSO model describes how teamwork transforms inputs into outputs. *Inputs* generally describe antecedent factors that enable and constrain members' interactions. These include individual, team, and organisational-level characteristics related to team composition and contextual factors. These various antecedents combine to drive team processes and emergent states, which describe members' interactions directed toward task accomplishment. *Team processes* refer to actions that team members may take to manage team dynamics, while *emergent states* describe the team levels of affective, motivational, and cognitive states. *Outputs* are results of team activity, such as team performance and members' well-being (Mathieu, Maynard, Rapp, & Gilson, 2008). The IPSO model also embraces the inherent multilevel nature of teams, in that individuals are nested in teams, which in turn are nested in organisations (Klein & Kozlowski, 2000). These previous studies on team effectiveness charted a change in the course of team research, highlighting the importance of team processes and emergent states to understanding team outcomes, especially in relation to understanding how team members by their

interpersonal interactions can perform effectively, using certain resources to generate outcomes.

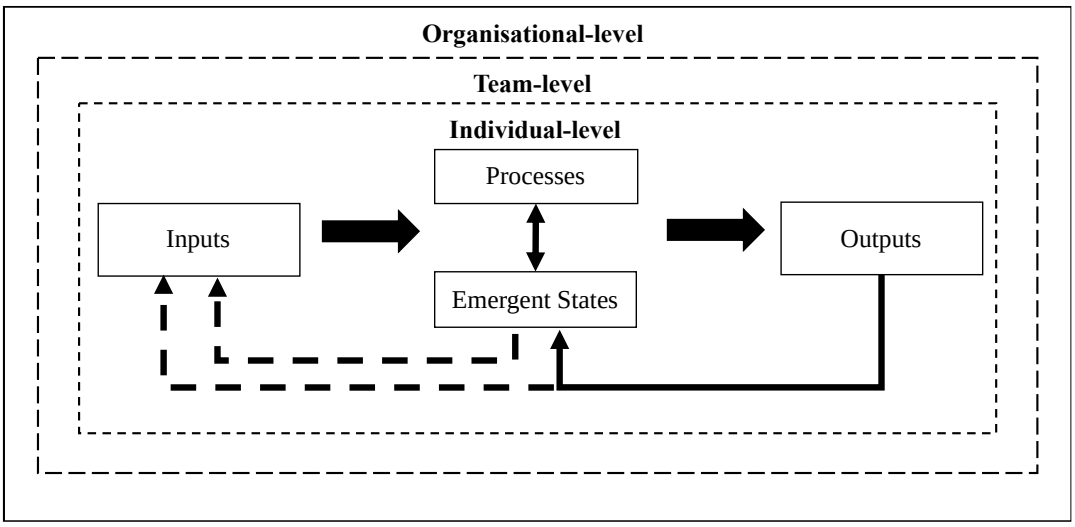


Figure 4.1. Representation of the IPSO model of team effectiveness. Based on Mathieu et al. (2008). The arrows indicate the direction of the influence between team inputs, processes, emergent states, and outputs.

Therefore, team effectiveness models bring us a clear organising framework to understand the effects of interpersonal processes on team performance. From the previous chapters, following the emotion regulation literature, team interpersonal emotion regulation was defined as the controlled process by which team members influence the occurrence, intensity, and duration of other members' emotions. However, how have these strategies been studied, if they so are, in team effectiveness literature? The next section focuses specifically upon examining team IER from the team effectiveness literature.

4.3. Interpersonal Emotion Regulation in the IPSO framework

Team member interpersonal emotion regulation has been classified as a key interpersonal process in team literature (Marks et al., 2001; Mathieu et al., 2019). Whereas interpersonal emotion regulation has been implicitly present in team research

almost since its earliest times (see, for example, Kaplan, 1979 or Bales, 1950), the first explicit mention of such a construct was made by Marks et al. (2001), under the term team member affect management. Affect management is defined as the interpersonal process engaged in by team members that "involves regulating [other] member[s'] emotions during mission accomplishment, including (but not limited to) social cohesion, frustration, and excitement" (p. 369). In their definition, the authors refer to a process of calibrating team member emotional levels, in which team member actions can impact other members' affective states, influencing other interpersonal processes (e.g. animosity among members) or team emergent states (e.g. temporary stress or job security concerns).

This definition highlights two main elements. First, team member IER is conceptualised as an interpersonal process that involves several 'techniques' directed to the calibration of members' emotions. This element is in line with the definition shaped from the emotion regulation literature mentioned in Chapter 3, in terms of being a 'interpersonal process' and the use of 'strategies' by team members. Second, there is the potentially pivotal role of interpersonal affect management between other interpersonal processes and emergent states. For example, through affect regulation individuals may decrease the potential occurrence and negative consequences of a conflict (e.g. manage "animosity among members") and, via the generation of positive affect, members may increase each other's levels of energy.

Thus, the IPSO model clearly locate team IER in theoretical terms as an interpersonal process by which team members can affect team dynamics, interpersonal relationships and performance. However, at the empirical level, the research in affective dynamics in teams has garnered far less attention (Mathieu et al., 2008). For example, the first serious attempt to generate a valid measure of team member affect management is quite recent, represented by Mathieu and colleagues' (2019) scale, which explicitly recognises the generalised use of the IPSO framework but lacks a specific scale to measure such processes. Although this measure attempts to measure team member IER, it fails to incorporate knowledge on emotion regulation discussed in previous chapters, for example, distinguishing between different strategies to regulate others' emotions.

This lack of empirical support with regards to team affect management is especially noticeable in LePine, Piccolo, Jackson, Mathieu and Saul (2008) meta-analysis of team processes, which analyses the relationships between several processes and outcomes across a high number of studies. Particularly related to affect management, their results show a positive relationship between team member affect management, team performance, and team member satisfaction. However, a closer look at how they categorised the study variables shows that these estimates were calculated via a reverse score of team relationship conflict, and not by using a measure of emotion regulation itself. Notwithstanding the above, these studies provide evidence that team processes and emergent states can relate to each other, and some team processes can have their effect on team performance via influencing other processes and emergent states. This specific evidence will be examined in the next section.

4.4. Team Mediators: Processes and Emergent States

This last section briefly reviews the evidence concerning the relationship between team processes and emergent states, and how they are related to team performance. Examining such evidence is crucial for this research because team IER may be related to team performance because its influence in other team processes and emergent stares. The relationship between different processes and emergent states has been further developed by current conceptualisations of team research (see for example Kozlowski, 2018; Mathieu et al., 2019), in which it is proposed that different processes and emergent states may dynamically co-vary and mutually influence each other over time. In fact, Marks and colleagues (2001), appealing to this mutual influence, suggest that team processes can act as inputs for other process and emergent states. Specifically, LePine and colleagues' (2008) meta-analysis on team processes showed, for instance, a positive relationship between interpersonal process (e.g. team conflict), action processes (e.g. monitoring) and team performance. These studies suggest that team processes or emergent states can indeed act as mediators in the relationship between team processes and outcomes, bringing support to a mediational model of team IER.

Likewise, theoretical reviews and empirical meta-analytic evidence in specific processes and emergent states have reported their link to team dynamics and team outcomes. For example, between team performance and team conflict (De Dreu & Weingart, 2003; de Wit, Greer & Jehn, 2012), team coordination and shared mental models (DeChurch & Mesmer-Magnus, 2010), team cohesion (Evans & Dion, 1991; Gully, Devine, & Whitney, 1995), group affect (Collins et al., 2013), and team trust (Breuer, Hüffmeier, & Hertel, 2016; Erdem & Ozen, 2003). Thus, according to previous evidence within team literature, the use of other processes and emergent states to explain the mechanisms by which group processes affect group outputs is well extended and robust. However, among the wide range of team processes and emergent states previously studied by which team member IER may produce its effects on performance, which are the most appropriate to include in this research?

Taken together the research examined in this and previous chapters regarding the effects of IER within the team context, and the specific interpersonal nature of this phenomenon, potential team processes and emergent states candidates through which team IER may influence team outcomes are: team member interpersonal relationships (e.g., relationship conflict and TMX), team member affective states (e.g., group affect or collective motivation), and affective related emergent states (e.g., team cohesion or trust). For instance, as mentioned, prior research in team effectiveness has highlighted the role of team member IER in decreasing animosity among members, and in building team morale and trust (LePine et al., 2008; Marks et al., 2001; Mathieu et al., 2019). In addition, emotion regulation literature has emphasised the positive effects of IER in the quality of relationships and interpersonal trust (Little et al., 2016; Niven et al., 2012). Although it appears important, this research will not include team affect because it is implicitly included when the regulation of team member emotions is conceptualised (e.g. actions directed to generating positive feelings in others), and it could be difficult to distinguish from the effect of emotional contagion among members due to the research design selected (Collins et al., 2013; Kelly & Spoor, 2006).

In terms of the possible outputs resulting from the team processes, two clear candidates appear to be classically included in the IPSO model: team performance and team member well-being (Mathieu et al., 2008). Lastly, it is important to mention here

that whereas the IPSO model suggests that certain variables may act as inputs of this interpersonal process (e.g. team member personality or team composition variables), these will not be included because the objective of this research is to understand the effects and not the antecedents of team IER in work teams. Figure 4.2 depicts the effects of team IER on team processes, emergent states, and outcomes using the IPSO structure. The specific relationship expected (in terms of hypotheses) and the theoretical support between these variables will be addressed in the next chapter of this thesis.

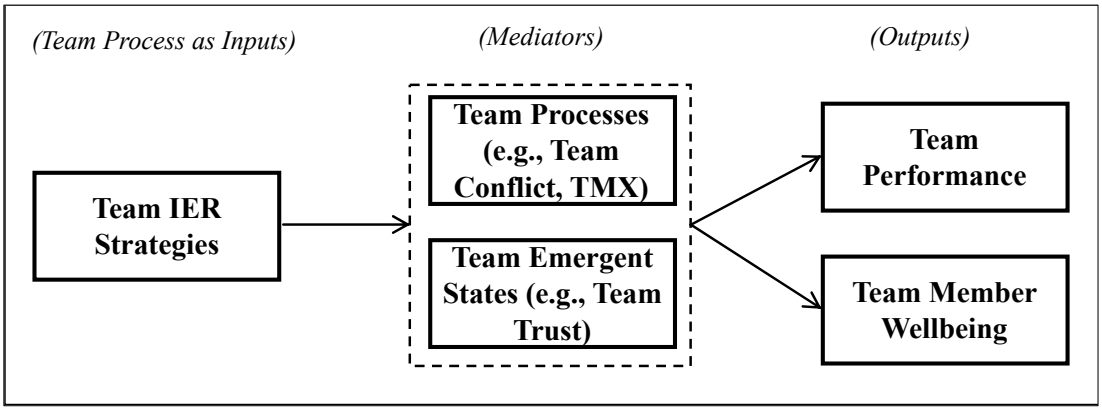


Figure 4.2. Representation of study variables in terms of the IPSO model of team effectiveness.

4.5. Chapter Summary

This chapter has reviewed team interpersonal emotion regulation from the perspective of research in work teams, particularly the IPSO model of team effectiveness. Through this review, team IER has been located as a specific interpersonal process in theoretical terms, but there remains a lack of empirical studies that have analysed the specific effects of this construct on other team variables. Furthermore, the IPSO model establishes a clear and organised framework in which it is possible to analyse team IER related to other team processes, emergent states, and outputs. Among the wide range of variables, team conflict, team trust, team member quality of relationships, team performance, and team member well-being appear as key related constructs, especially considering the social nature of interpersonal emotion regulation within the team context. The next chapter brings theoretical support to the relationships between these specific variables and states the hypotheses regarding the expected effects of team IER on other processes, emergent states, and outcomes.

CHAPTER 5. TEAM IER, TEAM DYNAMICS, PERFORMANCE AND TEAM MEMBER WELL-BEING: A MEDIATION MODEL

5.1. Chapter Overview

The purpose of this chapter is to bring theoretical support to the relationship between team interpersonal emotion regulation, team dynamics, and team outcomes. Based on the IPSO framework of team effectiveness, I propose a multilevel mediation model to investigating the effect of team IER on team outcomes (e.g. team performance and team member well-being), via its influence on team dynamics (e.g. team relationship conflict, TMX, and intrateam trust). Earlier chapters have described several approaches to understanding IER in the team context. Particularly, Chapter 2 described individual strategies that team members can use to regulate their colleagues' emotions. Chapter 3 reviewed evidence of team IER at several levels of analysis. Then, Chapter 4 examined how the IPSO framework can help to structure the variables as they represent team inputs, process, emergent states, and outputs.

However, the IPSO model does not explain, in theoretical terms, why and how team IER is related to other team processes, emergent states, and outputs. Thus, in the present chapter, I address these questions regarding the relationship between team IER and other constructs. Team IER can be characterised as interpersonal behaviours directed to helping others and bringing resources by regulating their negative emotions. Thus, I use different theoretical perspectives that explain similar behaviours and support the direction of the association between the variables such as interpersonal behaviour theory (IBT; Horowitz et al., 2006; Markey & Markey, 2009), prosocial behaviour (Grant, 2008), and social extensions of conservation of resources theory (COR; Hobfoll, Halbesleben, Neveu, & Westman, 2018; Hobfoll et al., 1990).

As the aim of this chapter is to bring theoretical support to the relationship between team IER and each of the other variables of the model, it is longer than previous chapters. Regarding its structure, this chapter is organised following the

conceptual multilevel mediation model of this research (see Figure 5.1). Specifically, in the first section I address the relationship between team IER and other team processes and emergent states, such as team relationship conflict, TMX, and team trust. Then, the second section brings theoretical support to the relationship of team relationship conflict, TMX, and team trust with team outcomes, such as team performance and team member well-being. The last section of this chapter describes the theoretical arguments that support the expected indirect effects between team IER, team performance, and team member well-being, via its influence on processes and emergent states (e.g. team conflict, TMX, team trust).

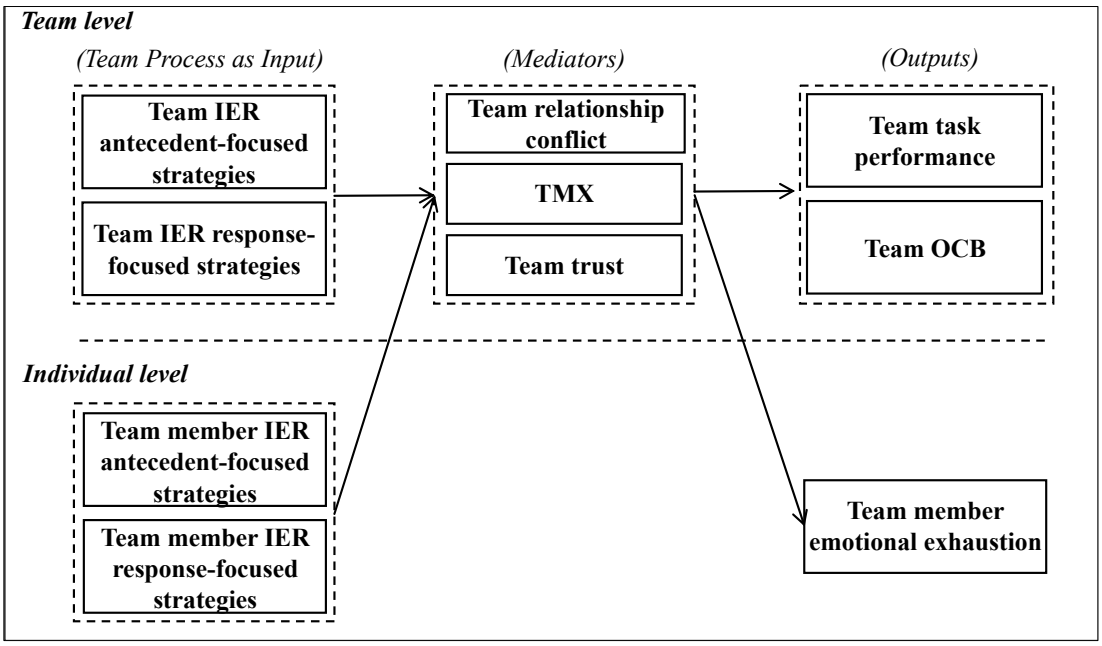


Figure 5.1. Theoretical model of this thesis, using the IPSO model as organising framework in terms of inputs, mediators (processes and emergent states), and outputs.

5.2. Team IER, Team Processes and Emergent States

One of the main objectives of this thesis is to determine whether team IER is related to other team processes. In Chapter 3, team IER was defined as the controlled process by which team members positively influence their colleagues' negative emotions, and it is represented in a series of strategies. Some of them direct the focus of the regulation onto the antecedents that cause the other's negative emotions

(antecedent-focused strategies), and others direct it onto regulating the emotional response itself (response-focused strategies). Previous evidence at the interpersonal level posits that IER is directly related to other interpersonal phenomena, such as social interactions and trust among employees (Eisenberg et al., 2000; Little et al., 2016; Niven et al., 2012; Williams, 2007).

Furthermore, prior research in teams using the IPSO framework has demonstrated that team interpersonal processes influence other related processes and emergent states, such as team conflict, coordination, and trust (LePine et al., 2008). Therefore, this section attempts to bring theoretical support to the relationship between the variables in the first section of the model (Figure 5.1), namely, team IER, team relationship conflict, team member quality of relationships (TMX), and team trust, using the explanations provided by the interpersonal behaviour theory and prosocial behaviour accounts (Batson, Ahmad, Powell, & Stocks, 2008; Grant, 2008; Horowitz et al., 2006; Wiggins & Trobst, 1997). Specifically, I address first team level relationships and then I compare team- and individual-level effects of team IER on other processes.

5.2.1. Interpersonal Behaviour Theory (IBT)

Interpersonal behaviour theory proposes that interpersonal actions follow a complementarity principle, in which social actions invite corresponding responses in kind from interaction partners (Horowitz et al., 2006). According to this account, the interpersonal space is organised around two orthogonal dimensions that are often called affiliation and agency (see Figure 5.2). The horizontal 'affiliation' axis ranges from friendly to hostile behaviours. Affiliative or friendly behaviours are characterised by feelings of camaraderie, interpersonal closeness, and social integration. Conversely, cold or hostile behaviours are characterised by feelings of unsociability, being unfriendly and socially distant. The vertical 'agency' axis ranges from dominating to submissive behaviour. Dominating behaviours are characterised by influencing, taking control or agency. Submissive behaviours are characterised by actions of receiving, yielding, or relinquishing control.

Thus, the complementarity principle suggests that behaviours in the horizontal axis tend to invite reciprocal responses. For example, a friendly behaviour (e.g. saying something nice) tends to invite friendly responses, and distancing behaviour (e.g.

being rude) tends to invite distancing responses. Otherwise, behaviours located in the dominance axis tend to generate complementary responses. Particularly, dominant behaviours (e.g., trying to influence) tend to invite submissive responses (e.g., being influenced), and vice versa (Locke & Sadler, 2007). This complementarity principle also depends on the perceived intentions or motivation of others' actions (Horowitz et al., 2006; Markey, Funder, & Ozer, 2003; Wiggins & Trobst, 1997).

Particularly, interpersonal models propose that to produce the complementarity principle, individuals' actions must coincide 'unambiguously' with their intentions (Horowitz et al., 2006). As can been observed in Figure 5.2, when someone receives advice and to produce a reciprocal friendly reaction, the interaction partner must recognise that such an action is driven by affiliative motives, for instance, a true concern for what is happening to them. If this condition is not fulfilled, and individuals recognise, for example, an attempt at manipulation or control, or an 'ambiguous intention' (i.e. intentions are not clear), the response is distant or hostile as opposed to being friendly. Such a view implies that every behaviour carries information regarding how the other should respond, and thus, each behaviour elicits or constrains subsequent behaviour on the part of others (Markey et al., 2003).

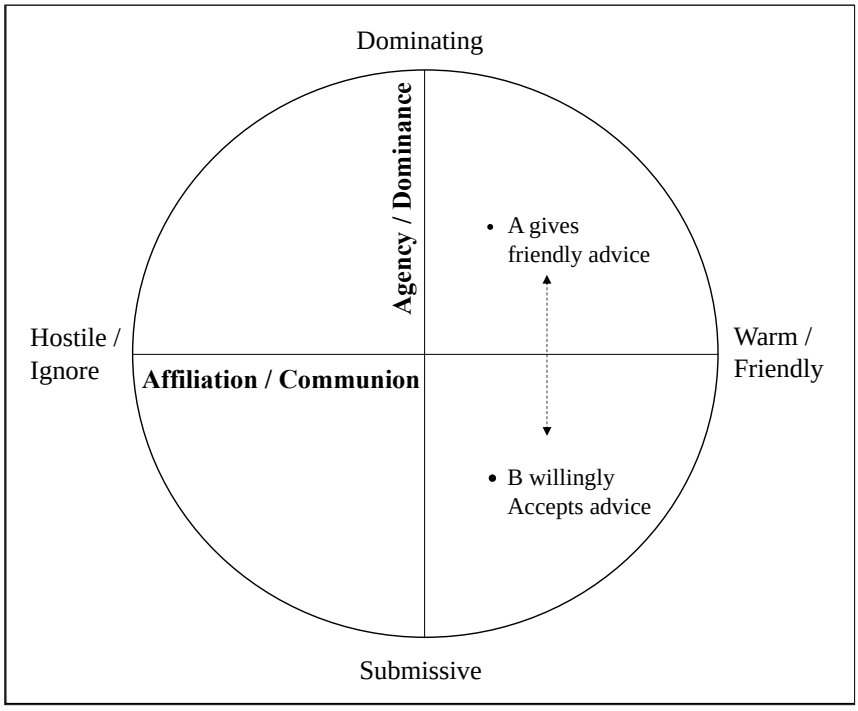


Figure 5.2. Interpersonal behaviours placed in a two-dimensional space. Adapted from Horowitz et al. (2006) and Markey and Markey (2009).

As IER involves interpersonal behaviours directed to assisting others to cope with their negative feelings, it is likely that interaction partners will perceive these behaviours as driven by affiliative or prosocial motives (Grant & Berg, 2011). In other words, when a team member provides advice to colleagues when they are feeling nervous or down, it is likely they will perceive these actions as help or care. In terms of interpersonal behaviour theory, such actions can be classified as affiliative-dominant with a communal or prosocial underlying motive, which invites affiliative-submissive responses (see Figure 5.2). Prosocial behaviour accounts suggest that individuals frequently engage in actions aiming to benefit or promote the well-being of others, and these actions are driven by prosocial motivations, such as those related to the desire to benefit other people (Grant, 2008). Particularly, interpersonal actions directed to regulating others' negative emotions can be conceptualised as prosocial behaviours as they involve a setting in which one person needs assistance (e.g. to regulate their negative feelings) and the other possesses the resources necessary to provide it (e.g. strategies aiming to regulate those negative feelings).

Thus, when these interpersonal behaviours are collectively displayed by members within teams, they can configure a team-level interpersonal process. In Chapter 3, I described the transition from particular interpersonal team member behaviours to team interpersonal processes appealing to social identity theory (Hogg & Terry, 2000; Tanis & Postmes, 2005). Specifically, when individuals work together in a team, they begin to integrate other members into their collective self and create a social identity as a function of this collective entity (Ellemers, Sleebos, Stam, & de Gilder, 2013). This social context shapes team members' behaviours in terms of social comparisons with other members and by engaging in behaviours for the sake of the team. When these interpersonal behaviours occur very often within teams, they configure an interpersonal team-level process in which team members manage interpersonal relationships in order to deliver team tasks (Marks et al., 2001).

Therefore, team processes characterised by team members engaging in affiliative behaviours should be correlated with similar affiliative processes, such as the team member quality of exchanges, and inversely correlated with processes that involve distant or hostile behaviours, such as relationship conflict. Following the same rationale, team processes that involve affiliative behaviours might be associated with

corresponding emergent states, such as positive affect, cohesion, and trust (Marks et al., 2001; Ilgen et al., 2005) and negatively correlated with the lack of those (e.g., negative affect or lack of psychological safety). Thus, when team members engage in IER actions with their colleagues, the 'receivers' of such actions could infer that other members are concerned about their well-being (or at least their current feelings), which ought to improve the quality of social interactions (and decrease the likelihood of relationship conflict). In terms of the associated emergent states, these interpersonal behaviours facilitate social integration, cohesion, and trust.

5.2.2. Team antecedent- vs response-focused IER strategies

Following the work of Little and colleagues (2016) regarding IER, a differing relationship of antecedent- and response-focused IER strategies with other processes is expected. Previous evidence from emotion regulation and emotional labour literature, addressed in Chapter 2, supports this distinct effect of these two sets of strategies (Grandey & Gabriel, 2015; Gross, 2015; Webb et al., 2012). In terms of the interpersonal behaviour theory, when team members engage in antecedent-focused IER strategies, as the focus of the interpersonal regulation is on the cause or situation which is generating negative emotions in colleagues, the behavioural expression and motives underlying are, in general, unambiguously prosocial, following the same theoretical mechanisms described above. Thus, it is likely that actions to modify a negative situation in colleagues (e.g. helping them with their workload), deploy another's attention away from the negative situation (e.g. using humour), or helping others reappraise their problems (e.g. providing advice) are perceived by interaction partners as prosocial or affiliative. They are thereby positively associated with other social processes. However, this may not be the case with team member response-focused IER strategies.

Team response-focused IER strategies involve actions to suppress the expression of negative emotions by colleagues. Whereas some prior qualitative studies have reported positive effects on team outcomes, appealing to affiliative underlying motives (e.g., Campo et al. 2016), when these behaviours are frequently engaged in by interaction partners, they can harm interpersonal relationships (Little, et al., 2016). This negative effect has been explained by appealing to regulators' intentions related to their interest in their targets' problems. As these interpersonal behaviours are

focused on suppressing the target's feelings and not on what is generating those feelings, they (the targets) may interpret that what is happening to them is not important to others (the agents).

In terms of interpersonal and prosocial behaviour theories, as the focus of the interpersonal regulation is on the emotional response (e.g. making others suppress their 'expression' of sadness, rather than learning more about 'why' they are sad), the potential prosocial motive is more ambiguous. Thus, it is more likely that they interpret such behaviours as an attempt to exert control over their behaviour, which would tend to generate a reciprocal hostile response from them (Horowitz et al., 2006). This is especially so when these behaviours are not an exception given a particular reason, but occur very often within teams, such as the phenomenon described here as team response-focused IER strategies. As a consequence, the use of such strategies by members would harm social integration, being associated with negative interpersonal processes.

Thus far, I have described in theoretical terms the expected relationship between team IER and other team processes and emergent states in general. In the following paragraphs, I review the evidence that supports the relationship of team IER with the specific team processes and emergent states of the theoretical model of this thesis (Figure 5.1), such as team relationship conflict, TMX and trust.

5.2.3. Team IER and team conflict

Among the large number of team processes and emergent states studied by researchers, team conflict emerges as one of the most important affect-related processes for understanding team dynamics. Research on conflict is abundant and has generally demonstrated a negative association with team dynamics and social integration, although some specific forms of conflict (e.g., task conflict) can be sometimes beneficial for groups and individuals (De Dreu & Weingart, 2003; de Wit et al., 2012). Team conflict has been defined as the process resulting from the tension between team members because of real or perceived differences (De Dreu & Weingart, 2003; de Wit et al., 2012), which involves team member disagreements, discrepancies, and personal frictions (Jehn, 1994).

Traditionally, two main types of team conflict have been described in the literature, namely task and relationship conflict (Jehn, 1994). Task conflicts occur when employees disagree over their understanding of the goals and tasks they are performing. Otherwise, relationship conflict takes place on an emotional or personal level between employees, characterised by friction, frustration, and value and personality clashes within the group (De Dreu & Weingart, 2003). For example, when two or more members experience conflicts within a team about personal taste, political preferences, values, and interpersonal style. As relationship conflict is more directly related to interpersonal disagreements, this thesis only focuses on this type of conflict.

Considering the theoretical explanations developed in previous paragraphs, I expect a negative relationship between team IER and team conflict, i.e., a common perception among team members about the more collective interpersonal affiliative behaviours exist within the team, the less the likelihood that interpersonal conflict develops. Indeed, teams whose members frequently engage in collective and reciprocal affiliative interpersonal behaviours, focused on regulating their colleagues' negative emotions, generate an ideal scenario for an absence of conflict, or its quick resolution, when minimal interpersonal frictions may arise (Horowitz et al., 2006). In other words, it is very unlikely that teams in which team members frequently assist each other by regulating their negative feelings and show care or concern for their emotions will have high levels of interpersonal conflict. This is because, according to IBT, these interpersonal actions facilitate a feeling of camaraderie, togetherness, and social integration, making difficult any expression of conflict.

Previous research into team processes has shown negative relationships between similar constructs to team IER and team relationship conflict. Particularly, studies of team positive affect have shown a negative effect on team relationship conflict. For example, Gamero, González-Romá and Peiró (2008), in a longitudinal study, describe a negative effect of team positive affective tone at time 1 on team relationship conflict at time 2. In addition, previous studies on leader IER have shown how interpersonal strategies directed to improving follower feelings are indeed related to their reported positive affect (Vasquez et al., 2020). Therefore, team IER will likely show a negative effect on conflict, not simply because of the positive effects of a

feeling of camaraderie and affiliation, but also due to the associated positive emotions among members (or the absence of negative emotions) resulting therefrom.

More directly related, previous studies in team-level emotional intelligence have consistently shown a negative relationship between this construct and intrateam relationship conflict (Curşeu et al., 2015; Jordan & Troth, 2004; Rezvani, Khosravi, & Ashkanasy, 2018). As described in Chapter 2, while emotional intelligence is a more complex phenomenon than IER, comprising the recognition and management of one's own and others' emotions, the authors of these studies have especially emphasised the importance of the regulation of other members' negative emotions as a key element to explain the effect of team emotional intelligence on reducing conflict.

In terms of the particular effect of team IER strategies, studies covering team intrapersonal and leader interpersonal emotion regulation support a differential effect of antecedent- versus response-focused strategies on team relationship conflict (Griffith, Connelly, & Thiel, 2014; Thiel et al., 2012; Thiel et al., 2019). For example, Theil and colleagues (2012), utilising an experimental design, reported a negative relationship between leaders' interpersonal use of cognitive reappraisal and intrateam conflict, and a positive relationship between suppression and conflict. Similarly, in a study involving team members and their intrapersonal strategies to regulate their own emotions, Thiel et al. (2019) found a positive effect of team member cognitive reappraisal on reducing team relationship conflict and that team member suppression of the expression of their emotions increases interpersonal frictions among members. Therefore, this research expects analogous effects in terms of team antecedent- and response-focused IER strategies and team relationship conflict.

Specifically, when team members use antecedent-focused strategies, they signal to their teammates that what happens to them is important, the prosocial intention is clear, and, therefore, the occurrence of interpersonal conflict is unlikely. Conversely, modulating the emotional response involves suggesting that a target (i.e., team members) refrain from expressing their negative (true) feelings. This mode of behaviour thus shows disregard for those feelings and does not address the source of the negative emotions. This may signal an agency intention characterised as 'I demand you to change your emotions, whatever is causing them' which may generate

reciprocal hostile behaviours, rather than affiliative, which may increase the likelihood of a situation of conflict.

5.2.4. Team IER and team member exchange quality (TMX)

Whereas team relationship conflict represents a process of interpersonal hostility, characterised by unfavourable interpersonal exchanges on the part of interaction partners, researchers have also studied the positive side of interpersonal relationships in the team context. Based on social exchange theory (Emerson, 1976), team member exchange quality (TMX) refers to the individual member's perception of their exchange relationship with their peer group as a whole. Specifically, TMX is proposed as a way to assess the process of reciprocity between team members in a group and consists in members' perception of their willingness to assist team colleagues, to share ideas and feedback (Seers, 1989). When a team member fulfils the expectation of team members regarding favourable exchanges, those expectations and fulfilments are reinforced, constituting a situation of high-quality exchange between the two parties (Tse, Dasborough, & Ashkanasy, 2005). Thus, the quality of the team member exchange relationship indicates the effectiveness of members' working relationship within a team.

As being opposed to team relationship conflict, based on interpersonal behaviour theory (IBT), a positive relationship between team IER and TMX is expected. When there is agreement among team members about how they collectively engage in reciprocal actions related to regulating each other's negative emotions, it is likely that this interpersonal phenomenon leads to high-quality exchanges among team members. In fact, previous theoretical works have located team members effort to manage colleagues' emotions as a key antecedent for team member quality of social interactions and a basic ingredient for the growth of any social relationship (Srivastava & Singh, 2015).

This claim is in line with the proposals of IBT in that affiliative behaviours invite reciprocal friendly actions from interactions partners. For instance, when team members assist others through regulating their negative emotions, such behaviours become an integral piece of information that team members draw upon in further evaluating, reciprocating, and maintaining that relationship with their colleagues. This creates a sense of obligation between team members and, as a consequence, team

member exchange quality is enhanced (Little et al., 2016). Thus, team member actions to regulate colleagues' negative emotions lead to the development of high-quality exchanges, increasing social ties and affective bonding, and enabling team members to experience relational meanings about their interpersonal relationships.

Previous studies have shown a positive association between IER and similar constructs at the interpersonal level (e.g. LMX). For instance, Little and colleagues (2016) in a field study found that leaders' use of strategies to regulate followers' negative emotions is positively related to their perception of high quality of exchange with their leaders (LMX). Likewise, Niven et al. (2012) when analysing the effect of employee IER in dyadic relationships reported that strategies directed to improving how others feel is related to their quality of relationship in terms of friendship and trust.

Thus, analogous effects are expected at the team level of analysis due to the fact that regulation of negative emotions by team members may impact how they interact with their group members and may affect their willingness to engage in social resource exchanges with them. Specifically, regarding the research in the team context, little is known about the effect of team IER and the quality of team member exchange relationships. Previous studies have found significant associations between team member intrapersonal emotion regulation and TMX (Hawkes and Neale, 2020). Likewise, research into emotional intelligence also has reported a positive association between this construct and TMX among restaurant employees (Oh & Jang, 2020). These studies support a positive effect of team member IER on sustaining quality relationships.

Considering the effect of particular strategies, prior research on emotion regulation has also reported a particular effect of antecedent- and response-focused strategies on the quality of social exchange relationships. For instance, Hawkes and Neale's (2020) study shows a positive relationship of intrapersonal cognitive reappraisal and a negative effect of emotional suppression on TMX. Relatedly, Little and colleagues (2016) reported a differential effect of leader antecedent- and response-focused IER strategies to regulate followers' emotions on LMX. Therefore, similar effects are expected in relation to the effects of team antecedent- and response-focused IER strategies and TMX.

Particularly, when team members use antecedent-focused IER strategies, they engage in behaviours with a clear prosocial motive (e.g. helping others with what is causing them negative emotions). This increases team members' sense of obligation regarding a norm of reciprocation of affiliative behaviours, and thus TMX is enhanced. The opposite effect is expected in terms of team response-focused IER strategies. As these actions are focused on the emotional expression of team members, and the causes of their negative emotions are not addressed, they might infer that their colleagues do not care enough to invest time and resources into alleviating the causes of their negative emotions. Thus, these motives do not match with an affiliative intention, impeding positive reciprocal affiliative behaviours and enhancing the likelihood of hostile responses, which will harm the quality of the exchanges between members.

5.2.5. Team IER and team trust

Trust is a fundamental characteristic of any work relationship and, like interpersonal conflict, it is one of the most frequently studied constructs in organisational research today (De Jong & Dirks, 2012; De Jong & Elfring, 2010). In general terms, interpersonal trust has been defined as individuals' willingness to accept vulnerability, based on positive expectations of the intentions or behaviours of another person. By extension, team trust refers to a team emergent state of reliance and represents the shared perception of trust that team members have in their fellow teammates (De Jong & Elfring, 2010; Fulmer & Gelfand, 2012). Previous studies have suggested two dimensions of team trust, namely cognitive and affective (Webber, 2008). Team cognitive trust is based on team members' shared beliefs about peer reliability and dependability as well as a sense of competence. Team affective trust is grounded in reciprocated interpersonal care and concern, or emotional bonds related to close interpersonal relationships.

Similar to the interpersonal processes described in previous paragraphs, a positive association between team IER and intrateam trust is expected, such that the more shared collective IER behaviours there are among members, the greater the likelihood of a state of intrateam trust emerging within the team. Taking into account the arguments of interpersonal behaviour theory developed in previous paragraphs, team IER would represent an antecedent of team trust due to these actions signifying a specific process of reciprocal behaviours of affiliation and care, increasing the

likelihood of a state of trust emerging. Accordingly, initial theoretical work in trust holds that previous positive interactions characterised by prosocial behaviour and positive affect among individuals is a predictor of trust (McAllister, 1995). This shows a clear relationship with the affective dimension of intrateam trust. Trust models also suggest that when these reciprocal interactions are stable and constant over time, a collective state of shared beliefs about peer reliability and dependability emerges.

Previous studies of IER have described interpersonal trust as a crucial outcome of IER strategies (Williams, 2007; Little et al., 2012; Niven et al., 2012). These studies label IER as an important process for intentionally building and maintaining trust between interaction partners. For example, Little and colleagues (2012) found a positive relationship between leader IER and follower trust in said leaders. Likewise, Niven et al. (2012) found similar effects in terms of dyadic relationships between co-workers. By extension, it is possible to imagine a parallel effect between team members, especially when IER is common within teams. In that regard, previous literature on collective or team-level emotional intelligence has reported a positive association with intrateam trust. For instance, Barczak and others (2010) reported a positive and significant effect of team member management of other's emotions (as a subscale of the emotional intelligence construct) on both affective and cognitive dimensions of trust.

Like the relationship between team IER, team conflict, and quality of social exchanges, previous literature in IER has supported a differing effect of antecedent- and response-focused IER strategies on trust. Specifically, Little and colleagues (2012) found a positive and significant relationship between leader antecedent-focused IER strategies (e.g., interpersonal cognitive change) and trust, and a significant negative relationship between leader response-focused IER strategies (e.g., interpersonal suppression) and trust. Therefore, similar effects are expected in terms of team-level antecedent- and response-focused IER strategies.

Specifically, as team antecedent-focused IER strategies involve explicit prosocial intentions, team colleagues may interpret these behaviours as clear actions to intentionally build and maintain trust between them. Thus, when these strategies are collectively performed by members, they create the affective (e.g., interpersonal bonds) and cognitive (e.g., beliefs related to future positive exchanges) necessary

conditions for a team-level state of trust to emerge. In contrast, when team members collectively focus on suppressing the expression of other members' negative emotions, they may interrupt this dynamic of affiliative reciprocal behaviours, harming both affective and cognitive dimensions of team trust. This is in the sense that they invite hostile rather than friendly behaviours, and do not assure a cognitive evaluation related to reliability and care if they need it in the future.

Therefore, taking together the arguments developed in previous sections regarding the relationship between team antecedent- and response-focused IER strategies and team relationship conflict, team member exchange quality, and intrateam trust, it is possible to formulate the following hypotheses.

Hypothesis 1: Team antecedent-focused IER strategies will be negatively related to (a) team relationship conflict and positively related to (b) team member exchange quality and (c) team trust.

Hypothesis 2: Team response-focused IER strategies will be positively related to (a) team relationship conflict and negatively related to (b) team member exchange quality and (c) team trust.

5.2.6. Team IER: individual- vs team-level strategies

The third objective of this thesis is to determine whether team interpersonal emotion regulation has an effect over individual team member actions. Chapter 3 describes several conceptualisations of team IER at different levels of analysis. This section uses those models in order to compare the effects of team IER at the individual and at the team level. Comparing such effects is important due to previous research in IER having been conducted exclusively at the individual or dyadic level of analysis. Furthermore, as this phenomenon is interpersonal in nature (i.e., individuals mostly tend to regulate one individual's emotions at a time), it could be argued that the effects of IER are manifested only at this interpersonal level. Thus, it seems important both theoretically and empirically to demonstrate that an understanding of IER at the team level has an effect over and above individual members' strategies on team dynamics and performance.

Previous theoretical reviews on employee affect and interpersonal emotion regulation in the workplace have emphasised the importance of considering the multilevel nature of organisations when individuals' organisational behaviour is studied (Ashkanasy & Dorris, 2017; Troth et al., 2018). This is because employees are nested in teams, which belong to areas, which are part of organisations, and previous research has shown that this structure in layers of organisation has an effect on employee behaviour (Bliese et al., 2019). Parallelly, researchers studying team effectiveness also have highlighted the benefits of considering the multilevel nature of teams in order to have a more precise understanding of team dynamics and the effects thereof on performance (Kozlowski, Chao, Grand, Braun, & Kuljanin, 2016). These studies have shown how psychological constructs exhibit stronger correlations with other constructs when they are at the same level of analysis.

In Chapter 3, I distinguished an individual level conceptualisation of IER (e.g. when the focus is on particular team member actions to regulate other's emotions, considering one direction, from regulators to targets), from a team-level account, utilising a referent-shift model (e.g. when the focus is on 'team members' or 'the team' as a whole actions to regulate members' emotions). Similar distinctions have been made in terms of leadership (Braun, Peus, Weisweiler, & Frey, 2013; Liu & Phillips, 2011; Tse, Troth, Ashkanasy, & Collins, 2018) and other team constructs, such as trust, conflict, resilience, or empowerment, to name just a few (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Costa, Fulmer, & Anderson, 2018; Gucciardi et al., 2018; Korsgaard, Soyoung Jeong, Mahony, & Pitariu, 2008; Zhou, Wang, Chen, & Shi, 2012). For example, Costa et al. (2018) in a conceptual review, examine previous research into trust, distinguishing this construct at the individual level (e.g. I trust my colleagues) from a referent-shift team-level model (e.g. In this team people can rely on each other). In their review, the authors highlighted the importance of considering these different levels because previous studies have shown how they can affect the strength of the relationship between trust and outcomes (De Jong and Dirks, 2012).

Therefore, analogous effects can be argued in terms of team IER. Specifically, it is expected that team IER will show stronger relationships than individual-level strategies with other team level constructs, such as team processes, emergent states, and outcomes. In other words, considering collective and shared behaviours related to

how members regulate each other's emotions should explain more variance in other team-level phenomena than merely accounting for individual members' interpersonal regulatory actions. This distinctive effect is applicable for both antecedent- and response-focused strategies. Thus, the following two hypotheses can be stated.

Hypothesis 3: Team antecedent-focused IER strategies will have an effect over and above individual-level IER strategies on (a) team relationship conflict, (b) TMX, and (c) team trust.

Hypothesis 4: Team response-focused IER strategies will have an effect over and above individual-level IER strategies on (a) team relationship conflict, (b) TMX, and (c) team trust.

5.3. Team Processes, Emergent States, and Team Outcomes

The main objective of this thesis is to examine the effects of team IER on teamwork. As represented in the conceptual model of this thesis (see Figure 5.1), this implies a mediation model, in which team IER is directly related to other processes and emergent states, and indirectly related to team outputs. Previous sections have examined the relationships between team IER and those other processes and emergent states. This section will address the association between team processes and team outcomes, such as team performance and team member well-being. To do this, first I briefly described how these two outcomes have been traditionally defined by researchers. Next, I synthesise the vast evidence about the relationship between team relationship conflict, TMX, and intrateam trust and team outputs (team performance and team member well-being). Then, in the subsequent section, I will integrate the explanations in terms of the indirect effects of team IER on these outcome variables.

Team performance has been defined as the extent to which a team accomplishes its tasks, goals, or mission, and generally refer to goods or services produced by a team (Bell, 2007; Devine & Philips, 2001; Kozlowski & Klein, 2000; Salas, Stagl, Burke, & Goodwin, 2007). The evidence regarding the antecedent and consequences of team performance is vast. In fact, some researchers have claimed that this is one of the most widely studied criterion variables in the organisational behaviour and human resource management literature (Mathieu et al., 2017). This thesis follows the classic distinction

between in-role and extra-role performance (Williams & Anderson, 1991). Team in-role performance refers to job-specific behaviours including levels of effort and task accomplishment enacted by team members, classically understood as task performance (Bradley, Anderson, Baur, & Klotz, 2015; Griffin, Neal, & Parker, 2007). Team extra-role performance corresponds to actions that are appreciated by organisations, but are not part of team members' main job role, such as courtesy or being a 'fair' and supportive member, traditionally studied as organisational citizenship behaviour (OCB) (Ehrhart, Bliese, & Thomas, 2006; Nielsen, Bachrach, Sundstrom, & Halfhill, 2012). Therefore, in this thesis I use both forms of team performance to operationalise this construct.

Team member psychological well-being is broadly defined as individuals' subjective positive experience of life (Bliese, Edwards, & Sonnentag, 2017). Similar to team performance (although to a lesser extent), team member well-being has been widely utilised in organisational behaviour research as an outcome variable of teamwork (van Mierlo, Rutte, Kompier, & Doorewaard, 2005). Whilst team member well-being can be operationalised as a team-level variable (see for example, Costa, Passos, & Bakker, 2015; Mäkikangas, Aunola, Seppälä, & Hakanen, 2016), researchers have argued that is in its very nature an individual experience. That is to say, team members - as individuals - are satisfied with their job, or experience such things as vitality, tension, and fatigue. Therefore, in this thesis, I define this construct at the individual level of analysis.

Specifically, in terms of its operationalisation, researchers have distinguished between positive (e.g. vitality, work engagement, and job satisfaction) and negative forms (e.g., exhaustion, burnout, and job dissatisfaction) of well-being (Huppert & Whittington, 2003; Inceoglu, Thomas, Chu, Plans, & Gerbasi, 2018). In this thesis, I selected emotional exhaustion as the form to operationalise team member well-being. The rationale utilised to select this form over others lies in the fact that previous research in IER has described this activity as effortful due to its involving individuals engaging actively in controlled behaviours to regulate other's emotions (Martínez-Íñigo, Poerio, & Totterdell, 2013; Niven, 2017). Thus, it seems appropriate to assess how team IER is related to team members' emotional exhaustion and examine whether these actions have an effect on individuals' resources, especially considering the fact

that within teams, because of their social nature, individuals are constantly engaging in effortful actions that involve resource expenditure and also receiving resources from their colleagues, for example, via feedback mechanisms (Hobfoll et al., 2018). Once having generally defined team performance and member well-being, the following paragraphs of this section summarise the evidence that has established the relationship between team conflict, TMX, and team trust and these two team outcomes. As Chapter 4 described, the IPSO model has been elaborated to explain the mediational role of team processes and emergent states, when team members transform inputs into outputs (Marks et al., 2001). Likewise, this section will describe the main theoretical accounts that have been developed to explain the relationships between these variables.

5.3.1. Team relationship conflict

Team performance. In the two past decades, several studies have shown that relationship conflict can be detrimental to team effectiveness. While scholars suggest that task conflict under certain conditions can be beneficial, such as for a creative task (de Wit, et al., 2012), this claim has been challenged by a number of researchers, who have noticed that there is an overlap between the two constructs and that both types of conflict are generally prejudicial to team effectiveness (De Dreu & Weingart, 2003). Particularly with regard to relationship conflict, research has commonly demonstrated that affective and personal attacks have large negative effects on group outcomes, such as team member satisfaction, team productivity, and overall task performance (De Dreu & Weingart, 2003; de Wit et al., 2012). For this reason, some authors have characterised this type of conflict as destructive conflict (Jehn, Bezrukova & Thatcher, 2008).

Researchers have argued for a number of mechanisms by which team relationship conflict impairs team performance, a common aspect being the fact that conflict impairs team members' social integration necessary to perform their tasks. Specifically, previous studies have suggested that relationship conflict limits the information processing ability of teams because members spend their time and energy focusing on each other's disagreements rather than on the team's task-related issues (De Dreu & Weingart, 2003). Likewise, researchers have noticed how relationship conflict produces tension and antagonism, and distracts team members from performing the task (Jehn, 1997). In support of this, relationship conflicts have often

been found to harm team effectiveness, such as by inhibiting team creativity and innovation (e.g., Farh, Lee, & Farh, 2010) and group performance (e.g., Brief & Weiss, 2002; Carnevale & Probst, 1998; De Dreu & Weingart, 2003; de Wit et al., 2012; Staw, Sandelands, & Dutton, 1981). For instance, the meta-analysis performed by de Wit et al. (2012) with a sample size of 116 empirical studies found a corrected negative correlation of (-.16) between relationship conflict and team performance. These results show different ways in which relationship conflict can impair team performance. However, team conflict has negative effects not only on team task accomplishment, but also on team member well-being.

Team member well-being. Whereas the majority of research on intrateam conflict has been focused on its impact on team performance, a number of studies have addressed the relationship between team conflict and team members' well-being (De Dreu, Dierendonck, & Dijkatra, 2004; Meier, Gross, Spector, & Semmer, 2013; Spector & Bruk-Lee, 2008), including meta-analytic evidence in relation to team member job satisfaction (De Dreu & Weingart, 2003). Research has established that relationship conflict has a negative and significant impact on individuals' well-being indicators such as psychosomatic complaints, emotional exhaustion, negative affect, and reduced job satisfaction (Dijkstra, van Dierendonck, &, Evers, 2005; De Dreu & van Vianen, 2001; Medina, Munduate, Dorado, Martínez, & Guerra, 2005; Spector & Bruk-Lee, 2008). Thus, previous research has shown a consistent view of the detrimental impact of interpersonal conflict on employee wellness.

Similar to the associations between intrateam relationship conflict and team performance, scholars have presented a number of reasons for team conflict damaging members' well-being. Specifically, according to de Wit and colleagues (2012), relationship conflict increases anxiety and hostility, since group members focus on self-concept-related issues, which further foster feelings of reduced control and lowered self-esteem, leading to reduced levels of individual well-being. Furthermore, other authors have conceptualised relationship conflict as a hindering demand (Costa et al., 2015) and a socially stressful event (Giebels & Janssen, 2005), which can directly impair individuals' well-being (Dormann & Zapf, 2002; Giebels & Janssen, 2005). All these explanations have as a common feature that relationship conflict is a

demanding situation for employees, which reduces individuals' resources, self-esteem and positive subjective experience at work.

For example, Sonnentag, Unger, & Nägel, (2013) studied the effect of workplace conflict on employee well-being, showing that both task and relationship conflict were negatively related to employee well-being. Specifically, employees who experienced a high level of relationship conflict at work reported significantly poorer well-being than employees experiencing low levels of conflict. Therefore, a relationship conflict situation not only may impair people's personal resources, because it represents a demanding situation, but also may hamper positive social situations that might provide social resources to team members. Both processes ultimately have a negative impact on employees' well-being.

5.3.2. Team member exchange (TMX)

Team performance. From its very conception, team member exchange quality was conceptualised as a team-level phenomenon. Consequently, there are several studies that have tested its effects on team performance. Nevertheless, research in TMX is still in development and the number of studies is nowhere near as great as for other team phenomena (e.g. intrateam conflict or trust; Banks et al., 2014). Prior research has shown a general positive relationship between these two constructs, for example in terms of team task performance (Jordan & Troth, 2004; Liu et al., 2011; Seers, 1995), team OCB (Farmer, Van Dyne, & Kamdar, 2015; Love and Forret, 2008), and innovation (Hu, Ou, Chiou, & Lin, 2012; Wu, Liu, Kim, & Gao, 2018). Since TMX has its roots in social exchange theory, most explanations of its consequences are based on this theoretical account.

Particularly, researchers have suggested that when team members have high quality exchange relationships, they engage in reciprocal actions related to the exchange of resources with their colleagues, such as information sharing, providing feedback, and collaborating, all beneficial for performance (Liden, Wayne, & Sparrowe, 2000; Jordan, Ashkanasy, Härtel, & Hooper, 2002; Liu et al., 2011). By better utilising colleagues' resources, team members are likely to achieve higher performance. Also, a high TMX score denotes that members fulfil the performance expectations of other members (Banks et al., 2014; Seers, 1989). Thus, team member

high quality exchanges would facilitate the social integration to carry on the team tasks, and as a consequence, enhance overall team performance.

Team member well-being. Similar to what occurs with team performance, early studies on TMX explored its relationship with team members' sense of well-being, albeit mostly in terms of job satisfaction (e.g., Seers. 1989 or Golden, 2006). This focus on job satisfaction is still present, for example, in meta-analytical empirical reviews (Banks et al., 2014). Whereas there is a large number of studies which have investigated the positive effect of sustaining constructive social relationships among employees on their sense of well-being, these studies have mainly focused more on employees perceived 'social support' than the particular quality of social exchanges. Despite this, there are in fact studies that have explored the relationship between these two constructs, besides team member job satisfaction. These studies have generally reported positive associations between TMX and such indicators. For example, Schermuly and Meyer (2016) described a negative association between TMX and members' general feelings of depression. Similarly, Theuwis (2010) reported a positive association between TMX and team member work engagement and general sense of well-being. Likewise, Liao and colleagues (2013) also reported a positive association between TMX and team members' work engagement (Liao, Yang, Wang, Drown, & Shi, 2013). Taken together, these studies provide support for a positive association between team members quality of exchanges and their sense of well-being at work.

Regarding the theoretical explanations that support the positive relationship between TMX and well-being, the majority has focused on the positive effect for team members of sustaining high quality relationships with their colleagues on their sense of wellness. However, similar to what happens with team conflict, they vary depending on the theory by which they support their claims. For example, Seers (1995) suggests that because higher-quality interpersonal relationships involve the positive and reciprocal exchanges of resources, this may be enjoyable to employees, which has an impact on their wellbeing. Similarly, Banks et al. (2014), indicate that these positive resource exchanges between members may increase their sense of self-esteem and efficacy, enhancing their feeling of mental health and well-being. Otherwise, Schermuly and Meyer (2016), appealing to self-determination theory, indicate that by

sustaining meaningful relationships, individuals fulfil their need for relatedness, which then increases their sense of well-being.

5.3.3. Team trust

Team performance. Unlike TMX, and more similar to the case of intrateam conflict, there is a large number of studies that have examined the relationship between team trust and team performance. For example, in a meta-analytical review involving 100 studies and a cumulative sample of 6,748 employees, De Jong and colleagues (2016) describe a significant and positive association (.30) between intrateam trust and team performance. Likewise, Breuer and colleagues (2016) also reported a positive relationship between team trust and team task and contextual performance in a sample of 54 studies and 3,506 employees. This meta-analytic evidence shows a robust positive effect of trust on performance, including both cognitive and affective dimensions, and confirms the results of the early studies, which found similar relationships (Dirks, 1999; Klimoski & Karol, 1976).

Related to the explanations addressed above regarding intrateam conflict and TMX, the main arguments elaborated by scholars to explain the relationship between team trust and performance are related to reciprocal interactions which involve the utilisation of some sort of resource. For example, De Jong and Elfring (2010) propose that intrateam trust allows team members to reduce uncertainty and vulnerability for future exchanges. Team members who trust each other are therefore more likely to engage in productive interactions and teamwork processes that increase team performance (Spreitzer & Mishra, 1999). Conversely, when team members do not trust their fellows, they protect themselves against future possible loses and stop sharing information and spending time with their colleagues, which as a consequence harms their performance as a team (Mayer & Gavin, 2005). Similarly, Dirks (1999) suggests that when team member trust each other, they increase their interpersonal resources and facilitate the utilisation of resources by the team. For instance, in terms of a reduced need for interpersonal control (e.g. monitoring) and an increased capacity to confront performance problems with their colleagues, which enables task accomplishment and therefore enhanced team performance.

Team member well-being. Unlike the case of performance, there are only a few studies that have examined the relationship between intrateam trust and team member

well-being. Most of these have tested the association between intrateam trust and group or individual job satisfaction (Breuer et al., 2016). For example, in the context of team effectiveness, Costa (2003) reports a significant and positive relationship between intrateam trust and team satisfaction. These results have been replicated by recent studies, which have found similar effects (DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013; Fung, 2014). In terms of other ways of conceptualising subjective well-being, previous research has found significant positive relationships between intrateam trust and work engagement (Chughtai and Buckley, 2013), a negative association between co-worker trust and stress (Lehmann-Willenbrock, Lei, & Kauffeld, 2012), and a negative effect of employees feeling trusted on their levels of exhaustion, specifically, when associated with feelings of pride (Baer et al., 2015).

The justifications used by scholars to explain the effects of team trust on members' sense of well-being follow the same pattern used to describe the effects on team performance, appealing to social exchange or resource allocation. In terms of social exchange, when team members trust each other, they rely on their colleagues and reduce uncertainty about future exchanges. For instance, in terms of future help and care, which has an effect on their sense of safety, comfort, and wellness (Edmondson, 2004; Costa, 2003). In contrast, when team members collectively perceive they cannot trust their colleagues, this generates a climate within the team characterised by social isolation, lack of cooperation, and lack of support, typically associated with lack of well-being.

Therefore, taking together the argument expressed in the previous paragraphs regarding the effects of team relationship conflict, TMX and intrateam trust on team performance and team member well-being, it is possible to state the following hypotheses.

Hypothesis 5: Team relationship conflict will be negatively related to (a) Team Performance (Task performance and OCB) and positively related to (b) Team member Emotional Exhaustion.

Hypothesis 6: TMX will be positively related to (a) Team Performance (Task performance and OCB) and negatively related to (b) Team member Emotional Exhaustion.

Hypothesis 7: Team trust will be positively related to (a) Team Performance (Task performance and OCB) and negatively related to (b) Team member Emotional Exhaustion.

5.4. Team IER and Team Outcomes: the mediating role of team processes and emergent states

This section consolidates prior arguments regarding the effect of team IER on team outcomes (Figure 5.1). Based on the IPSO framework of team effectiveness, I have proposed a mediation model to examine the effect of team IER on team outcomes (e.g. team performance and team member well-being) via its influence on team dynamics (e.g. team relationship conflict, TMX, and intrateam trust). So far, I have addressed how team IER can have a direct effect on other processes and emergent states. In addition, the previous section summarised the literature that has linked these processes (e.g. team conflict and TMX) and emergent states (e.g. team trust) to team performance and team member well-being. The current section integrates both, proposing that team member strategies to regulate their colleagues' negative emotions can enhance team performance and members' sense of well-being because of their influence on positive social dynamics and role in reducing negative interpersonal processes.

In Chapter 4, I examined the possibility that team processes have their effects on team outputs via their influence on other processes and emergent states, based on the IPSO model. Here I theoretically ground such a mediational effect. To accomplish this, and following previous research in teams, I use social extensions of conservation of resources theory (COR; Hobfoll, 1989) to complement the arguments elaborated in previous paragraphs, related to the reciprocity of interpersonal behaviours by interactions partners (Horowitz et al., 2006). I use COR theory because, as can be seen in earlier sections, almost all explanations of the effects of team processes on team outcomes previously established by scholars, appeal to a certain degree to the exchange of some sort of resource. Thus, COR theory complements interpersonal behaviour accounts by suggesting that, when team members engage in reciprocal affiliative behaviours, they exchange, develop, and accumulate resources, which have an impact on their task performance and sense of well-being. As IBT was already

described in the first section of this chapter, in the following paragraphs, first, I describe COR theory, and then, I apply both accounts to explain the indirect effects of team IER on team outcomes.

5.4.1. Conservation of resources theory (COR)

Conservation of resources theory provides a complementary explanation for the effects of team level interpersonal emotion regulation on team processes and team effectiveness. Overall, this account posits that resources can be interpersonally accumulated and shared between interaction partners, when they engage in reciprocal resource exchanges (Hobfoll, 1989; Hobfoll et al., 2018; Hobfoll et al., 1990). Specifically, COR theory suggests that when individuals and groups engage in social exchanges, they are motivated to protect their current resources and acquire new resources (Hobfoll et al., 2018). Although the notion of resources may tend to be vague, according to this theory, the concept basically refers to things that people (individually and in groups) perceive as positive and consequently value. This includes, but is not limited to (a) *object resources*, such as material assets; (b) *condition resources*, for instance, employment, tenure; (c) *personal resources*, for example, key skills; (d) *social resources*, such as interpersonal care, trust, and social support; and (e) *energy resources*, for instance, energy, money (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014). Thus, as this thesis involves interpersonal processes and emergent states, I focus mainly on the conservation and exchange of social resources.

The basic tenet of COR theory is represented in four general principles which describe how individuals in social interactions invest effort in resource acquisition and protection against resource loss, summarised in Table 5.1. Based on these principles, Hobfoll et al. (1990) describes three main propositions (corollaries) which make predictions about the resource investment process in the interpersonal domain. These corollaries propose that resource gain and loss occur in dynamic spirals of increasing or decreasing over time. Furthermore, resources gain cycles create what Hobfoll and colleagues (2018) call ‘resources caravans’, which refers to the fact that resources co-vary and ‘travel’ together in packs. These resources can be interpersonally exchanged

thorough a process known as crossover of resources (Hobfoll et al., 2018; Westman, Etzion, & Danon, 2001; Westman, Hobfoll, Chen, Davidson, & Laski, 2004).

Table 5.1. Summarise of Principles and Corollaries of Conservation of Resources Theory

Principles	
Primacy of loss principle:	Suggests that resource loss is disproportionately more salient than resource gain for individuals.
Resource investment principle:	Indicates that people must invest resources in order to protect against resource loss, recover from losses, and gain resources.
Gain paradox principle:	Specifies that resource gain increases in salience for individuals when it occurs in the context of resource loss.
Desperation principle:	Suggests that when people's resources are exhausted, they enter a defensive mode to preserve the self which is often defensive, aggressive, and may become irrational.
Corollaries	
Corollary 1:	Suggests that those with greater resources are less vulnerable to resource loss and more capable of resource gain. Contrariwise, individuals and groups who lack resources are more vulnerable to resource loss and less capable of resource gain.
Corollary 2:	Resource loss cycles. Because resource loss is more powerful than resource gain, and because stress occurs when resources are lost, loss spirals gain in momentum as well as magnitude at each new iteration.
Corollary 3:	Resource gain spirals. Because resource gain is both of less magnitude and slower than resource loss, resource gain spirals tend to be weak and develop slowly at each new iteration.

Note. Adapted from Hobfoll., et al., (2018).

This crossover model of resources suggests that resources can be shared among people, via interpersonal behaviours or via the experience of common affective events by interaction partners (Morelli, Lieberman, & Zaki, 2015; Uy, Lin, & Ilies, 2017; Westman et al., 2004). For example, when people's resources at work increase (such as personal control), they may be able to share them with their colleagues, leading to an increase in the latter's well-being. In return, co-workers may well engage in reciprocal actions related to increasing colleagues' resources, which can result in a cycle of resource gain for the whole group. In that regard, the crossover model extends previous approaches, by adding an interpersonal level of analysis and expanding the focus to dyads, teams, and organisations (Westman, 2001). By doing this, it outlines the mechanisms by which resources are shared in the organisational context.

An example of crossover of resources mentioned by Hobfoll and colleagues (2018) occurs in the case of LMX. Specifically, LMX describes how leaders exchange important resources (e.g. social support, autonomy) with subordinates who assist them in completing their work, establishing a different quality of relationships. A similar process might occur in team member-colleague interactions, where they exchange resources, such as sharing a task and bringing support in exchange for a future reward (Banks et al., 2014; Seers, 1989). In the present research, the perception of team interpersonal emotion regulation by members can be a key interpersonal resource that they can share in order to increase their resource availability to cope with demanding situations that generate negative emotions in themselves. However, what are these resources that team members generate and share?

Following the principles of COR theory, team IER can generally be characterised as a social resource, because it implies members' perception that they will obtain assistance to regulate their negative emotions from their social interactions (e.g. other team members). In other words, team members perceive that they do not necessarily have to use their own resources to regulate their emotions, because they going to count on their colleagues' support to do so. Thus, when team members collectively regulate each other's emotions, they generate and share their determination to continually change negative emotions and sustain positive feelings among them. This understanding of team IER as social resources is more explicit in relation to antecedent-focused strategies, as these strategies are directed to regulating the elements that are generating others' negative emotions, for example, via modifying a situation or helping others to reappraise their problems.

Conversely, as response-focused strategies imply the regulation of the emotional expression (and not its causes), its conceptualization as a social resource may depend on the context and their frequency of use. For example, if a colleague tells another to not show his anxiety on a particular occasion, because that could be prejudicial to them, it could be a resource (because it implies interpersonal assistance to regulate an inappropriate emotion for that context). However, if team members frequently and collectively engage in these interpersonal actions within a team (and continually request each other to not express their feelings), they may create a social

demand of having to intrapersonally regulate their own emotions, which involves effort and resource expenditure, effecting cycles of resource loss.

5.4.2. Team IER, team dynamics, and team performance

In theoretical terms, taking together the arguments elaborated above, I propose that team IER increases team performance because it involves affiliative behaviours and the generation of resources that facilitate beneficial team dynamics (e.g. a good quality of social exchange and an emergent state of trust among members) and impedes the development of harmful processes (e.g. intrateam relationship conflict) (Horowitz et al., 2006). In turn, these processes and emergent states facilitate team members in focusing attention and effort on task accomplishment, which enables team performance. Specifically, team member IER strategies represent collective interpersonal affiliative behaviours, which invite reciprocal affiliative responses from team colleagues directed to regulating their negative emotions. Team members may perceive this interpersonal process as an accumulation of resources, in the sense that IER strategies represent assets that team members may use to cope with demanding situations and sustain positive feelings.

Thus, this interpersonal process enhances favourable exchanges between members, for instance in terms of cooperative information sharing (TMX), and facilitates their affective bonds and beliefs about peer reliability and dependability (intrateam trust). In parallel, team IER decreases the likelihood of hostile behaviours, by which members may behold information, withhold their cooperation, and harm each other's feelings (interpersonal conflict). All these processes facilitate the social integration and interpersonal coordination necessary for team members to focus their efforts on task accomplishment, boosting as a result team-unit performance. As a consequence, teams whose members frequently engage in IER behaviours will show better team dynamics and higher performance than teams whose members barely regulate others' negative emotions.

Following the IER literature (Gross, 2015; Little et al., 2016; Webb et al., 2012), I propose that team antecedent- and response-focused IER strategies will increase and decrease team performance respectively, because, as stated in previous sections, they

are associated with beneficial or detrimental team processes and emergent states. Thus, when there is agreement among team members about how often they engage in team antecedent-focused IER behaviours (e.g., sharing workload, using humour, or providing advice to make others feel better), they have the resources to quickly resolve a conflict situation, impeding its further development. This also enhances team members' sense of obligation regarding a norm of reciprocation of affiliative behaviours, building a better relationship (TMX), creating affective (e.g. interpersonal bonds) and cognitive (e.g. peer reliability and beliefs related to future positive exchanges) conditions necessary for a team-level state of trust to emerge. Thus, teams that present low levels of conflict and high levels of positive exchanges and trust produced by team IER strategies would show overall better levels of team performance.

Previous research in IER supports this mediational effect, for example, Madrid and colleagues (2018) show that leader IER affects team innovation, via its effect on team positive affect. Similarly, at the individual level of analysis, Little et al. (2016) reported similar mediated relationships, showing that leader IER is associated with LMX, which, in turn, is related to follower OCB. Likewise, Vasquez and colleagues (2020) found that follower affect plays a mediational role in the relationship between leader IER and follower performance. An analogous pattern can be found in studies on collective emotional intelligence, which have reported a significant mediated effect of team conflict and coordination in the relationship between team emotional intelligence and team performance (Barczak et al., 2010; Curşeu et al., 2015; Jordan & Troth, 2004). These studies bring support to the view that team IER is related to team performance, via its influence on team interpersonal dynamics.

Conversely, team response-focused IER strategies will likely harm team performance. When team members often and collectively suppress their colleagues' expression of negative emotions, they demand that other members use their personal resources to regulate such negative feelings. As the motives behind the use of these strategies are more dominant, in the sense that they could mean, 'regulate your negative emotions despite what is causing them', they likely would be interpreted as an attempt at control over their behaviours (e.g., emotional expression). According to IBT, such behaviours invite reciprocal distant or hostile behaviours. Therefore,

response-focused IER strategies may increase interpersonal friction, harm members' resource exchange, for example, by withholding information, or impairing intrateam trust. These negative team dynamics are likely to damage team performance, because team members will focus their efforts on their interpersonal problems and conflict resolution, decreasing levels of cooperation and, therefore, task accomplishment. Taken together, these arguments allow the formulation of two additional, mediation hypotheses, relating to the relationship between team IER and team performance.

Hypothesis 8: The positive relationship between team antecedent-focused IER strategies and team performance will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust.

Hypothesis 9: The negative relationship between team response-focused IER strategies and team performance will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust.

5.4.3. Team IER, team dynamics and team member well-being

The positive team dynamics resulting from team members assessing that they as a group collectively engage in affiliative behaviours directed to interpersonally regulating their negative emotions may also positively impact team member sense of psychological well-being. COR theory describes psychological well-being as the experienced excess of resources that individuals feel as happiness, comfort, and well-being (Hobfoll et al., 2018). As this variable is being conceptualised at the individual level of analysis, it is important to analyse the effects of the use of IER strategies by both parties, namely agents (who engage in the regulatory acts towards other people) and targets (who experience negative emotions that need to be regulated). Especially, considering that IER has been described as a controlled, voluntary, and therefore effortful behaviour, it consequently involves resource expenditure for agents (Niven, 2017). Previous studies in IER and well-being suggests a positive relationship for both agent and targets, even though these behaviours imply spending personal resources on the part of agents (Martínez-Íñigo et al., 2013; Niven, et al., 2012). In particular, target individuals would increase their resources if the interpersonal emotion regulation strategy was directed to improving how they feel (Uy, Lin, & Ilies, 2017). With regard

to agent individuals' side of the process, they may suffer a loss of resources due to the effort involved in the regulatory behaviour, but also could gain some resources via interpersonal feedback processes (Niven et al., 2009b; Hülsheger & Schewe, 2011). These feedback mechanisms are especially abundant if positive team dynamics resulting from reciprocal affiliative behaviours are considered.

In fact, in the previous sections I examined how team dynamics, such as team relationship conflict, TMX, and intrateam trust are related to members' psychological well-being, by a process of crossover of resources (Hobfoll et al., 2018; Westman, Etzion, & Danon, 2001; Westman, Hobfoll, Chen, Davidson, & Laski, 2004). Specifically, when team members sustain good relationships with their colleagues and trust each other because they constantly regulate their negative emotions, they engage in reciprocally beneficial resource exchanges, and perceive that positive future exchanges are assured. This has an effect on individual's self-esteem and social bonds, increasing members' welfare. The opposite effects are expected when team members engage in relationship conflicts, likely harming their self-esteem and interpersonal bonds.

Following the same rationale of previous paragraphs, opposite effects for team antecedent- and response-focused IER on team member well-being are expected. Team antecedent-focused IER strategies clearly represent prosocial behaviours aimed to benefit or promote the well-being of others (Grant, 2008). Such actions are expressly used to make colleagues feel better when they are experiencing negative emotions, such as anxiety or sadness, and specially, if we consider that these strategies are focused on the causes of others' negative emotions. Thus, other colleagues interpret that their emotions are valid, and their colleagues put an effort into trying to change them, for example by taking the time to discuss their problems, focusing their attention on positive situations, or even trying to modify the elements that are causing negative emotions in them. Furthermore, their prosocial underlying motive encourages the use of reciprocal behaviours by other members, affecting their quality of relationship and trust. These positive resources are perceived by team members and have a positive effect on their wellness because they feel important to others, supported and cared for.

In contrast, it is expected that the use of team response-focused IER strategies by members will have a negative impact on their sense of well-being. This negative association can be more clearly understood, again, through separating the consequences for team member agents and targets. Targets are called upon to use personal resources to not express their negative feelings. This case matches with what is known as surface acting (Grandey & Melloy, 2017), namely, people's attempts to suppress the expression of emotions to adhere to certain emotional display rules established, in this specific case, by colleagues. As previously examined in Chapter 2, numerous studies have supported the negative effects of surface acting on individuals' quality of relationships and well-being (Bono & Vey, 2005; Brotheridge & Grandey, 2002; Hülsheger & Schewe, 2011), especially in the work context. For agents, they engage in controlled and effortful actions to regulate colleagues' negative emotions, and by doing so, incur resource expenditure, but unlike the case of antecedent-focused IER strategies, here they do not obtain resources in return from their colleagues, because they do not engage in reciprocal affiliative behaviours. Thus, considering the effects upon agents and targets altogether, this represents the typical scenario of resources loss in terms of (lack of) crossover of resources, which can impair employee well-being (Westman, Bakker, Roziner, & Sonnentag, 2011).

In terms of cross-level effects, when team members collectively engage in response-focused strategies, they signal to their colleagues that what is happening to them is not important enough to spend time in analysing what is causing them their negative emotions, and all that matters is the expression of these negative feelings. As these actions may be interpreted as high in 'agency' and 'distant', they may generate hostile behaviours by interacting members, which may increase interpersonal conflict within the team. Such actions can also harm team member quality of relationship and trust, because members perceive that they are not going to receive care and support when they need it, so they cannot rely on their colleagues. All these negative processes will tend to result in individuals' lack of well-being, for instance, in the form of lack of self-esteem and social bonds, and a feeling of exhaustion (Hobfoll et al., 2018). Therefore, two final hypotheses can be proposed regarding the mediational role of team dynamics in the relationship between team IER and team member well-being.

Hypothesis 10: The positive relationship between team antecedent-focused IER strategies and team member well-being will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust.

Hypothesis 11: The negative relationship between team response-focused IER strategies and team member well-being will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust.

5.5. Chapter summary

In summary, this chapter has provided evidence and theoretical explanations to support the view that the relationships between this research's constructs represent a multilevel mediation model. This mediation model uses the IPSO framework to organise the variables in terms of an interpersonal process as inputs (team interpersonal emotion regulation), team processes and emergent states as mediators (team relationship conflict, TMX and team trust), and team outputs (team performance and team member well-being). Following the arguments related to interpersonal behaviour, prosocial behaviour, and social extensions of conservation of resources theory, team IER has been generally characterised as an interpersonal process that involves the collective display of affiliative behaviours by members. These prosocial and affiliative behaviours invite reciprocal affiliative responses from interaction team members. When team members as a group share their perception that they collectively regulate their colleagues' negative emotions, they perceive this team-level process as a team social resource, related to mutual care, lack of interpersonal friction, good quality of exchanges, and trust among members. These beneficial processes facilitate the necessary social integration to carry on team tasks, enhancing team performance and team member sense of personal well-being.

Specifically, based on the accumulated literature on IER (e.g., Gross, 2015; Little et al., 2016; Webb et al., 2012), I propose that not all team IER strategies will have the same effects on team mediators and outputs. Particularly, team antecedent-focused IER strategies (e.g. modifying the situation that is generating negative emotions in others, deploying their attention to a more pleasant stimulus, and helping others by reappraising their problems) explicitly represent prosocial intentions. Thus,

when they are collectively enacted by members, they are likely to invite affiliative responses and enhance team performance, and members' sense of well-being, via the facilitation of the social mechanisms described above. In contrast, team response-focused IER strategies, as they represent the collective interpersonal suppression of negative emotions, invite hostile responses from team members. This increases the likelihood of interpersonal frictions, decreases the quality of resource exchange among members, and harms the chance of team members trusting each other within teams. In turn, these negative processes have a detrimental effect on team performance and members' wellness because they concentrate on their personal issues rather than team tasks, which affects their self-esteem and sense of belonging.

The next chapters describe the methodology and results of the testing of the multilevel mediation hypotheses. Specifically, in order to test the hypotheses, I use a quantitative cross-sectional survey design, collecting data from three different organisations, representing different sections of the main conceptual model, increasing complexity. After analysing and presenting the results of the multilevel mediation models in terms of a referent-shift composition team IER model, I will use the same data to examine a dispersion model of team IER. Examining the diversity in team member IER strategies is important because, in reality, it is likely that team members vary as to the strategies used, the frequency with which they use them, and their perception of the prevalence of these strategies within the team.

CHAPTER 6. THESIS METHODOLOGY

6.1. Chapter Overview

This chapter describes the general philosophical approach and research methods adopted in the empirical studies contained in this thesis. Specifically, the first section presents a general description of the positivist scientific paradigm, establishing its relationship with the quantitative methods adopted in this research. The second section of this chapter describes the specific procedure employed for data collection, the sample characteristics, the measures selected, and the main methodology and strategy adopted for analysing the data.

The overall purpose of this research is to determine the relationship between interpersonal emotion regulation among team members and its effect on teamwork. Accordingly, the main research question of this thesis is: Does team members' interpersonal emotion regulation have an effect on team processes and outputs? This involves the description of the relationship between different behaviours and social processes in human beings, including affective and cognitive components; a quantitative design was adopted in order to address this research question and its associated hypotheses.

6.2. Research Approach and Philosophical Assumptions

Throughout the history of the discipline, psychologists have traditionally embraced either a quantitative or qualitative approach. Both approaches entail specific underlying philosophical and theoretical assumptions concerning reality (ontology), knowledge (epistemology), and the principles that govern scientific investigation (methodology). This constrains the kinds of questions that scientists try to answer, how knowledge is generated, and characteristics of studies, in terms of data collection, analysis, and interpretation (Gelo, Braakmann, & Benetka, 2008). For example, the

research questions of this thesis can be understood under the quantitative paradigm (as they are directed to understanding the effect size of the relationship between team phenomena), which sees reality as single and tangible, where the knower and the known are considered to be relatively separate and independent. This approach, which presupposes quantification, has its foundations – from the perspective of philosophy of science – in logical positivism and in critical rationalism (Johnson & Cassell, 2001). The critical basis of knowledge lies in public experimental verification or confirmation, traditionally in terms of a numerical quantification.

In terms of methodology, quantitative approaches usually adopt a nomothetic methodology (Salvatore & Valsiner, 2010) which consists of the attempt to build and establish general laws or principles that are always and, in every circumstance, immutable and universally applicable. Thus, quantitative approaches usually elaborate hypotheses, which are deductively and theoretically driven, then to be falsified through empirical investigation (confirmatory study). For instance, previous chapters of this thesis have established the theoretical background that sustains certain relationships between a number of elements, namely, how team members behaviours will influence other team processes and their work performance. After planed research design and a series of statistical analysis, the confirmation or rejection of the hypothesised relationships between the elements allows the elaboration of general patterns regarding members' behaviour in work teams.

In terms of research design, the quantitative approach includes experimental and non-experimental designs. Experimental designs draw causal inferences about the relationship between a set of variables. In contrast, non-experimental designs, such as correlational designs, have as a primary aim the description of the relationship between two or more variables of interest. The current research uses a cross-sectional design, which is a specific example of correlational design. This design was selected to provide a general understanding of the relationship between variables in an ecologically valid setting (i.e., an organisation structured in teams), being able to reach a large data sample. Thus, while cross-sectional survey studies have the advantage of generalising observed results to the population - 'high external validity' - they have limitations in attempting to test causal relationships between constructs investigated - 'low internal validity' (Bryman & Bell, 2015).

Therefore, in order to answer the research questions and hypotheses of this thesis, three quantitative studies were implemented. Study 1 was conducted and performed in a public organisation in Chile designed to give a first approach to the measures in the team context and to explore the general relationships between the model variables at the team level. Study 2 focuses on the multilevel nature of the data, with a larger sample size collected in a multinational Latin American company, assessing the relationships between team members' interpersonal emotion regulation antecedent-focused and response-focused strategies (level 2), team conflict (level 2), team performance (level 2), and team member well-being (level 1). Finally, study 3 pursues the replication and extension of the relationship between the variables in study 1 and study 2. To do this, this study compares interpersonal emotion regulation at the individual (level 1) and team level (level 2), and also adds additional theoretically chosen team processes (e.g. team trust, TMX) to understand the role of interpersonal emotion regulation with regard to team outputs.

The following sections of this chapter provide details about the procedure, sample characteristics, and methodology used to analyse the data in each study. As the procedure and strategy for analysing the data is similar across the three studies, these sections contain more details for Study 1 (e.g. use of formulas, explanation of indices and methodologies, etc.), giving additional details and focusing on the differentiated aspects of Study 2 and Study 3.

6.3. Methods - Study 1. Team-Level Mediation Model

6.3.1. Procedure

Study 1 was conducted in an administrative public organisation located in Chile and sought to understand how team processes impact team performance. The participants are administrative workers whose work is structured in teams. Once the approval of human resource directors was received, a link to the online questionnaire was distributed via email to the employees. Specifically, this study utilised two online surveys: one for team leaders and one for team members, with a period of two weeks between them. Team members completed their survey first. This strategy was used to

collect information from two different sources, avoiding common-method bias related to the predictor and outcome variables (Podsakoff, MacKenzie, & Podsakoff, 2012).

The email received by employees included the invitation to participate in the study, a description of the main research objective, its confidentiality conditions, the voluntary character of their participation, and the email address of the main researcher to offer comments or ask for more detailed information about the study. Participants provided their consent to participate in the study by completing the informed consent form located on the first page of the on-line survey. The informed consent form was improved and approved by the University of Manchester Ethics Committee - ID number 2019-5430-8993. Once the final version of the questionnaire was completed, as all measures utilised are in English, a process of translation into Spanish was carried out, following the procedure described by Brislin (1970). Specifically, the English form of the items was translated into Spanish and then translated back into English by two independent translators. In cases of back translation disagreement, the two translators decided together on the most precise Spanish version of the problematic items. Appendix 1 contains an example of the questionnaire containing all items included in the study.

6.3.2. Sample

The original sample invited to participate in the study comprised 3,898 employees who were part of 152 teams, of whom 2,583 team members and 130 leaders actually responded to the surveys. This corresponds to a response rate of 66.26% for team members and 85.53% for team leaders. Then, the responses of team members and leaders' surveys were matched, resulting in a sample of 2,162 employees and 121 leaders. After following the guidelines of Timmerman (2005), indicating the exclusion of cases with intra-team response rates less than 60%, the final sample consisted of 1,096 employees grouped into 99 teams. This case selection strategy was appropriate, because reliable statistical estimations of relationships between team-level constructs require a high number of relevant team members. The average team size was 15 members (SD = 7.17), with the range being from a minimum value of 3 members to a maximum value of 25 members. In terms of gender and age distribution, 42% of team members were female, with the average age being 44 years (SD = 10.87). The sample consisted of personnel at administrative (5.4%), technical (9.0%), professional

(50.4%), managerial, executive, or CEO (34.8%) levels. The mean job tenure was 11 years (SD = 11.59), with the range being from a minimum value of 3 months to a maximum value of 30 years of tenure with the company. 57% of team leaders were male with their average age being 48 years (SD = 7.12). The mean job tenure for leaders was 12.92 years (SD = 10.03), with the range being from a minimum value of 16 months to a maximum value of 30 years of tenure with the company.

6.3.3. Measures

6.3.3.1. Team member survey

Team Interpersonal Emotion Regulation. This construct was measured with twelve items adapted from the Interpersonal Emotion Management Scale (IEMS) developed by Little et al. (2012), changing the referent to the team context. Individuals were asked to think about a situation in which a teammate is experiencing negative emotions and then select how frequently team members perform each of the following strategies. All items had the same response options marked on a five-point Likert-type scale (1 'Never/ Almost Never', 2 'Rarely', 3 'Sometimes', 4 'Frequently', 5 'Very Frequently').

This measure includes four sub-dimensions: *Situation modification* includes three items, for example: "team members try to modify the characteristics of a situation that is causing negative emotions in a colleague", Cronbach's alpha .93. *Attentional deployment* includes three items, for example: "team members distract their colleague's attention from the issue causing him/her negative emotions", Cronbach's alpha .94. *Cognitive change* includes three items, for example: "team members give them advice to try to make them feel better". Cronbach's alpha .94. *Response modulation* includes three items, for example: "team members suggest to their colleagues that they do not express negative emotions", Cronbach's alpha .92. This scale was selected because, unlike other measures (e.g., EROS, Niven et al., 2011), it is a measure based on Gross's (1998) model of emotion regulation applied to the interpersonal realm.

Team relationship conflict. This construct was measured with four items from the relationship conflict subscale of the Intragroup Conflict Scale developed by Jehn (1995). Individuals reported the extent to which they agreed or disagreed with the

items on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). One item example is “There is friction among members”, Cronbach’s alpha .92.

6.3.3.2. Team leader survey

Team performance. This variable was measured by team leaders’ ratings on a seven-item scale from Williams & Anderson (1991). Individuals reported the extent to which they agreed or disagreed with the items on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). One item example is “The team adequately completes assigned duties”, Cronbach’s alpha .89.

Team Organisational Citizenship Behaviours (OCB). This construct was measured by team leaders’ ratings on a seven-item scale from Williams & Anderson (1991). Individuals reported the extent to which they agreed or disagreed with the items on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). One item example is “The team helps members who have been absent”, Cronbach’s alpha .83.

Control variables. To account for possible influences of other intervening variables, the model used team member interaction frequency and team size as control variables. The use of these variables is common in team research because it may affect the degree to which social processes occur within the team context (Tropp & Pettigrew, 2005; Tröster, Mehra, & van Knippenberg, 2014). Team members reported their interaction frequency using the single item “How many times do you interact with your team colleagues?” (1: almost never – 5: every day).

Particularly, these variables were included on the assumption that team behaviours, such as team processes and team emergent states, might be more sensitive and have stronger effects if members frequently interact with each other (Pfeffer, 1983; Smith et al., 1994). For instance, in terms of interaction frequency, it is likely that if team members work together and regularly interact with each other to carry out their tasks, they have more opportunities to regulate colleagues’ emotions than teams in which members barely see their colleagues. Team size was also utilised as a control variable, because a larger number of team members might lead to reduced opportunities for social interactions and increase team heterogeneity (Bantel & Jackson, 1989; Brewer & Kramer, 1986; Smith et al., 1994). Whereas there is an extensive discussion among scholars about the optimal number of members within a

team, they agree on the fact that the larger the team size, the less the likelihood of the social processes carrying through to a team reality emerging (Aubé, Rousseau, & Tremblay, 2011). For example, consider the opportunities that team members have to regulate each other's emotions overall in a team with five members versus a team with fifteen members.

6.3.4. Data analysis strategy

A three-step strategy was conducted in order to analyse the data.

6.3.4.1. Inter-rater reliability (IRR) and agreement (IRA) analyses

IRR and IRA analyses were conducted on measures of team interpersonal emotion regulation, team relationship conflict, and team trust (Lebreton, Burgess, Kaiser, Atchley, & James, 2003; Lebreton & Senter, 2008). These analyses are necessary to justify aggregating lower-level data to form team-level data when using a referent-shift consensus composition model (Chan, 1998). IRR is commonly assessed by intra-class correlation (ICC) indices, which refers to the relative consistency in ratings provided by multiple judges of multiple targets (Burke & Dunlap, 2002; Lebreton & Senter, 2008; Hox, Moerbeek & van de Schoot, 2010). ICC(1) values represent the proportion of between-group variance compared with the overall variance.

$$\mathrm{ICC}(1) = \frac{\mathrm{MS_B} - \mathrm{MS_w}}{\mathrm{MS_B} + (\mathrm{K} - 1)\mathrm{MS_w}}$$

ICC(2) provides an estimate of the reliability of the higher-level unit's group means within a sample, adjusting ICC(1) values for group size. Thus, ICC(2) values are frequently higher when there are more team members per group (Klein & Kozlowski, 2000). Both forms of ICC are calculated using an ANOVA framework in which the higher-level grouping variable is the independent variable (e.g. team ID code) and the construct of interest is the dependent variable (e.g. team interpersonal emotion regulation, team conflict).

$$\mathrm{ICC}(2) = \frac{\mathrm{MS_B} - \mathrm{MS_w}}{\mathrm{MS_B}}$$

In terms of interpretation, ICC(1) values tend to range from 0 to 0.50, and findings suggest that for ICC values of 0.10 or larger, the multilevel structure of the data should definitely be modelled (cf. Bliese, 2000; Byrne, 2013). In addition, some researchers have shown that even for values below 0.10, the hierarchical structure should not be ignored (Selig, Card & Little, 2008). Whereas using cut-off values is still a matter of discussion between scholars, they do suggest interpreting these values as effect sizes (Woehr, Loignon, Schmidt, Loughry, & Ohland, 2015). Therefore, an ICC(1) value of 0.01 would be considered a small effect, 0.10 would constitute a medium effect, and 0.25 would represent a large effect (Lebreton & Senter, 2008). Likewise, because ICC(2) values are comparable to reliability indices, LeBreton and Senter (2008) suggested cut-off values that range from 0.70 to 0.85.

In addition to IRR, IRA indices (e.g. r_{WG}, Average Deviation) are used to address whether scores given by different individuals are interchangeable or equivalent in terms of their absolute value. Whereas researchers have used several indices to show within-unit agreement, this index has typically been assessed using r_{WG} (Bliese, 2000; Lebreton & Senter, 2008). r_{WG} compares the amount of observed variance among lower-level units to the amount of variance expected from an established null distribution reflecting a lack of agreement (Cohen, Doveh, & Eick, 2001; Meyer, Mumford, Burrus, Campion, & James, 2014).

$$r_{WG(j)} = \frac{J\left(1 - \frac{\acute{S}^2_{xj}}{\sigma^2_E}\right)}{J\left(1 - \frac{\acute{S}^2_{xj}}{\sigma^2_E}\right) + \frac{\acute{S}^2_{xj}}{\sigma^2_E}}$$

where $\acute{S}^2_x$ is the observed variance of variable X across the set of team members and σ^2_E is the variance expected when there is a complete lack of agreement across these individuals. Specifically, $\acute{S}^2_{xj}$ is the mean of the observed variance across J items. Higher r_{WG} values suggest higher levels of within-group agreement. Basically, when all judges are in perfect agreement, in that they assign the same rating to the target, the observed variance among judges is 0 and r_{WG}= 1. In contrast, when judges are in total lack of agreement, the observed variance will asymptotically approach the error variance obtained from the theoretical null distribution as the number of judges

increases. This leads r_{WG} to approach 0.0 (Lebreton, 2008). Traditionally, scholars have (albeit arbitrarily) used cut-off values for r_{WG} of above 0.70 (Biemann, Cole, & Voelpel, 2012). However, as for ICC values, researchers have begun to offer alternatives to this cut-off value. For example, LeBreton and Senter (2008) propose the use of ranges of values, whereby r_{WG} values of 0.00 - 0.30 represent a situation of lack of agreement, r_{WG} values of 0.31 - 0.50 denote weak agreement, r_{WG} values of 0.51 - 0.70 moderate agreement, r_{WG} values of 0.71 - 0.90 imply strong agreement, and r_{WG} values of 0.91 - 1.00 suggest very strong agreement.

However, the use of this index has been criticised due to difficulties in determining the specific null distribution prior to the data collection, out-of-range values (usually coded as 0), dependency on the number of scale anchors (e.g. 5, 7, or 9-point Likert scale), and group sample size (Lebreton & Senter, 2008). In an attempt to solve these issues, Burke, Finkelstein and Dusig (1999) developed the Average Deviation (AD) index. AD has been described as a pragmatic index of agreement because they estimate agreement in the metric of the original scale of the item (Burke & Dunlap, 2002).

$$AD_{M(j)} = \frac{\sum_{k=1}^{k} X_{jk} - \acute{X}_j \vee}{K}$$

where k = 1 to K team members, X_{jk} is the k^{th} team member's ratings of the j^{th} item, and $\acute{X}_j$ item mean is taken over team members. AD has been also described as a disagreement index due to values closer to zero representing higher agreement. In this context, scholars suggest cut-off values below 0.80 to support high agreement on a five-point Likert-like scale (Burke & Dunlap, 2002). It is important to mention here that these indices (e.g. AD, r_{WG}) should be used in a comprehensive way, using multiple indices to interpret the data (Lebreton, 2008), because all of them are informing researchers about the nested nature of the data. In fact, some scholars have shown how these indices are often highly correlated and show similar values (Brown & Hauenstein, 2005; Burke et al., 1999).

6.3.4.2. Exploratory Factor Analyses (EFA) and Confirmatory Factor Analyses (CFAs)

In order to confirm the factor structure of the data, a series of Exploratory Factor Analyses (EFA) and Confirmatory Factor Analyses (CFA) were performed. EFAs were conducted using unweighted least squares as the method of extraction and direct oblimin as the method of rotation. The maximum likelihood method was selected as the method of extraction because according to the recommendations of Fabrigar, Wegener, MacCallum & Strahan (1999) it is the best option if data are reasonably close to normally distributed. To improve interpretation of the factor loadings, an oblique rotation was used (direct oblimin as the method of rotation). Oblique methods have the advantage of assuming that factors are likely correlated, something common in social sciences, and therefore they make more reasonable assumptions about the data (Costello & Osborne, 2005). Besides this, whether the factors are truly uncorrelated, orthogonal and oblique approaches should produce very similar results.

As to the method for determining the number of factors to retain, it uses three criteria: 1) Kaiser criterion (eigenvalues above 1); 2) Scree plot test; and 3) Parallel analysis. The Kaiser criterion has been demonstrated to be a less than completely accurate method and was therefore only used as an initial approximation of the number of factors. Next, a scree plot test was performed on eigenvalues in order to observe a change in the pattern of the eigenvalues' variation. Finally, among the methods for determining the number of factors to retain, parallel analysis is strongly recommended (Horn, 1965). Parallel analysis involves the comparison of the sample data eigenvalues with multiple random datasets including the same number of participants and variables as the study data set. It is thus possible to determine how many of the factors generated by the data explain more variance than the factors generated by random data.

Although EFA is helpful in determining the dimensionality of the instrument, it only provides evidence of a theoretical factor structure. In order to confirm the factor structure obtained in the EFA, a series of CFAs were performed. To interpret results, the chi-square test of model fit was estimated; however, given the sensitive nature of the chi-square test with larger samples, the use of relative goodness-of-fit measures is recommended (Bentler, 1990). Goodness-of-fit tests whether a data misfit is due to model misspecification or to sampling variability. Accordingly, four relative

goodness-of-fit indices were used: confirmatory fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR).

CFI and TLI assess the improvement of the model over the independent or baseline model; values greater than 0.90 in these indices are generally indicative of acceptable model fit (Hu & Bentler, 1999), and values over 0.95 are indicative of excellent model fit. RMSEA estimates the mean difference between the actual data and the data predicted by the model, values up to 0.05 indicate good fit, those between 0.06 and 0.08 indicate adequate fit, and > 0.10 indicates poor fit. Due to RSMEA using differences in residuals, it is a more reliable indicator with larger sample size. SRMR is defined as the standardised difference between the observed correlation and the predicted correlation; values below 0.08 are indicative of a good fit, and values of zero indicate perfect fit (Hu & Bentler, 1999; Kline, 2010). Finally, to compare the models, the difference in fit between these models was assessed using the likelihood ratio test (the difference in $\chi 2$ between the two nested models).

6.3.4.3. Structural Equation Modelling (SEM)

In order to test the relationship between the study variables, study hypotheses were tested using structural equation modelling (SEM). As all study variables represent constructs at team level, SEM analysis was performed after aggregation, using latent variables at the team level of analysis, with bootstrapping techniques to assess indirect effects of the mediation processes with MPlus 8 (Muthén & Muthén, 2012).

6.4. Methods - Study 2. Multilevel mediation model

6.4.1. Procedure

Study 2 was conducted in a multinational Latin American financial company in the private sector whose headquarters are located in Chile. The participants correspond to administrative, sales, and operational workers whose work is structured in teams. This study used a similar strategy to Study 1 to undertake the data collection in a different organisation. Specifically, once the approval of human resource directors was received, a link to the online questionnaire was distributed to the employees in the

organisation using the company's intranet. Then, employees were invited to participate in the study via email. This email included a description of the main goal of the study, its confidentiality conditions, the voluntary character of their participation, and the email address of the main researcher to offer comments or ask for more detailed information about the study. All this information was also displayed on the company's intranet. For the same reasons as detailed in Study 1, this study also utilised two online surveys: one for team leaders and one for team members, utilising the same period of two weeks between them, in which team members completed their survey first. This study used the same procedure for informed consent and translation of scales as stated in the procedure section of Study 1. Appendix 2 includes an example of the questionnaire containing all items included in this study.

6.4.2. Sample

The original sample invited to participate in the Study 2 comprised 9,195 employees who were part of 1,423 teams, of whom 7,135 team members and 1196 leaders actually responded to the surveys. This corresponds to a response rate of 77.60% for team members and 84.05% for team leaders. Then, the responses of team members and leaders' surveys were matched, resulting in a sample of 5,859 employees and 816 leaders. After following the guidelines of Timmerman (2005) indicating the exclusion of cases with intra-team response rates less than 60%, the final sample consisted of 4,659 employees in 697 teams. The average team size was 9.05 members (SD = 4.76), with the range being from a minimum value of 3 members to a maximum value of 20 members. In terms of gender and age distribution, 58% of team members were female, with the average age being 34 years (SD = 8.87). The academic level of participants was 31.5% middle education, 31.2% technical diploma, 35.0% bachelor's degree or other professional qualification, and 2.3% master's degree. The sample consisted of personnel from administrative (37.1%), technical (9.1%), professional (39.5%), and managerial, executive, or CEO (14.4%) levels. The mean job tenure was 13 years (SD = 7.01), with the range being from a minimum value of 10 months to a maximum value of 22 years of tenure with the company. 52% of team leaders were female, with their average age being 42 years (SD = 8.17). The mean job tenure for leaders was 8 years (SD = 4.45), with the range being from a minimum value of 12 months to a maximum value of 18 years of tenure with the company.

6.4.3. Measures

6.4.3.1. Team member survey

Team Interpersonal Emotion Regulation. This construct was measured using the same scale employed in Study 1, which includes four sub-dimensions. *Situation modification* includes three items; Cronbach's alpha .92. *Attentional deployment* includes three items; Cronbach's alpha .93. *Cognitive change* includes three items; Cronbach's alpha .94. *Response modulation* includes three items; Cronbach's alpha .92.

Team relationship conflict. This construct was measured using the same four-item scale as employed in Study 1; Cronbach's alpha .91.

Emotional exhaustion. This construct was measured with four items adapted from the Emotional Exhaustion subscale of the Maslach Burnout Inventory general scale (MBI-GS) developed by Maslach, Jackson, Leiter, Shaufeli and Schwab (1986). Team members reported the extent to which they agreed or disagreed with the items on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). One item example is "I feel burned out from my work"; Cronbach's alpha .80.

6.4.3.2. Team leader survey

Team performance. This construct was measured by team leaders' ratings of three items from the team productivity subscale developed by Kirkman & Rosen (1999). One item example is "The team completes its tasks on time". Team leaders reported the extent to which they agreed or disagreed with the items regarding their teams on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). This scale was selected because it is specifically designed to assess team performance as seen by team leaders. In addition, several numbers have pointed to productivity as a proxy for team effectiveness and performance (e.g., Cohen & Ledford Jr, 1994; Mathieu et al., 2008); Cronbach's alpha .87.

Control variables. This study uses the same control variables as Study 1, namely team member interaction frequency and team size.

6.4.4. Data analysis strategy

Similar techniques and strategies were conducted in order to analyse the data to those used in Study 1. Thus, I only describe in detail those which differ.

6.4.4.1. Inter-rater reliability (IRR) and agreement (IRA) analyses

The multilevel nature of the data should be considered due to the data having been collected based on individual-team member perceptions in teams, and the model involves relationships between the variables at different levels of analysis (e.g. team relationship conflict at level 2 and team member emotional exhaustion at level 1). Thus, inter-rater reliability (IRR) and agreement (IRA) analyses were applied to observations of team interpersonal emotion regulation (including all four subscales) and team relationship conflict (Burke & Dunlap, 2002; Lebreton & Senter, 2008)

6.4.4.2. Exploratory Factor Analyses (EFA) and Confirmatory Factor Analyses (CFAs)

In order to confirm the factor structure of the data, a series of Multilevel Confirmatory Factor Analyses (MCFAs) were performed. Analogous to Study 1, The confirmatory fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR) were used as indicators of relative goodness-of-fit of the model (Hu & Bentler, 1999; Kline, 2010).

A seven-factor model was outlined, in which antecedent-focused strategies represent a second-order latent factor (composed of team situation selection, attentional deployment, and cognitive change), response-focused strategies, team relationship conflict, team performance, and team member emotional exhaustion. Variables representing team constructs measured from individual ratings (e.g. interpersonal emotion regulation and team conflict) were implemented at level 2 and level 1 (separating the variance at different levels). Team performance was implemented only at level 2 due to its constituting an indicator at team level, lacking variance at level 1, and team member emotional exhaustion was applied only at level 1, because it represents a construct at individual level.

6.4.4.3. Multilevel Structural Equation Modelling (MSEM)

In order to test the relationship between constructs located at different levels of analysis, multilevel structural equation modelling (MSEM) was performed. MSEM techniques allow the simultaneous examination of all multilevel paths in a single model. Thus, following recommendations by Preacher, Zyphur and Zhang (2010), a two-level mediation model was fitted, in which antecedent- and response-focused strategies (level 2) represent the predictors, team relationship conflict (level 2) represents the mediator, and team performance (level 2) and team member emotional exhaustion (level 1) represent the outcomes. Multilevel analysis is recommended for this study due to the nested nature of the data (e.g. individuals nested in teams). Considering the cluster effect is important because when the data are nested, the individual data coming from one cluster are likely to be more similar than those coming from different clusters; thus, the errors are neither independent nor random. This violates a fundamental assumption of ordinary least squares (OLS) regression – the independence of observations. Therefore, with the aid of multilevel modelling, analysis can explain several sources of variance. MCFA and MSEM analyses were estimated in MPlus 8 (Muthén & Muthén, 2012).

Indirect effects were estimated using the Monte Carlo (MC) method (Preacher & Selig, 2012) by examining confidence intervals (CIs) using 20,000 replications. This method was adapted to the multilevel Mediation model by Bauer, Preacher and Gil (2006), based on the work of MacKinnon, Lockwood, and Williams (2004). In this approach, the sampling distribution for the effect of interest is not assumed to be normal and is instead simulated from the model estimates and their asymptotic variances and covariances (Bauer et al., 2006). The MC method has been recommended as an alternative to construct confidence intervals for indirect effects in situations where bootstrapping is not feasible, such as multilevel modelling (Preacher & Selig, 2012).

6.5. Methods Study 3. Individual versus Team-Level Mediation Model

6.5.1. Procedure

Study 3 was also conducted in Chile, this time in an educational organisation in the private sector. The participants correspond to administrative workers whose work is structured in teams. A similar strategy to that of Study 1 and 2 was used to contact the personnel area directors and carry out the data collection using an online link to distribute the questionnaire to the employees. Following the same strategy used in Study 1 and 2, this study also utilised two online surveys: one for team leaders and one for team members, with a period of two weeks between them, in which team members completed their survey first. The email received by employees included the invitation to participate in the study, a description of the main goal of the study, its confidentiality conditions, the voluntary character of their participation, and the email address of the main researcher to offer comments or ask for more detailed information about the study. This study used the same procedure for informed consent and translation of scales as stated in the procedure section of Study 1 and 2. Appendix 3 contains an example of the questionnaire containing all items included in this study.

6.5.2. Sample

The original sample invited to participate in the Study 3 comprised 3,098 employees who were part of 809 teams, of whom 2,108 team members and 685 leaders actually responded to the surveys. This corresponds to a response rate of 68.04% for team members and 84.67% for team leaders. Then, the responses of team members and leaders' surveys were matched, resulting in a sample of 1,448 employees and 647 leaders. After following the guidelines of Timmerman (2005) indicating the exclusion of cases with intra-team response rates less than 60%, the final sample consisted of 856 employees sitting in 187 teams. The average team size was 7 members (SD = 4.43), with the range being from a minimum value of 2 members to a maximum value of 18 members. Team members were 51.0% female, with the average age being 40 years (SD = 10.83). The sample consisted of personnel from administrative (34.78%), technical (17.78%), professional (37.22%), managerial, executive, or CEO (10.22%) levels. The mean job tenure was 6 years (SD = 7.01), with the range being from a minimum value of 3 months to a maximum value of 28 years of tenure with the company. Team leaders were 55% male with their average age being 43 years (SD =

9.15). The mean job tenure for leaders was 6.8 years (SD = 7.02), with the range being from a minimum value of 5 months to a maximum value of 28 years of tenure with the company.

6.5.3. Measures

6.5.3.1. Team member survey

Individual Interpersonal Emotion Regulation. This construct was measured using twelve items adapted from the Interpersonal Emotion Management Scale (IEMS) developed by (Little et al., 2012). The original scale comprises twenty items, five items for each sub-dimension; thus, for the purpose of avoiding a very long questionnaire and reducing potential exhaustion on the part of participants, the highest-loaded three items from the corresponding subscales were selected. Individuals were asked to report the frequency of their use of several strategies to regulate other emotions in their teams. All items had the same response options marked on a five-point Likert-type scale (1 'Never/ Almost Never', 2 'Rarely', 3 'Sometimes', 4 'Frequently', 5 'Very Frequently').

This measure includes four sub-dimensions: *Situation modification* includes three items, for example: "I remove the negative aspects of the situation that are negatively impacting others"; Cronbach's alpha .83. *Attentional deployment* includes three items, for example: "I distract others' attention from the aspect of the problem causing their undesired emotions"; Cronbach's alpha .89. *Cognitive change* includes three items, for example: "I try to influence the emotions of others by changing how they think about the situation they are in"; Cronbach's alpha .91. *Response modulation* includes three items, for example: "I encourage others not to express their negative emotions"; Cronbach's alpha .90.

Team Interpersonal Emotion Regulation. This construct was measured using the same scale employed in Study 1 and 2, although, slightly modifying the referent from 'team members' to 'the team'. This strategy was implemented to make stronger the contrast between individual level and team level interpersonal emotion regulation strategies. This measure includes four sub-dimensions: *Situation modification* includes three items; Cronbach's alpha .94. *Attentional deployment* includes three

items; Cronbach's alpha .91. *Cognitive change* includes three items; Cronbach's alpha .96. *Response modulation* includes three items; Cronbach's alpha .95.

Team relationship conflict. This construct was measured using the same four-item scale employed as Study 1 and 2; Cronbach's alpha .95

Team trust. This variable was measured via four items adapted from McAllister (1995). Individuals reported the extent to which they agreed or disagreed with the items on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). One item example is "We trust each other a lot in my team"; Cronbach's alpha .95.

Team–member exchange quality (TMX). This construct was measured through an adapted seven items from the team member exchange scale developed by Seers (1989). Individuals reported the extent to which they agreed or disagreed with the items on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). One item example is "members of my team recognise each other's potential"; Cronbach's alpha .90.

Emotional exhaustion. This construct was measured using the same four-item scale as Study 2; Cronbach's alpha .89.

6.5.3.2. Team leader survey

Team performance. This team outcome variable was measured by team leaders' ratings using the same seven-item scale as employed in Study 1; Cronbach's alpha .76.

Team Organisational Citizenship Behaviours (OCB). This construct was measured by team leaders' ratings using the same seven-item scale as Study 1; Cronbach's alpha .88.

Control variables. This study uses the same control variables as Study 1 and Study 2, namely team member interaction frequency and team size.

6.5.4. Data analysis strategy

As for Study 1 and Study 2, a three-step strategy was conducted in order to analyse the data. Thus, I only describe in detail the differences.

6.5.4.1. Inter-rater reliability (IRR) and agreement (IRA) analyses

First, following the same pattern as Study 1 and 2, this model involves relationships at two levels of analysis, in which some team-level constructs (e.g. team interpersonal emotion regulation, team processes, etc.) have been calculated from individual team member perceptions. Thus, inter-rater reliability (IRR) and agreement (IRA) analyses were applied to observations of team interpersonal emotion regulation (including all four subscales), team relationship conflict, team trust, and TMX (Burke & Dunlap, 2002).

6.5.4.2. Exploratory Factor Analyses (EFA) and Confirmatory Factor Analyses (CFAs)

Second, in order to confirm the factor structure of the data, a series of Multilevel Confirmatory Factor Analyses (MCFAs) were performed. Specifically, a ten-factor model was estimated in which antecedent-focused strategies represent a second-order latent factor (composed of team situation selection, attentional deployment, and cognitive change), response-focused strategies, team relationship conflict, team trust, TMX, team performance, and team member emotional exhaustion. Variables representing team constructs measured from individual ratings (e.g. interpersonal emotion regulation and team processes) were analysed at level 2 and level 1 (separating the variance at different levels). Team performance was applied only at level 2 due to its constituting an indicator at team level, lacking variance at level 1, and individual level team member IER and team member emotional exhaustion were incorporated only at level 1 because they represent a construct at individual level. Multilevel Confirmatory Factor analysis was performed when the number of parameters allowed it; otherwise, simple CFA was performed.

6.5.4.3. Multilevel Structural Equation Modelling (MSEM)

Third, in order to test the relationship between constructs located at different levels of analysis, multilevel structural equation modelling (MSEM) was performed. MSEM techniques allow the simultaneous examination of all multilevel paths in a single model. Thus, following recommendations from Preacher and colleagues (2010), one two-level mediation model was fitted, in which team antecedent- and response-focused strategies (level 2), team relationship conflict, team trust, and TMX (level 2)

represent the mediators; and team performance (level 2) and team member well-being (level 1) represent the outcomes.

Multilevel analysis is recommended for this study due to the nested nature of the data (e.g. individuals sitting in teams). Scholars recommend the use of multilevel structural equation modelling to analyse the data in order to prevent the negative bias of aggregating individuals' responses to a group indicator (Christ et al., 2017). They also acknowledge the limitations of this kind of analysis in terms of having sufficient sample sizes at both levels to test the relationship between several variables (e.g. in a mediation or moderation model). Thus, when it was not possible to partition variance, level 2 constructs were aggregated and specified only at their respective level. Multilevel and traditional CFA and SEM analyses were estimated in MPlus 8 (Muthén & Muthén, 2012). Similar to Study 2, indirect effects were estimated using the Monte Carlo method (Preacher & Selig, 2012), by creating confidence intervals (CIs) using 20,000 replications.

6.6. Chapter summary

This chapter has described the general philosophical approach and research methods adopted in the empirical studies contained in this thesis. Particularly, a quantitative design was adopted in order to address the research question and hypotheses of this thesis. The data were collected in three different organisations located in Latin America and Chile. Regarding, this chapter described the specific procedure employed for data collection, the sample characteristics, the measures selected, and the main methodology and strategy adopted for analysing the data in each of the studies. The next chapter will describe the general results of this research.

CHAPTER 7. THESIS RESULTS

7.1. Chapter Overview

This chapter presents the main results of the analysis. The first section is focused on showing the evidence that supports the construct validity of the team interpersonal emotion regulation (IER) scale. This because this construct was measured with an adapted scale, originally developed to assess individual-level behaviours. Particularly, as described in the previous chapter, this measured was adapted from the Interpersonal Emotion Management Scale (IEMS) elaborated by Little et al. (2012) and based on Gross's (2015) Process Model of emotion regulation, by shifting the referent (from 'I' do to 'the team' or 'team members' do). Thus, the first section of this chapter describes the results of the Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) considering the data of the three studies.

Then, the second section of this chapter presents the results of each study separately, with each specific model and variables, following the data analysis strategy presented in Chapter 6. Specifically, the results for each study are organised as follows: the results of inter-rater reliability and agreement analysis; the results of CFA that compares alternative measurement models; and finally, the results of Structural Equation Modelling (SEM) and Multilevel Structural Equation Modelling (MSEM) analyses that has tested study hypotheses. Table 7.1 summarises the main hypotheses of this research and their level of support in each study. As can be seen, in order to be consistent with the order of the hypotheses originally formulated in Chapter 5, the number of the particular hypotheses tested in each study sometimes does not match with a sequential number (e.g., 1, 2, 3). For example, Study 1 tested hypotheses 1, 2, 5, 8 and 9, and, only Study 3 tested all the hypotheses of this thesis. Furthermore, the results regarding hypotheses 12 – 19 are described in the following chapter (Chapter 8) dedicated to the diversity or within-team variation in team interpersonal emotion regulation.

Table 7.1. Main Thesis Hypotheses and Level of Support in Each Study

		Study 1	Study 2	Study 3
Direct effects:				
Hypothesis 1. Team antecedent-focused IER strategies will be	negatively related to (a) Team relationship conflict,	✓	✓	✓(t)
	positively related to (b) TMX,			✓(t)
	positively related to (c) Team trust			✓(t)
Hypothesis 2. Team IER response-focused strategies will be	positively related to (a) Team relationship conflict	✓	✓	✓(t)
	negatively related to (b) TMX,			✓(t)
	negatively related to (c) Team trust			✓(t)
Hypothesis 3. Team IER antecedent-focused strategies will have an effect over and above individual-level strategies on	(a) Team relationship conflict			✓
	(b) TMX			✓
	(c) Team trust			✓
Hypothesis 4. Team IER response-focused strategies will have an effect over and above individual-level strategies on	(a) Team relationship conflict			✓
	(b) TMX			×
	(c) Team trust			×
Hypothesis 5. Team relationship conflict will be	negatively related to (a) Team Performance	✓	✓	✓(t)
	positively related to (b) Team member emotional exhaustion		✓(i)	×
Hypothesis 6. Team trust will be	positively related to (a) Team Performance			✓(t)
	positively related to (b) Team member emotional exhaustion			×
Hypothesis 7. TMX will be	positively related to (a) Team Performance			✓(t)
	negatively related to (b) Team member emotional exhaustion			×
Mediation:				
Hypothesis 8. The positive relationship between team antecedent-focused IER strategies and team performance will be mediated by	(a) Team relationship conflict	✓	✓	×
	(b) TMX			✓(t)
	(c) Team trust			×

Table 7.1. (continued).

Hypothesis 9. The negative relationship between team response-focused IER strategies and team performance will be mediated by	(a) Team relationship conflict	×	✓	×
	(b) TMX			×
	(c) Team trust			×
Hypothesis 10. The positive relationship between team antecedent-focused IER strategies and team member well-being will be mediated by	(a) Team relationship conflict			×
	(b) TMX			×
	(c) Team trust			×
Hypothesis 11. The negative relationship between team response-focused IER strategies and team member well-being will be mediated by	(a) Team relationship conflict			×
	(b) TMX			×
	(c) Team trust			×
Moderated mediation [α]:				
Hypothesis 12. Within-team antecedent IER variation will moderate the negative relationship between team antecedent IER and	Team relationship conflict, such that this relationship will be stronger when within-team antecedent IER variation is low rather than high		✓	
Hypothesis 13. Within-team response IER variation will moderate the positive relationship between team response IER and	Team relationship conflict, such that this relationship will be stronger when within-team response IER variation is low		×	
Hypothesis 14. Within-team antecedent IER variation will moderate the strength of the mediation between team antecedent IER	Team relationship conflict and team performance, such that the mediation will be stronger when within-team antecedent IER variation is low rather than high		✓	
Hypothesis 15. Within-team response IER variation will moderate the strength of the mediation between team response IER	Team relationship conflict and team performance, such that the mediation will be stronger when within-team response IER variation is low rather than high.		×	
Hypothesis 16. The negative relationship between team IER and /	Team conflict will be stronger in teams with shared team IER configuration than in teams with non-uniform configurations (i.e. solo-status low, solo-status high, bimodal, and fragmented).		✓(p)	

Table 7.1. (continued).

Hypothesis 17. Team IER configurations will moderate the strength of the mediation between team IER, team relationship conflict and team performance	such that the mediation will be stronger in teams with shared team IER configuration than in teams with non-uniform configurations (i.e. solo-status low, solo-status high, bimodal, and fragmented).	✓(p)
Hypothesis 18. The negative relationship between within-team IER variation and	Team conflict will be stronger in teams with bimodal team IER configuration than in teams with solo-status low, solo-status high and fragmented team IER configurations.	×
Hypothesis 19. Team IER configurations will moderate the strength of the mediation between within-team IER variation, team relationship conflict and team performance	such that the mediation will be stronger in teams with bimodal team IER configuration than in teams with solo-status low, solo-status high, and fragmented team IER configurations.	×

Note: $^{\alpha}$ These analyses are presented in Chapter 8 and were conducted using only the data of Study 2. ✓= Supported; ×= not supported; ✓(p) = Partially supported; ✓(t) = team level only (aggregated scores); ✓(i) = individual level only

7.2. Validity of Team Interpersonal Emotion Regulation Scale

7.2.1. Exploratory Factor Analysis (EFA)

This section uses the data of the three studies and describes the evidence that supports the construct validity of the team IER scale adapted in this thesis. Exploratory Factor Analysis (EFA) was conducted on the twelve items of the scale to determine the factor structure of the measure in each of the three studies separately. The unweighted least squares method extracted two factors, by combination with Kaiser's criterion (eigenvalues above 1), Cattell's scree plot test, and parallel analysis as previously stated in Chapter 6 (see Figure 7.1).

These factors together explained 79.8% of the variance in the item set in Study 1 (Factor 1 explained 59.7%, Factor 2 explained 20.1%); 76.6% of the variance in Study 2 (Factor 1 explained 57.1%, Factor 2 explained 19.5%); and 78.8% of the variance in the item set of Study 3 (Factor 1 explained 55.9%, Factor 2 explained

22.9%). Oblique rotation was used (Direct Oblimin) as the method of rotation to interpret the factors.

Table 7.2 shows the results at the individual level of analysis. As the analyses of Study 1 were conducted only at the team level, this table only shows the results for study 2 and 3. Factor 1 comprised nine items of antecedent-focused strategies (factor patterns coefficients ≥ .76 for Study 2, and ≥ .82 for Study 3), and Factor 2 included three items of response-focused strategies (factor patterns coefficients ≥ .88 for Study 2, and ≥ .89 for Study 3).

Similarly, Table 7.3 depicts the results of the EFA with the data aggregated at the team-level of analysis. Factor 1 comprised nine items of antecedent-focused strategies (factor patterns coefficients ≥ .82 for Study 1, ≥ .86 for Study 2, and ≥ .85 for Study 3), and Factor 2 included three items of response-focused strategies (factor patterns coefficients ≥ .87 for study 1, ≥ .91 for study 2, and ≥ .90 for study 3). Factor pattern coefficients over .55 are considered 'good', while those over .63 are 'very good' and those over .71 are 'excellent' (Comrey & Lee, 1992). Cross-loading of items onto other factors did not exceed .31, while communalities for all items exceeded .30.

The final EFA solution depicted the classic distinction present in the Gross's (1998) process model of emotion regulation regarding antecedent-focused IER strategies (situation modification, attentional deployment, and cognitive change) and response-focused IER strategies (response modulation). Therefore, applied to the team context, EFA suggests an analogous two-dimensional structure, in terms of team antecedent- and response-focused IER strategies.

EFA is helpful in determining the dimensionality of an instrument. However, it only provides evidence of an empirical factor structure. In order to confirm the two-factor results obtained in the EFA, a series of MCFAs were performed. All confirmatory models were estimated in MPlus 8 (Muthén & Muthén, 2012) using Maximum Likelihood estimation.

Table 7.2. Exploratory Factor Analysis – Individual level – Studies 2-3 (EFA)

Code	Items	Study 2 Factors		Study 3 Factors	
		1	2	1	2
[tsm1]	Try to modify the characteristics of situation that is causing negative emotions in a colleague	0.76		0.85	
[tsm2]	Take concrete actions to change the situation that generate those negative emotions	0.83		0.87	
[tsm3]	Try to change the negative elements situation that produce negative emotions in a colleague	0.84		0.82	
[tad1]	Say something nice to focus their colleagues' attention on something that make them feel good	0.86		0.87	
[tad2]	Distract their colleague's attention from the issue causing him/her negative emotions	0.82		0.76	
[tad3]	Focus colleagues' attention on a more positive topic (e.g. team achievements)	0.89		0.82	
[tcc1]	Give colleagues' advice to try to make them feel better	0.85		0.87	
[tcc2]	Try to help him/her by putting their problems in perspective	0.87		0.87	
[tcc3]	Try to change the way in their colleagues think about the cause of their negative emotions	0.82		0.86	
[trm1]	Suggest to their colleagues that they do not express negative emotions		0.89		0.89
[trm2]	Encourage him/her do not express them in that moment		0.88		0.96
[trm3]	Communicate their colleagues that it is better not show negative emotions		0.91		0.96

Note. Extraction Method: Unweighted Least Squares. Rotation Method: Oblimin with Kaiser Normalization. Study 2 N = 4,659 employees; Study 3 N = 856. EFA results for study 1 are not included due to the analyses were made only at the team level.

Table 7.3. Exploratory Factor Analysis – Team level – Studies 1-3 (EFA)

Code	Items	Study 1 Factors		Study 2 Factors		Study 3 Factors	
		1	2	1	2	1	2
[tsm1]	Try to modify the characteristics of situation that is causing negative emotions in a colleague	0.87		0.86		0.90	
[tsm2]	Take concrete actions to change the situation that generate those negative emotions	0.86		0.89		0.92	
[tsm3]	Try to change the negative elements situation that produce negative emotions in a colleague	0.90		0.91		0.86	
[tad1]	Say something nice to focus their colleagues' attention on something that make them feel good	0.92		0.89		0.91	
[tad2]	Distract their colleague's attention from the issue causing him/her negative emotions	0.91		0.86		0.85	
[tad3]	Focus colleagues' attention on a more positive topic (e.g. team achievements)	0.92		0.91		0.87	
[tcc1]	Give colleagues' advice to try to make them feel better	0.88		0.89		0.89	
[tcc2]	Try to help him/her by putting their problems in perspective	0.93		0.92		0.90	
[tcc3]	Try to change the way in their colleagues think about the cause of their negative emotions	0.88		0.86		0.90	
[trm1]	Suggest to their colleagues that they do not express negative emotions		0.90		0.93		0.90
[trm2]	Encourage him/her do not express them in that moment		0.91		0.91		0.96
[trm3]	Communicate their colleagues that it is better not show negative emotions		0.87		0.94		0.93

Note. Extraction Method: Unweighted Least Squares. Rotation Method: Oblimin with Kaiser Normalization. Study 1 N = 99 teams; Study 2 N = 697 teams; Study 3 N = 187 teams

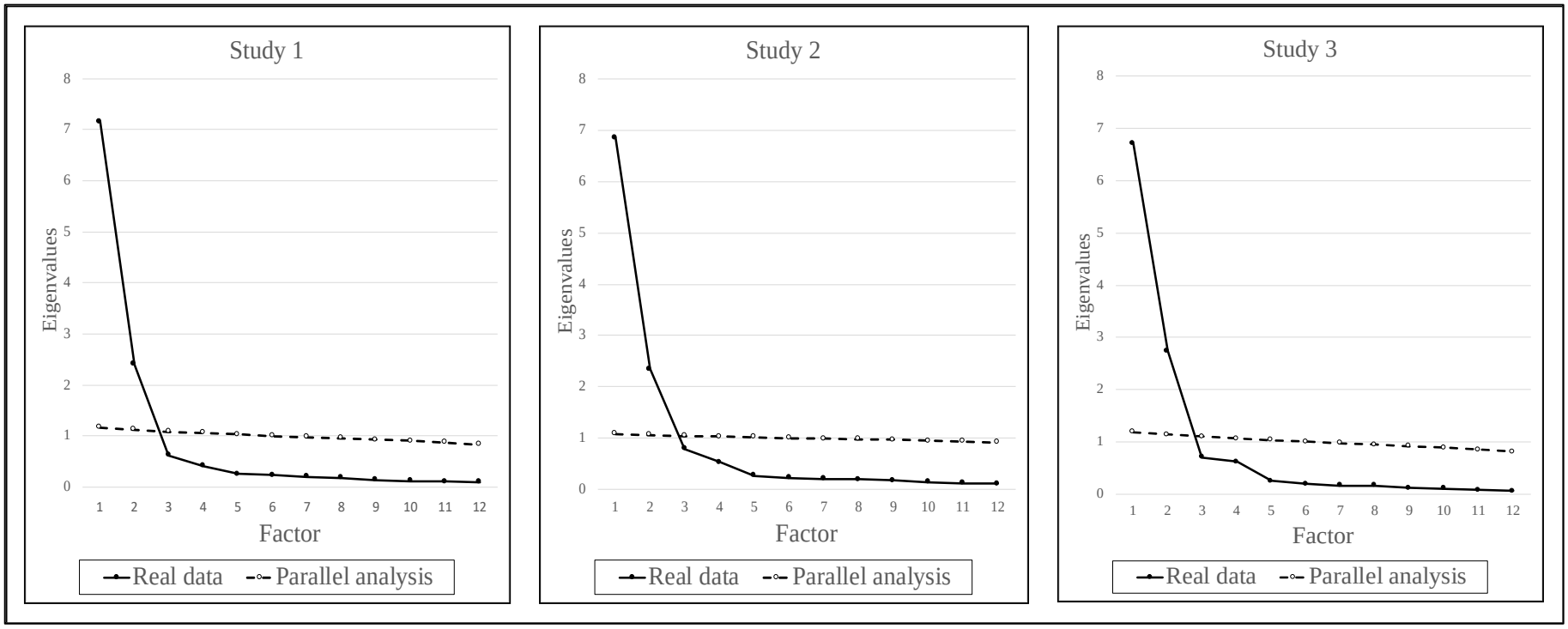


Figure 7.1. Parallel analysis (Studies 1-3). Study 1 N = 1096 employees, 99 teams; Study 2 N = 4,659 employees, 697 teams; Study 3 N = 856, 187 teams.

7.3. Multilevel Confirmatory Factor Analysis (MCFA)

In order to confirm the consistency of the theoretical structure of the team interpersonal emotion regulation measure, a four-factor solution was tested, including all four sub-scales separately. This solution (Model 1) showed excellent fit across the three studies (see Table 7.4), for example, results of Study 1 show: $\chi 2$(df) = 185.47 (98), CFI = 0.99, TLI = 0.99, RMSEA = 0.03, $SRMR_w$= 0.02, $SRMR_b$= 0.13. This model was compared to three alternative solutions. Model 2 consists of all four scales loaded in one single-factor (Harman's single-factor test). Model 3 involves a five-factor solution, creating a second-order factor of all team antecedent-focused strategies, in addition to the response modulation scale. Model 4 represents a two-factor solution, reflecting one factor of team antecedent-focused strategies and one factor of team response modulation. As mentioned in Chapter 6, the difference in fit between these models was assessed using the likelihood ratio test (the difference in $\chi 2$ between two nested models).

Both Model 2 and Model 4 show poor fit to the data, for instance, Model 2, study 1: χ^2(df) = 3693.62 (108.00), CFI = 0.74, TLI = 0.69, RMSEA = 0.17, $SRMR_w$= 0.15, $SRMR_b$= 0.68, $\Delta\chi^2(10) = 3508.15$, $p < .001$, and Model 4, study 1: χ^2(df) = 1627.71 (106.00), CFI = 0.89, TLI = 0.87, RMSEA = 0.11, $SRMR_w$= 0.04, $SRMR_b$= 0.40, $\Delta\chi^2(8) = 1442.24$, $p < .001$. In contrast, the solution that includes a second-order factor shows excellent fit to the data, Model 3, study 1: $\chi 2$(df) = 193.02 (102.00), CFI = 0.99, TLI = 0.99, RMSEA = 0.03, $SRMR_w$= 0.02, $SRMR_b$= 0.21 but the fit was no different from the original model (Model 1) in two of the three studies (e.g., study 1: $\Delta\chi^2(4) = 7.55$, $p > .001$). Thus, as Model 1 and 3 show excellent fit, and Model 3 groups all antecedent-focused strategies in a second-order factor, by using a parsimony criterion, this five-factor solution (Model 3) was selected. This factor solution with the respective factor loadings is depicted in Table 7.5.

Table 7.4. Multilevel Confirmatory Factor Analysis – Comparison of Measurement Models – Fit indices (Studies 1-3)

Model	Factors	**Study 1**							
		df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	$SRMR_w$	$SRMR_b$
Model 1	Four factors: TSM, TAD, TCC, TRM	98	185.47		.99	.99	.03	.02	.13
Model 2	One factor (Harman test)	108	3693.62	3508.15**	.74	.69	.17	.15	.68
Model 3	Five factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM	102	193.02	7.55	.99	.99	.03	.02	.21
Model 4	Two factors: one factor (TSM + TAD + TCC), TRM	106	1627.71	1442.24**	.89	.87	.11	.04	.40

Model	Factors	**Study 2**							
		df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	$SRMR_w$	$SRMR_b$
Model 1	Four factors: TSM, TAD, TCC, TRM	97	372.91		.99	.99	.03	.02	.06
Model 2	One factor (Harman test)	108	16477.80	16104.89**	.70	.63	.18	.15	.66
Model 3	Five factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM	101	407.47	34.56**	.99	.99	.03	.02	.06
Model 4	Two factors: one factor (TSM + TAD + TCC), TRM	106	7728.28	7355.37**	.86	.82	.12	.06	.14

Model	Factors	**Study 3**							
		df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	$SRMR_w$	$SRMR_b$
Model 1	Four factors: TSM, TAD, TCC, TRM	97	220.19		.98	.98	.04	.02	.13
Model 2	One factor (Harman test)	108	4419.02	4198.83**	.62	.53	.22	.18	.28
Model 3	Five factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM	102	226.19	6	.98	.98	.04	.02	.14
Model 4	Two factors: one factor (TSM + TAD + TCC), TRM	107	1821.57	1601.38**	.85	.81	.14	.07	.29

Note: ** $p < .01$. TSM = Team situation modification. TAD = Team attentional deployment. TCC = Team cognitive change. TRM = Team response modulation. TANT = Team antecedent-focused strategies (including TSM, TAD and TCC). Study 1 N = 1096 employees, 99 teams; Study 2 N = 4,659 employees, 697 teams; Study 3 N = 856, 187 teams

Table 7.5. Multilevel Confirmatory Factor Analysis. Factor loadings (Studies 1-3)

	Study 1		Study 2		Study 3	
Observed variable	Within	Between	Within	Between	Within	Between
Team situation modification						
Try to modify the characteristics of situation that is causing negative emotions in a colleague	0.85	0.99	0.80	0.99	0.89	0.90
Take concrete actions to change the situation that generate those negative emotions	0.94	0.95	0.92	0.99	0.94	0.98
Try to change the negative elements situation that produce negative emotions in a colleague	0.93	0.99	0.92	0.99	0.89	0.99
Team attentional deployment						
Say something nice to focus their colleagues' attention on something that make them feel good	0.90	0.99	0.89	0.90	0.92	0.99
Distract their colleague's attention from the issue causing him/her negative emotions	0.92	0.99	0.85	0.95	0.80	0.96
Focus colleagues' attention on a more positive topic (e.g. team achievements)	0.93	0.97	0.92	0.99	0.87	0.99
Team cognitive change						
Give colleagues' advice to try to make them feel better	0.91	0.99	0.90	0.99	0.94	0.99
Try to help him/her by putting their problems in perspective	0.95	0.97	0.94	0.99	0.96	0.99
Try to change the way in their colleagues think about the cause of their negative emotions	0.89	0.99	0.88	0.99	0.91	0.90
Team response modulation						
Suggest to their colleagues that they do not express negative emotions	0.86	0.99	0.86	0.99	0.88	0.90
Encourage him/her do not express them in that moment	0.90	0.99	0.88	0.98	0.95	0.99
Communicate their colleagues that it is better not show negative emotions	0.86	0.98	0.88	0.99	0.94	0.99
Second order factor – Team antecedent-focused strategies						
Team situation modification	0.86	0.99	0.81	0.99	0.87	0.97
Team attentional deployment	0.95	0.99	0.93	0.98	0.90	0.99
Team cognitive change	0.93	0.98	0.89	0.99	0.86	0.97

Note. Study 1 N = 1096 employees, 99 teams; Study 2 N = 4,659 employees, 697 teams; Study 3 N = 856, 187 teams. Standardized values

In summary, EFA and CFA analysis bring evidence to support the factorial consistency of the scales, depicting four different team interpersonal emotion regulation strategies. Team situation modification, attentional deployment, and cognitive change represent a second-order factor of antecedent-focused strategies, and team response modulation denotes the response-focused strategies. Therefore, the following models use this factor structure as a base, exploring the relationship between these team level interpersonal processes and other team-relevant processes of the model (e.g. team relationship conflict, TMX), emergent states (e.g. team trust), and team outcomes (e.g. team performance and team member well-being). As indicated previously, the next section describes the results of each study separately.

7.4. Study 1 Results: Team-Level Mediation Model

The main aim of Study 1 was primarily to test the adapted measure of team interpersonal emotion regulation in the team context and to explore the general relationships between some of the model variables at the team-level. Therefore, the hypotheses tested in this study are mainly related to the relationship between team-level constructs in the theoretical model (see Figure 5.1, Chapter 5). The specific hypotheses tested in this study are summarised in Table 7.1, on page 122. The data for this study were collected in an administrative public organisation located in Chile, and the final sample consisted of 1,096 employees grouped into 99 teams. As was outlined in the data analysis strategy section of the previous chapter, Study 1 results are organised as follow. The first section presents the results of inter-rater reliability (IRR) and agreement (IRA). Then, CFA results for the theoretical model and the testing of the hypotheses are detailed.

7.4.1. Results of Inter-rater Reliability and Agreement Analysis

Inter-rater reliability and agreement analyses showed that ratings of all team-level variables were dependent on team membership, although these indicators were moderate for team antecedent- and response-focused emotion regulation strategies. In the same vein, team members showed high agreement in their ratings concerning team antecedent- and response-focused IER strategies and team conflict. Results of these indicators were as follows (see Table 7.6): team situation modification, ICC(1) = .12, ICC(2) = .50, r_{WG} = .77, AD = .79, team attentional deployment, ICC(1) = .14, ICC(2) = .56, r_{WG} = .76, AD = .77, team cognitive change, ICC(1) = .15, ICC(2) = .57, r_{WG} = .76, AD = .77, team response modulation strategies, ICC(1) = .10, ICC(2) = .65, r_{WG} = .58, AD = .88, and team relationship conflict, ICC(1) = .23, ICC(2) = .70, r_{WG} = .72, AD = .76. These results established that all variables could be examined as team-level constructs, therefore individual observations for these variables were aggregated around each team's mean score for the subsequent analyses.

Table 7.6. Study 1 - Intraclass Correlation Coefficient, Average Deviation and r_{WG} indices

Variable	ICC(1)	ICC(2)	AD	Range AD	r_{WG}	Range r_{WG}
Team relationship conflict	0.23	0.70	0.76	[.00, 1.20]	0.72	[.00, 1.00]
Team situation modification	0.12	0.50	0.79	[.00, 1.50]	0.77	[.00, 1.00]
Team attentional deployment	0.14	0.56	0.77	[.00, 1.39]	0.76	[.00, 1.00]
Team cognitive change	0.15	0.57	0.77	[.00, 1.31]	0.76	[.00, 1.00]
Team response modulation	0.10	0.65	0.88	[.15, 1.50]	0.58	[.00, 1.00]

Note: N = 1096 employees, 99 teams. Values of AD < .80 and r_{WG} > .70 are indicator of good agreement.

7.4.2. Results of Measurement Models

Next, a Confirmatory Factor Analysis (CFA) of the eight-factor measurement model was tested. This model included team antecedent-focused IER strategies (a second order factor of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies, team relationship conflict, team performance, and team OCB. This model (Model 1) showed excellent goodness-of-fit (see Table 7.7), $\chi 2(df) = 394.30\ (286)$, CFI = 0.96, TLI = 0.95, RMSEA = 0.040, SRMR = 0.031. This eight-factor (Model 1) solution was not significantly different, using the likelihood ratio test, from a seven-factor alternative solution (Model 2) loading all antecedent-focused strategies independently, in addition to response-focused strategies, team relationship conflict, team performance, and team, OCB, $\chi 2(df) = 381.16\ (278)$, CFI = 0.96, TLI = 0.95, RMSEA = 0.06, SRMR = 0.05, $\Delta\chi 2(8) = 13.14$, $p > .01$. Furthermore, the eight-factor solution (Model 1) was significantly better than an alternative model (Model 3), a five-factor solution consisting of loading all antecedent-focused strategies on one single factor, as well as response-focused strategies, team relationship conflict, team performance, and team OCB, $\chi 2(df) = 578.30\ (289)$, CFI = 0.89, TLI = 0.88, RMSEA = 0.10, SRMR = 0.06, $\Delta\chi 2(3) = 184.00$, $p < .01$. Therefore, these results bring further support to the use of a second-order factor of team antecedent-focused IER strategies in the sense that it is simpler and not statistically different from a model using all antecedent-focused IER strategies

separately, and it is better than a model with all items of antecedent-focused strategies IER loaded on one factor.

Lastly, the original eight-factor model was compared to an alternative seven-factor solution (Model 4) which loaded both outcomes (team task performance and OCB) on a single factor, plus the second-order factor of antecedent-focused strategies, response-focused strategies, and team conflict. This model was tested because it could be argued that both dimensions of performance (task and OCB) represent a second-order factor of overall team performance. However, Model 4 showed worse fit: $\chi 2(df) = 435.47$ (290), CFI = 0.95, TLI = 0.94, RMSEA = 0.07, SRMR = 0.061, $\Delta\chi 2(4) = 41.17$, $p < .01$. Taking the above together, the robustness of the measurement model involved in hypothesis testing was supported.

Table 7.7. Study 1 - Confirmatory Factor Analysis – Comparison of Measurement Models – Fit indices

Model	Factors	df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	SRMR
Model 1	Eight factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TRC, TPER, TOCB	286	394.30		.96	.95	.06	.06
Model 2	Seven factors: TSM, TAD, TCC, TRM, TRC, TPER, TOCB	278	381.16	13.14	.96	.95	.06	.05
Model 3	Five factors: TANT (TSM + TAD + TCC), TRM, TRC, TPER, TOCB	289	578.30	184.00**	.89	.88	.10	.06
Model 4	Seven factors: 2nd order TANT (TSM, TAD and TCC), TRM, TRC, TOUT (TPER + TOCB)	290	435.47	41.17**	.95	.94	.07	.06

Note: N = 1096 employees, 99 teams. ** $p < .01$. TSM = Team situation modification. TAD = Team attentional deployment. TCC =Team cognitive change. TRM = Team response modulation. TANT = Team antecedent-focused strategies (including TSM, TAD and TCC). TRC = Team relationship conflict. TPER = Team performance. TOCB = Team organisational citizenship behaviour. TOUT = Team outcomes (including TPER and TOCB in a single factor).

Table 7.8. Study 1 - Correlation matrix

	Mean	SD	1	2	3	4	5	6	7
1. Team performance	4.07	.54	**(.89)**	.65**	-.37**	.28**	.30**	.24*	.11
2. Team OCB	4.06	.59	-	**(.83)**	-.39**	.30**	.32**	.31**	.13
3. Team relationship conflict	2.34	1.02	-	-	**(.97)**	-.64**	-.70**	-.69**	.03
4. Team situation modification	3.09	1.04	-	-	-.46**	**(.96)**	.82**	.79**	.08
5. Team attentional deployment	3.33	1.06	-	-	-.48**	.80**	**(.97)**	.88**	.20*
6. Team cognitive change	3.22	1.03	-	-	-.45**	.78**	.85**	**(.95)**	.04
7. Team response modulation	2.24	1.05	-	-	.03	.17**	.17**	.20**	**(.92)**

Note: N = 1096 employees, 99 teams. ** p < .01. Numbers in parenthesis indicate de reliability of scales. Values below and above the diagonal represent individual- and team-level correlations respectively

7.4.3. *Results of Structural Equation Modelling (SEM)*

7.4.3.1. Reliabilities and Zero-order correlations

Table 7.8 shows means, standard deviations, reliability, 'Cronbach's α', and zero-order correlations for all variables in Study 1. As can be seen, almost all direct correlations are statistically significant and the values are in the expected direction, excepting some correlations of team response modulation at team level. For example, team relationship conflict is negatively related to team performance, $r = -.37$, $p < .01$. In addition, all team antecedent-focused interpersonal emotion regulation strategies were significant and positively associated with team performance, team situation modification, $r = .28$, $p < .01$, team attentional deployment, $r = .30$, $p < .01$, and team cognitive change, $r = .24$, $p < .01$. Contrary to expectations, team response modulation was positively although non-significantly related to team performance, $r = .28$, $p > .11$, and team OCB, $r = .13$, $p > .05$.

7.4.3.2. Hypothesis testing

Results for the proposed mediation model indicated good model fit, $\chi 2(df) = 487.67\ (332)$, CFI = 0.94, TLI = 0.93, RMSEA = 0.07, SRMR = 0.09. Thus, the robustness of the measurement mediation model involved in hypotheses testing was supported. Figure 7.2 and Table 7.9 depict SEM analysis results.

Direct Effects

Hypothesis 1 stated that team antecedent-focused IER strategies will be negatively related to team relationship conflict. As can be seen in Table 7.9, the results show a negative and significant relationship between team antecedent-focused IER strategies and team relationship conflict ($b = -.79$, $p < .01$). Therefore, Hypothesis 1 was supported, showing that high levels of team antecedent-focused strategies are associated with low levels of team interpersonal conflict.

Hypothesis 2 stated that team response-focused IER strategies will be positively related to team relationship conflict. The results show a positive and significant relationship between team response-focused IER strategies and team relationship conflict ($b = .16$, $p < .05$). Thus, Hypothesis 2 was supported, showing that high levels of team response-focused strategies are associated with high levels of team interpersonal conflict.

Hypothesis 5 stated [1] that team relationship conflict will be negatively correlated with team performance and team OCB. The results show a negative and significant relationship between team relationship conflict and team performance (b = -.43, p < .01) and team OCB (b = -.55, p < .01). Thus, Hypothesis 5 was supported, showing that high levels of team relationship conflict have a detrimental effect on team performance.

Mediated effects

Hypothesis 7 stated that team relationship conflict will mediate the relationship between team antecedent-focused IER strategies and both team performance and team OCB. The results show a positive and significant indirect effect of team antecedent-focused IER strategies on team performance (CI 95% = .46 [.18, .74]) and team OCB (CI 95% = .37 [.09, .65]). Therefore, Hypothesis 7 was supported, indicating that high levels of team antecedent-focused strategies are associated with team performance and team OCB, via its effects on reducing team relationship conflict.

Hypothesis 8 stated that team relationship conflict will mediate the relationship between team response-focused IER strategies and both team performance and team OCB. The results show a negative and non-significant indirect effect of team response-focused IER strategies on team performance (CI95% = -.10 [-.22, .01]), and team OCB (CI95% = -.08 [-.18, .02]). Thus, Hypothesis 8 was not supported, showing that high levels of team antecedent-focused strategies are not associated with team performance and team OCB, via its effects on reducing team relationship conflict.

[1] As can be seen in Table 7.1 at the beginning of this chapter, in order to be consistent with the order of the hypotheses originally formulated in Chapter 5, the number of each hypothesis sometimes does not match with a sequential number (e.g., 1, 2, 3) in each study. Specifically, only Study 3 tested all the hypotheses of this thesis.

Table 7.9. Study 1 - Structural Equation Modelling Results for Team Antecedent- and Response-focused IER Strategies, Team Conflict, Team Performance and Team OCB

Variable	Team relationship conflict	Team Performance	Team OCB
Control			
Team Size	.11 (.07)	.03 (.10)	.05 (.11)
Member interaction frequency	.15 (.07)	.36 (.11)*	0.24 (.12)*
Direct effect			
Team antecedent-focused IER strategies	-.79 (.05)**	.30 (.18)	.05 (.19)
Team response-focused IER strategies	.16 (.07)*	-.21 (.10)	-.23 (.11)
Team relationship conflict		-.43 (.17)**	-.55 (.17)**
R^2 Model		.25 (.09)*	.23 (.08)*
Indirect effect			
(Bootstrap = 10,000) [CI 95%]			
Team antecedent-focused IER strategies		.46 [.18, .74]*	.37 [.09 .65]*
Team response-focused IER strategies		-.10 [-.22, .01]	-.08 [-.18, .02]

Note. N = 99 teams. Standardized estimates. * p <.05. ** p <.01.

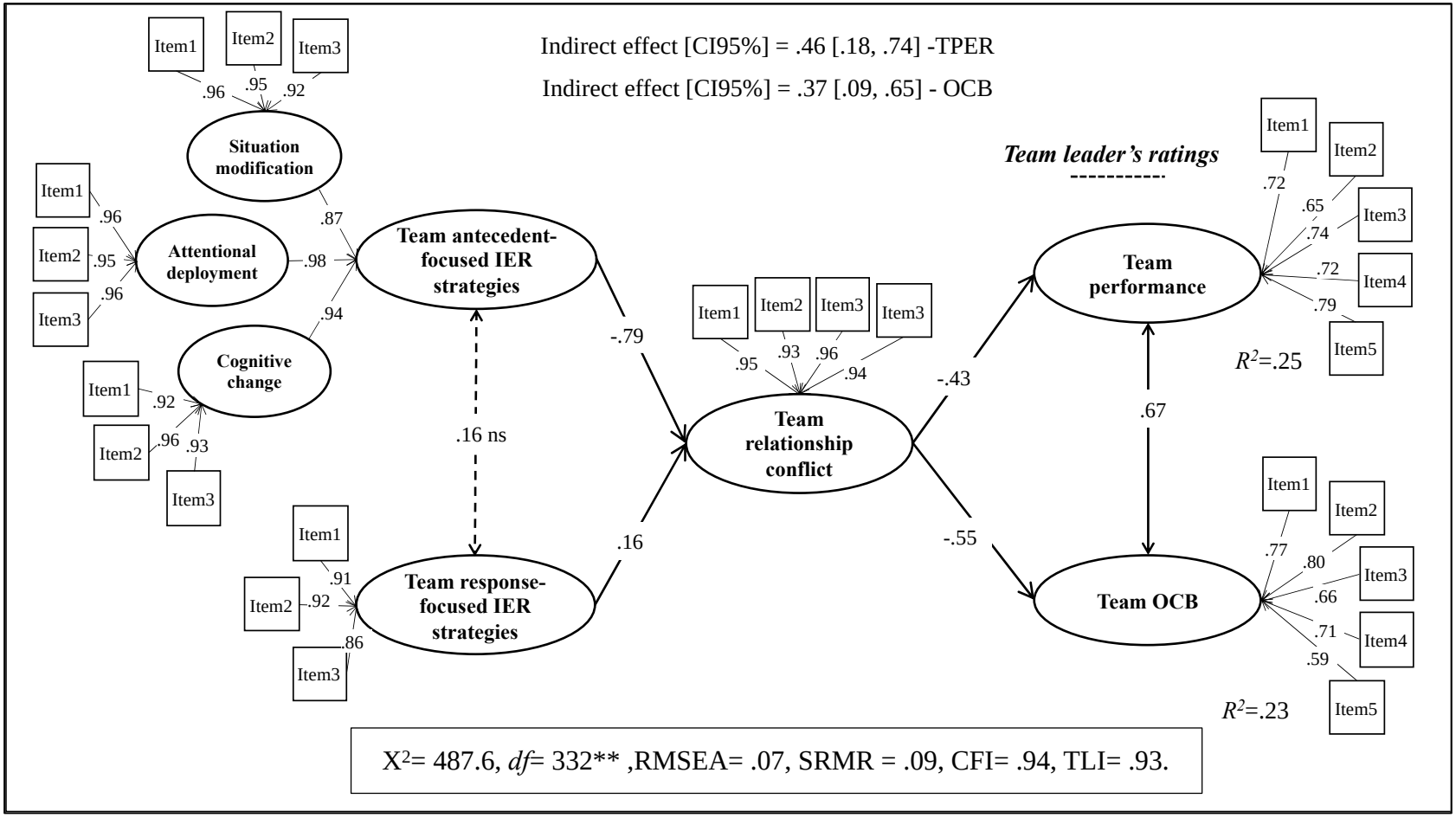


Figure 7.2. Structural Equation Modelling for team antecedent- and response-focused strategies, team conflict, team performance and team OCB.

7.4.4. Summary of Study 1 Results

In summary, these results generally support the relationship between team antecedent- and response-focused IER strategies and team relationship conflict. Furthermore, these results support the hypothesised relationship between team processes and team performance, by showing that team antecedent-focused IER strategies and team relationship conflict are related to team performance, and that team relationship conflict fully mediates the effect of team antecedent-strategies on team performance (both in terms of task performance and OCB). However, the results do not support the mediation in the case of response-focused strategies. Lastly, this study was unable to conduct the multilevel SEM model due to specification problems related to the insufficient sample size at the team-level (N = 99). Thus, the effects could only be calculated using aggregated team-level scores of the team IER and team conflict scales. Therefore, Study 2 set out to try to solve these issues, testing the same variables in a larger data set. Study 2 also adds team member well-being as an outcome variable at the individual level.

7.5. Results Study 2. Multilevel mediation model

The purpose of Study 2 was to explore the multilevel nature of the data, assessing the relationships between the variables at different levels of analysis. Therefore, the hypotheses tested in this study are related to the relationship between constructs at different levels of analysis in the theoretical model (see Figure 5.1, Chapter 5). The specific hypotheses tested in this study are summarised in Table 7.1, on page 122. As mentioned in the previous chapter, the data for this study were collected in a multinational Latin American financial company in the private sector whose headquarters are located in Chile. The participants correspond to administrative, sales, and operational workers whose work is structured in teams, and the final sample consisted of 4,659 employees nested in 697 teams. Similar to Study 1, this section organises the Study 2 results as follow. The first part presents the results of inter-rater reliability (IRR) and agreement (IRA). Then, it gives the CFA results for the theoretical model, and lastly the testing of the hypotheses is detailed.

7.5.1. Results of Inter-rater Reliability and Agreement Analysis

Inter-rater reliability and agreement analyses showed that ratings of all team-level variables were dependent on team membership (Table 7.10). Following a similar pattern to Study 1, inter-rater reliability indicators were moderate for team antecedent- and response-focused IER strategies. Along the same lines, team members showed high agreement in their ratings regarding team antecedent-focused IER strategies and team relationship conflict, but were moderate for response-focused strategies. The results of these indicators were as follows: team situation modification, ICC(1) = .12, ICC(2) = .53, r_{WG} = .64, AD = .70, team attentional deployment, ICC(1) = .12, ICC(2) = .53, r_{WG} = .66, AD = .68, team cognitive change, ICC(1) = .11, ICC(2) = .52, r_{WG} = .70, AD = .64, team response modulation strategies, ICC(1) = .10, ICC(2) = .73, r_{WG} = .48, AD = .85, and team relationship conflict, ICC(1) = .24, ICC(2) = .73, r_{WG} = .71, AD = .63. These results established that all variables show that team members ratings are influenced by team membership and can be examined as team-level constructs.

Table 7.10. Study 2 - Intraclass Correlation coefficient, Average Deviation and r_{WG} indices

Variable	ICC(1)	ICC(2)	AD	Range AD	r_{WG}	Range r_{WG}
Team relationship conflict	0.24	0.73	0.63	[.00, 1.56]	0.71	[.00, 1.00]
Team situation modification	0.12	0.53	0.70	[.00, 1.67]	0.64	[.00, 1.00]
Team attentional deployment	0.12	0.53	0.68	[.00, 1.58]	0.66	[.00, 1.00]
Team cognitive change	0.11	0.52	0.64	[.00, 1.56]	0.70	[.00, 1.00]
Team response modulation	0.10	0.73	0.85	[.00, 1.78]	0.48	[.00, 1.00]

Note: N = 4,659 employees, 697 teams. Values of AD < .80 and r_{WG} > .70 are indicative of good agreement.

7.5.2. Results of Measurement Models

Table 7.11 depicts the results of Multilevel Confirmatory Factor Analysis (MCFA) for the eight-factor model when testing the variables underlying the hypotheses (Model 1), described by a second-order factor of team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 1, 2), team relationship conflict (Level 1, 2), team performance (Level 2), and team member emotional exhaustion (Level 1), which showed excellent goodness-of-fit, χ^2(df) = 1573.60 (309), CFI = 0.98, TLI = 0.98, RMSEA = 0.03, $SRMR_w$ = 0.02, $SRMR_b$= 0.06.

Similar to Study 1, this original model was compared to two alternative solutions (Model 2 and Model 3). Model 2: loaded all antecedent-focused strategies separately, in addition to response-focused strategies (Level 1, 2), team relationship conflict (Level 1, 2), team performance (Level 2), and team member emotional exhaustion (Level 1), χ^2(df) = 1511.47 (297), CFI = 0.98, TLI = 0.98, RMSEA = 0.03, $SRMR_w$ = 0.02, $SRMR_b$= 0.06, $\Delta\chi^2(3) = 184.00$, $p < .01$. This alternative seven-factor model (Model 2) was slightly better than the original eight-factor solution (Model 1). Model 3: consisted of loading all team antecedent-focused IER strategies onto one single factor, in addition to team response-focused IER strategies (Level 1, 2), team relationship conflict (Level 1, 2), team performance (Level 2), and team member

emotional exhaustion (Level 1), χ^2(df) = 8469.07 (312), CFI = 0.89, TLI = 0.88, RMSEA = 0.08, $SRMR_w$ = 0.08, $SRMR_b$ = 0.18, $\Delta\chi^2(3)$ = 6895.47, p < .01. This alternative five-factor model (model 3) was significantly worse than the original eight-factor solution (Model 1).

In summary, Models 1 and 2 are significantly better than Model 3. Whereas Model 2 is slightly better than Model 1, the values of the fit indices are excellent to the same extent for both models. Thus, taking these findings together with the results from EFA and CFA, in addition to a parsimony criterion, the analyses were performed using the original model (Model 1), which involves a second-order factor of antecedent-focused IER strategies.

Table 7.11. Study 2 - Multilevel Confirmatory Factor Analysis – Comparison of Measurement Models – Fit indices

Model	Factors	df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	$SRMR_w$	$SRMR_b$
Model 1	Eight factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TRC, TPER, TMWB	309	1573.60		.98	.98	.03	.02	.06
Model 2	Seven factors: TSM, TAD, TCC, TRM, TRC, TPER, TMWB	297	1511.47	62.12**	.98	.98	.03	.02	.06
Model 3	Five factors: TANT (TSM + TAD + TCC), TRM, TRC, TPER, TMWB	312	8469.07	6895.47**	.89	.88	.08	.04	.18

Note: ** p < .01. TSM = Team situation modification. TAD = Team attentional deployment. TCC =Team cognitive change. TRM = Team response modulation. TANT = Team antecedent-focused strategies (including TSM, TAD and TCC). TRC = Team relationship conflict. TPER = Team performance. TMWB = Team member wellbeing. N = 4,659 employees, 697 teams.

Table 7.12. Study 2 - Correlation matrix

	Mean	SD	1	2	3	4	5	6	7
1. Team member emotional exhaustion	2.64	.86	**(.80)**	-	-	-	-	-	-
2. Team performance	4.09	.64	-	**(.97)**	-.32**	.20**	.22**	.24**	-.03
3. Team relationship conflict	2.12	.94	.36**	-	**(.91)**	-.56**	-.58**	-.58**	.07
4. Team situation modification	3.42	.99	-.31**	-	-.44**	**(.92)**	.82**	.81**	.16**
5. Team attentional deployment	3.66	.98	-.30**	-	-.48**	.73**	**(.93)**	.87**	.20**
6. Team cognitive change	3.64	.93	-.30**	-	-.46**	.71**	.80**	**(.94)**	.23**
7. Team response modulation	2.74	1.15	-.07**	-	.01	.20**	.22**	.26**	**(.92)**

Note: ** p < .01. Numbers in parenthesis indicate reliability of scales. Values below and above the diagonal represent individual- and team-level correlations respectively. N = 4,659 employees, 697 teams.

7.5.3. Results of Multilevel Structural Equation Modelling (MSEM)

7.5.3.1. Reliabilities and Zero-order correlations

Table 7.12 shows means, standard deviations, reliability, 'Cronbach's α', and zero-order correlations for all variables in the study. Following the same pattern as Study 1, almost all direct correlations are statistically significant, and the values are in the expected direction. For example, team relationship conflict is negatively related to team performance, $r = -.32$, $p < .01$, and positively related to team member emotional exhaustion, $r = .36$, $p < .01$. In addition, all team antecedent-focused interpersonal emotion regulation strategies were significant and positively associated with team performance, team situation modification, $r = .22$, $p < .01$, team attentional deployment, $r = .22$, $p < .01$, and team cognitive change, $r = .24$, $p < .01$

7.5.3.2. Hypothesis testing

Results for the proposed multilevel mediation model indicated excellent model fit, $\chi^2(df) = 1573.60\ (309)$, CFI = 0.98, TLI = 0.98, RMSEA = 0.03, $SRMR_w = 0.02$, $SRMR_b = 0.06$. Thus, the robustness of the measurement mediation model involved in hypothesis testing was supported. Figure 7.3 and Table 7.13 depict MSEM analysis results.

Direct Effects

Hypothesis 1 stated that team antecedent-focused IER strategies will be negatively related to team relationship conflict. The results show a negative and significant relationship between team antecedent-focused IER strategies and team relationship conflict ($\gamma = -.76$, $p < .01$). Therefore, Hypothesis 1 was supported, showing that high levels of team antecedent-focused strategies are associated with low levels of team interpersonal conflict.

Hypothesis 2 stated that team response-focused IER strategies will be positively related to team relationship conflict. The results show a positive and significant relationship between team response-focused IER strategies and team relationship conflict ($\gamma = .02$, $p < .01$). Therefore, Hypothesis 2 was supported, showing that high levels of team response-focused strategies are associated with high levels of team interpersonal conflict.

Hypothesis 5 stated that team relationship conflict will be (a) negatively related to team performance and (b) positively related to team member emotional exhaustion. The results show a negative and significant relationship between team relationship conflict and team performance (γ = -.32, $p < .01$), a positive and significant relationship with team member emotional exhaustion (b = .32, $p < .01$), and a positive and non-significant cross-level effect between team relationship conflict and team member emotional exhaustion (γ = .28, $p > .01$). Thus, Hypothesis 5 was partially supported, in the sense that high levels of team relationship conflict have a detrimental effect on the performance of the team and that the individual member perception of conflict within the team is positively associated with their feelings of exhaustion.

Mediated effects

Hypothesis 7 stated that team relationship conflict will mediate the relationship between team antecedent-focused IER strategies and team performance. The results show a positive and significant indirect effect of team antecedent-focused IER strategies on team performance (γ = .38, $p < .05$, Monte Carlo CI 95% [.10, .61]). Therefore, Hypothesis 7 was supported, showing that high levels of team antecedent-focused strategies increase team performance via their association with team interpersonal conflict.

Hypothesis 8 stated that team relationship conflict will mediate the relationship between team response-focused IER strategies and team performance. The results show a negative and significant indirect effect of team response-focused IER strategies on team performance (γ = -.01, $p < .05$). However, Monte Carlo estimations does not support this indirect effect (CI 95% [-.02, .00]). Therefore, Hypothesis 8 was not supported, showing that team response-focused IER strategies is related to team performance, via their positive association with team interpersonal conflict.

Hypothesis 9 stated that team relationship conflict will mediate the relationship between team antecedent-focused IER strategies and team member emotional exhaustion. The results show a negative and significant effect on team member emotional exhaustion (b = -.19, $p < .01$, Monte Carlo CI 95% [-.30, -.10]). Therefore, Hypothesis 9 was supported, showing that high levels of team antecedent-focused strategies have a positive effect on team member well-being (reducing team member

feelings of being emotionally exhausted), via their association with team relationship conflict.

Hypothesis 10 stated that team relationship conflict will mediate the relationship between team response-focused IER strategies and team member emotional exhaustion. The results show a negative and significant effect on team member emotional exhaustion (γ = -.01, $p < .05$). However, similar to team performance, Monte Carlo estimations does not support this indirect effect (CI 95% [--.00, .04]). Therefore, Hypothesis 10 was not supported, showing that high levels of team response-focused strategies have a negative effect on team member well-being, via their positive association with team relationship conflict.

Table 7.13. Study 2 - Multilevel Structural Equation Modelling for Team antecedent- and Response-focused Strategies, Team Conflict, Team Performance and Team Member Emotional Exhaustion

Variable	Team relationship conflict		Team performance		Emotional exhaustion	
	Within	Between	Within	Between	Within	Between
Control						
Team Size	-	.20 (.04)**	-	-.09 (.05)	-	.01 (.06)
Member interaction frequency	.04 (.01)**	.01 (.00)**		.03 (.10)	-.03 (.02)	-.10 (.11)
Direct effect						
Team antecedent-focused IER strategies	-.57 (.02)**	-.76 (.05)**	-	.15 (.13)	-	-.43 (.17)*
Team response-focused IER strategies	.06 (.02)**	.02 (.01)**	-	.04 (.08)	-	-.17 (.09)
Team relationship conflict				-.32 (.12)*	.32 (.02)**	.25 (.16)
R^2 Model				.22 (.05)**	.18 (.01)**	.44 (.09)**
Indirect effect						
Team antecedent-focused IER strategies				.38 (.15)*	-.19 (.02)**	-.17 (.11)
Team response-focused IER strategies				-.01 (.01)*	.01 (.01)*	.00 (.00)
Indirect effect (Monte Carlo = 20,000)						
[CI 95%]						
Team antecedent-focused IER strategies				[.10, .61]*	[-.30, -.10]*	
Team response-focused IER strategies				[-.02, .00]	[-.00, .04]	

Note. N = 4,659 employees, 697 teams. Standardized estimates. * p <.05. ** p <.01

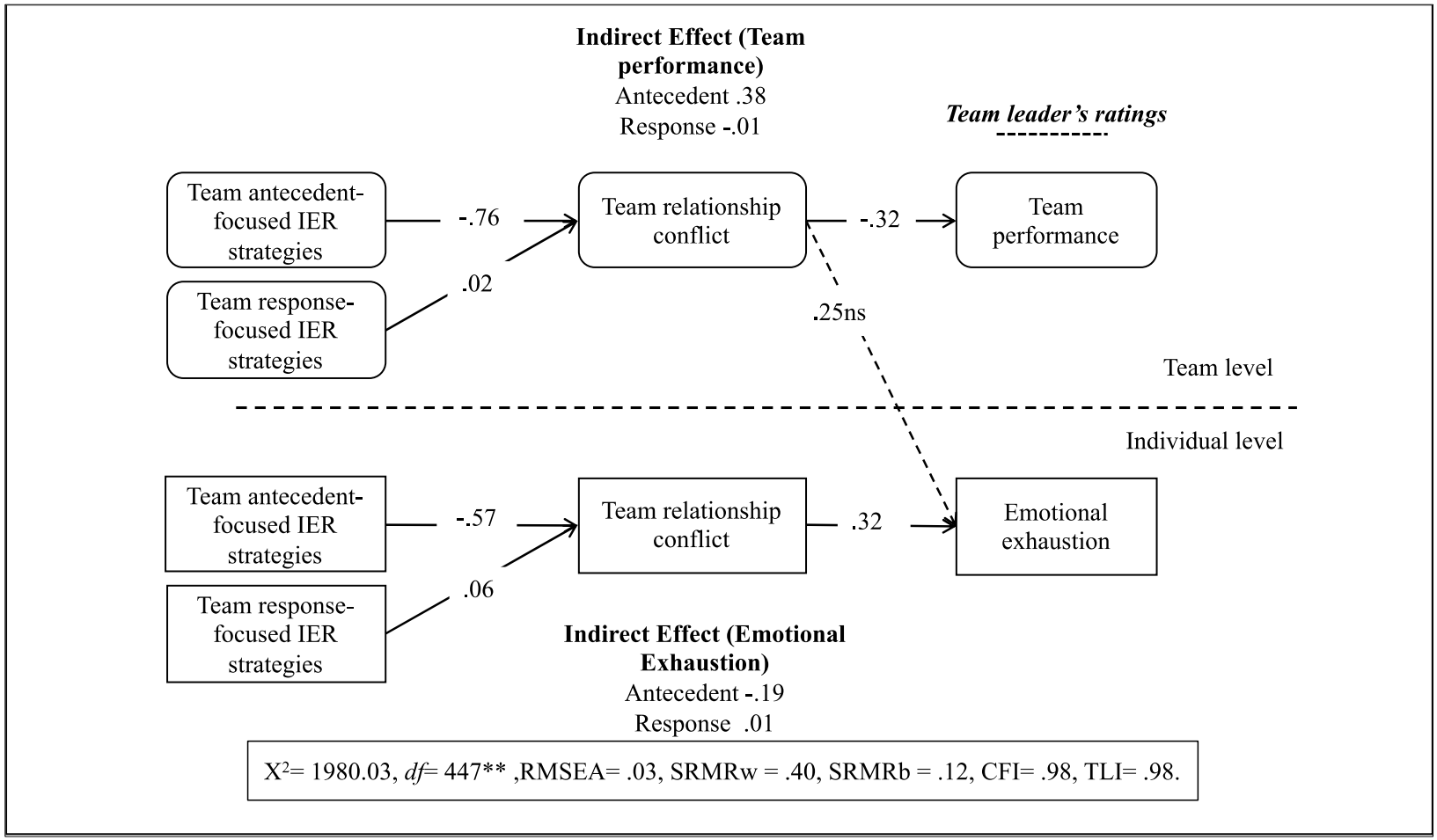


Figure 7.3. Multilevel Structural Equation Modelling (latent variables) for team antecedent- and response-focused IER strategies, team conflict, team performance, and team member emotional exhaustion. The rounded boxes represent the variance at the team level (between) and squared boxes represent the variables at the individual level (within). Due to the complexity of the multilevel model, only latent and not observed variables are depicted.

7.5.4. Summary of Study 2 Results

In summary, these results follow a similar pattern to Study 1, supporting the expected relationships between team antecedent- and response-focused IER strategies and team relationship conflict. Furthermore, these results support the hypothesised relationship between team processes and team outcomes, by showing that team antecedent-focused IER strategies and team relationship conflict are related to team performance and team member well-being, and that team relationship conflict fully mediates the effect of team antecedent-strategies on team performance and partially mediates the effect of these strategies on team member well-being. However, similar to Study 1, the results do not support the mediation in the case of response-focused strategies.

Therefore, these results replicate and extend those of Study 1, first by including an outcome variable at the individual level (team member emotional exhaustion), and second, by showing the mediated relationships, separating the variance at the individual and team levels of analysis. Taken together, these results bring additional evidence of the stability of the effects of team IER on team processes and outputs. Notwithstanding the above, although Study 2 separates individual and team level effects, it did not compare the effects of these strategies in terms of team level (e.g., 'we as a team' regulate members emotions) as against individual level (e.g., 'I' regulate other members emotions). Furthermore, so far, the only team process assessed has been team relationship conflict. Therefore, Study 3 set out to try to solve these issues, comparing the effects of team member IER representing separate individual and team constructs, and including 'positive' team processes and emergent states, such as team member quality of exchanges (TMX) and team trust.

7.6. Results Study 3. Individual versus Team-Level Mediation Model

This study rises to the need of addressing the third objective of this thesis, namely, to determine whether team interpersonal emotion regulation has an effect over and above individual team member actions on other team processes and outcomes. Thus, it includes a specific measure of individual members' IER strategies and compares it to the adapted team IER measure. This study also expands the models tested in the previous studies by including two additional 'positive' mediators, specifically, a team process (TMX), and an emergent state (team trust). Lastly, by including team conflict, team performance, and team member emotional exhaustion, this study seeks to replicate and confirm the findings of Study 1 and Study 2.

Therefore, this study seeks to test all the hypotheses of this thesis, which are represented in the theoretical model (see Figure 5.1, Chapter 5) and summarised in Table 7.1, on page 122. The data for this study was collected in an educational organisation in the private sector located in Chile, and the final sample consisted of 856 employees sitting in 187 teams. As was outlined in the data analysis strategy section of the previous chapter, Study 3's results are organised as follow. The first section presents the results of inter-rater reliability (IRR) and agreement (IRA). Then, CFA results for the theoretical model and the testing of the hypotheses are detailed.

7.6.1. Results of Inter-rater Reliability and Agreement Analysis

Inter-rater reliability and agreement analyses showed that ratings of all team-level variables were dependent on team membership. Similar to Studies 1 and 2, Inter-rater reliability indicators were moderate for team antecedent- and response-focused emotion regulation strategies. Along the same lines, team members showed high agreement in their ratings regarding team antecedent-focused IER strategies, team conflict, and trust, and were moderate for team response-focused IER strategies. Results of these indicators were as follows (see Table 7.14): team situation modification, ICC(1) = .12, ICC(2) = .30, r_{WG} = .78, AD = .58, team attentional deployment, ICC(1) = .17, ICC(2) = .48, r_{WG} = .82, AD = .54, team cognitive change, ICC(1) = .13, ICC(2) = .29, r_{WG} = .81, AD = .55, team response modulation strategies, ICC(1) = .09, ICC(2) = .16, r_{WG} = .67, AD = .67, team relationship conflict, ICC(1) = .21, ICC(2) = .55, r_{WG} = .81, AD = .56, team trust, ICC(1) = .24, ICC(2) = .63, r_{WG} =

.83, AD = .52, and team-member exchange (TMX), ICC(1) = .23, ICC(2) = .67, r_{WG} = .86, AD = .51. These results established that all variables show that team members ratings are influenced by team membership and can be examined as team-level constructs.

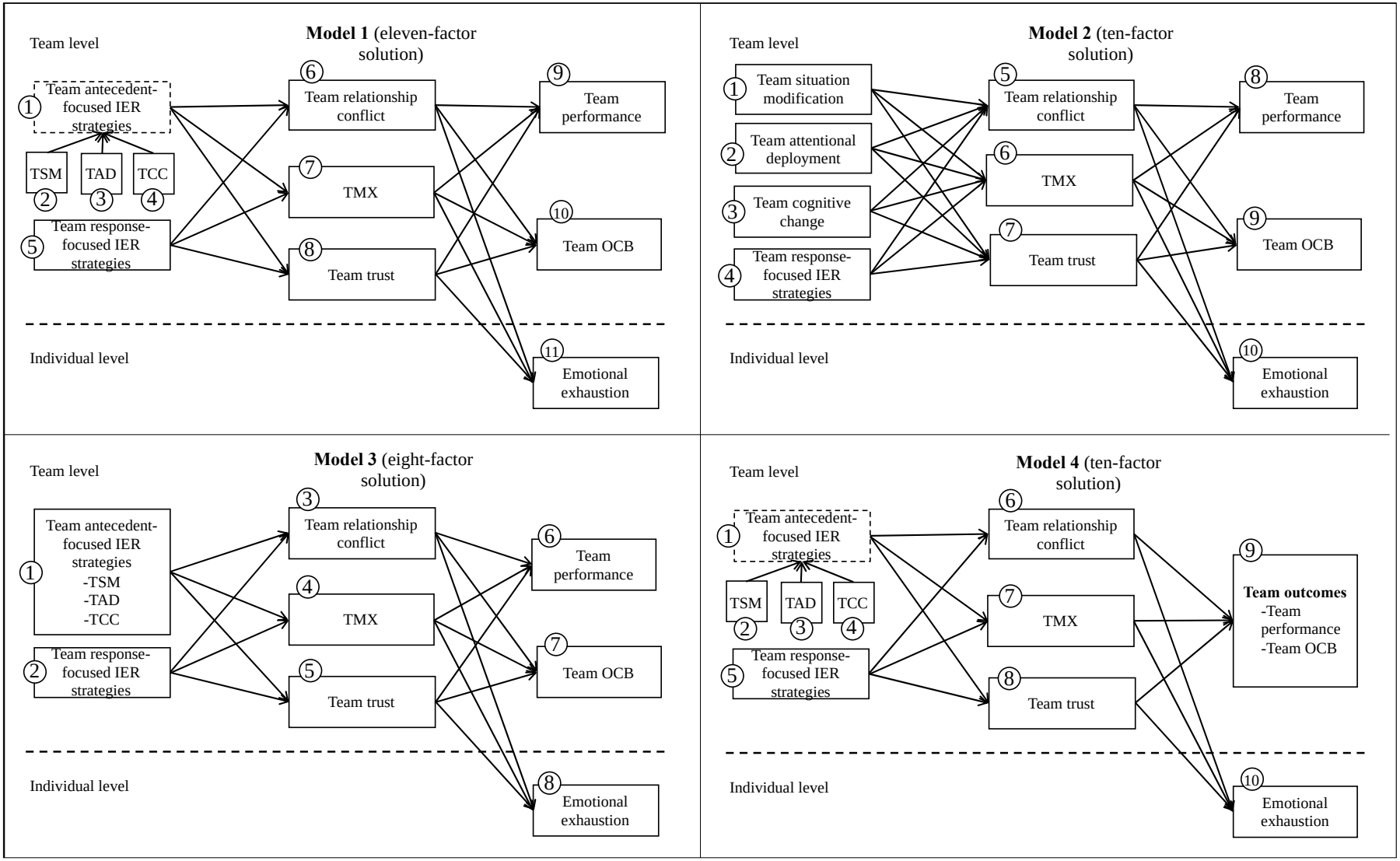
Table 7.14. Study 3 - Intraclass Correlation Coefficient, Average Deviation and r_{WG} indices

Variable	ICC(1)	ICC(2)	AD	Range AD	r_{WG}	Range r_{WG}
Team relationship conflict	.21	.55	.56	[.00, 1.30]	.81	[.00, 1.00]
Team trust	.24	.63	.52	[.00, 1.20]	.83	[.00, 1.00]
TMX	.23	.67	.51	[.00, 1.10]	.86	[.00, 1.00]
Team situation modification	.12	.39	.58	[.00, 1.50]	.78	[.00, 1.00]
Team attentional deployment	.17	.48	.54	[.00, 1.50]	.82	[.00, 1.00]
Team cognitive change	.13	.39	.55	[.00, 1.20]	.81	[.00, 1.00]
Team response modulation	.09	.16	.67	[.00, 1.20]	.67	[.00, 1.00]

Note: values of AD < .80 and r_{WG}> .70 are indicator of good agreement.

7.6.2. Results of Measurement Models

Table 7.15 depicts the results of Multilevel Confirmatory Factor analysis (MCFA) for the eleven-factor model (Model 1) testing the variables underlying the hypotheses, described by a second-order factor of team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2), team trust (Level 2), team performance (Level 2), team OCB (Level 2), and team member emotional exhaustion (Level 1). This model showed excellent goodness-of-fit χ^2(df) = 1120.93 (646), CFI = 0.96, TLI = 0.95, RMSEA = 0.03, $SRMR_w$ = 0.03, $SRMR_b$= 0.04, and was compared to five alternative solutions. As these models have a significantly greater number of variables involved; they are depicted in Figure 7.4 to reduce complexity and facilitate the interpretation of the MCFA results.


Team level
Model 1 (eleven-factor solution)
1 Team antecedent-focused IER strategies
TSM 2
TAD 3
TCC 4
5 Team response-focused IER strategies
6 Team relationship conflict
7 TMX
8 Team trust
9 Team performance
10 Team OCB
11 Emotional exhaustion
Individual level
Team level
Model 2 (ten-factor solution)
1 Team situation modification
2 Team attentional deployment
3 Team cognitive change
4 Team response-focused IER strategies
5 Team relationship conflict
6 TMX
7 Team trust
8 Team performance
9 Team OCB
10 Emotional exhaustion
Individual level
Team level
Model 3 (eight-factor solution)
1 Team antecedent-focused IER strategies -TSM -TAD -TCC
2 Team response-focused IER strategies
3 Team relationship conflict
4 TMX
5 Team trust
6 Team performance
7 Team OCB
8 Emotional exhaustion
Individual level
Team level
Model 4 (ten-factor solution)
1 Team antecedent-focused IER strategies
TSM 2
TAD 3
TCC 4
5 Team response-focused IER strategies
6 Team relationship conflict
7 TMX
8 Team trust
9 Team outcomes -Team performance -Team OCB
10 Emotional exhaustion
Individual level

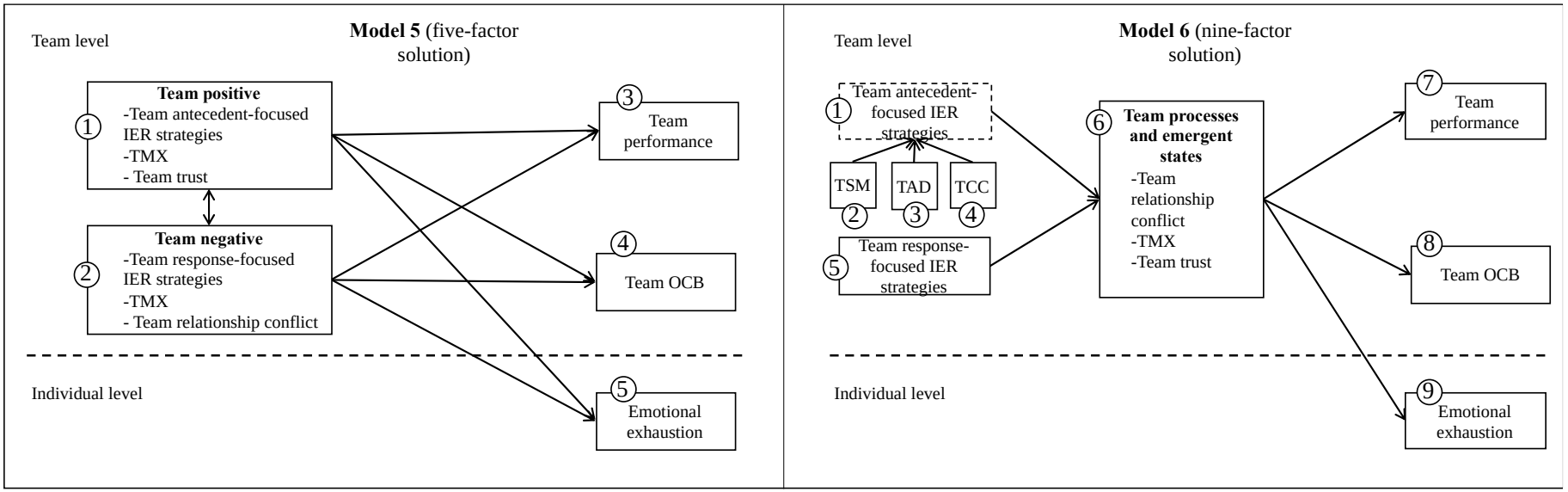


Figure 7.4. Alternative factorial models tested, multilevel models. Numbers represent factors. Dash lines represent second order factors. TSM = team situation modification; TAD = team attentional deployment; TCC = team cognitive change.

Table 7.15. Study 3 - Multilevel Confirmatory Factor Analysis – Comparison of Measurement Models – Fit indices

Model	Factors	df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	$SRMR_w$	$SRMR_b$
Model 1	Eleven factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TRC, TT, TMX, TPER, TOCB, TMW	646	1120.93		.96	.95	.03	.03	.04
Model 2	Ten factors: TSM, TAD, TCC, TRM, TRC, TT, TMX, TPER, TOCB, TMW	634	1105.32	15.61	.96	.95	.03	.03	.04
Model 3	Eight factors: TANT (TSM + TAD + TCC), TRM, TRC, TT, TMX, TPER, TOCB, TMW	649	1445.89	324.96**	.93	.92	.04	.03	.04
Model 4	Ten Factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TRC, TT, TMX, TMW, OUT (TPER + TOCB)	652	1266.34	145.41**	.94	.94	.03	.03	.05
Model 5	Five Factors: TPOS (TSM + TAD + TCC + TT + TMX), TNEG (TRM + TRC), TPER, TOCB, TMW	664	2822.22	1701.29**	.80	.78	.06	.03	.08
Model 6	Nine Factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TPR (TT + TMX + TRC), TPER, TOCB, TMW	657	2054.69	933.76**	.87	.86	.05	.03	.06

Note: ** $p < .01$. TSM = Team situation modification. TAD = Team attentional deployment. TCC =Team cognitive change. TRM = Team response modulation. TANT = Team antecedent-focused strategies (including TSM, TAD and TCC). TRC = Team relationship conflict. TT = Team trust. TMX = Team member exchange. TMW = Team member wellbeing. TPER = Team performance. TOCB = Team organisational citizenship behaviour. OUT = Team outcomes (including TPER and TOCB in a single factor). N = 856, 187 teams

Similar to Study 1, the original eleven-factor solution (Model 1) was not significantly different from a ten-factor alternative solution (Model 2), which loaded all team antecedent-focused IER strategies separately (Level 2), along with team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2), team trust (Level 2), team performance (Level 2), Team OCB (Level 2), and team member emotional exhaustion (Level 1), χ^2(df) = 1105.32 (634), CFI = 0.96, TLI = 0.95, RMSEA = 0.03, $SRMR_w$ = 0.03, $SRMR_b$= 0.04, $\Delta\chi^2$(12) = 15.61, p > .01. This eleven-factor solution (Model 1) was significantly better than four alternative models (see Table 7.15). These models were tested with the aim of showing that all team-level variables represent distinct constructs. Besides, they follow the same pattern as the previous studies, such as loading all the team antecedent IER strategies in one single factor (Model 3), or both team performance measures in one factor (Model 4). Furthermore, two additional alternative models were included, which loaded all team processes and emergent states in one single factor (Model 5), or all positive- and negative-valence team processes in two separate factors (Model 6).

Specifically, Model 3 represents one eight-factor solution consisting of loading all team antecedent-focused IER strategies on one single factor, as well as team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2) team trust (Level 2), team performance (Level 2), team OCB (Level 2), and team member emotional exhaustion (Level 1), χ^2(df) = 1445.89 (649), CFI = 0.93, TLI = 0.92, RMSEA = 0.04, $SRMR_w$ = 0.03, $SRMR_b$= 0.04, $\Delta\chi^2$(3) = 324.96, p < .01. Model 4 depicts a ten-factor solution which loads both outcomes (team performance and OCB) on a single factor (Level 2), in addition to one second-order factor of team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2), team trust (Level 2), TMX, and team member emotional exhaustion (Level 1), χ^2(df) = 1266.34 (652), CFI = 0.94, TLI = 0.94, RMSEA = 0.03, $SRMR_w$ = 0.03, $SRMR_b$= 0.05, $\Delta\chi^2$(5) = 145.41, p < .01.

Model 5 represents a five-factor solution consisting of loading all positive valence team constructs: team antecedent-focused IER strategies, TMX, and team trust, in one single factor (Level 2), and all negative valence team constructs: team response-focused IER strategies and team relationship conflict, in a single factor

(Level 2), in addition to team performance (Level 2), team OCB (Level 2), and team member emotional exhaustion (Level 1), χ^2(df) = 2822.22 (664), CFI = 0.80, TLI = 0.78, RMSEA = 0.06, $SRMR_w$ = 0.03, $SRMR_b$= 0.08, $\Delta\chi^2(18) = 1701.29$, $p < .01$. Model 6 depicts a nine-factor alternative solution loading all team process mediator variables (i.e. team relationship conflict, TMX, and team trust) on one single factor (Level 2), in addition to one of second order team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 2), team performance (Level 2), team OCB (Level 2), and team member emotional exhaustion (level 1), χ^2(df) = 2054.69 (657), CFI = 0.87, TLI = 0.86, RMSEA = 0.05, $SRMR_w$ = 0.03, $SRMR_b$= 0.06, $\Delta\chi^2(11) = 933.76$, $p < .01$.

In summary, Models 1 and 2 are not statistically different from each other, both being significantly better than all the other alternative models. Thus, taking these findings together with the results from EFA and CFA, in addition to a parsimony criterion, the analyses were performed using the original model (Model 1), which involves a second-order factor of antecedent-focused strategies.

7.6.3. Results of Multilevel Structural Equation Modelling (MSEM)

7.6.3.1. Reliabilities and Zero-order Correlations

Table 7.16 shows means, standard deviations, reliability, 'Cronbach's α', and zero-order correlations for all variables in the study. Following the same pattern as Studies 1 and 2, almost all direct correlations are statistically significant, and the values are in the expected direction. For example, team trust is positively related to team performance, $r = .23$, $p < .01$, and negatively related to team member emotional exhaustion, $r = -.24$, $p < .01$. In addition, all team antecedent-focused interpersonal emotion strategies where significant and positively associated with team OCB, team situation modification, $r = .16$, $p < .01$, team attentional deployment, $r = .16$, $p < .01$, and team cognitive change, $r = .20$, $p < .01$. Also, all team interpersonal emotion regulation strategies show correlations higher than individual strategies with team constructs, for example, team situation modification and team trust, $r = .53$, $p < .01$, compared to individual situation modification and team trust, $r = .22$, $p < .01$. Contrary to expectations, team conflict was negatively although non-significantly related to team performance, $r = -.12$, $p > .11$.

Table 7.16. Study 3 - Correlation matrix

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Team member emotional exhaustion	2.39	.78	**(.89)**	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Team performance	4.11	.54	-.07*	**(.76)**	.55**	-.12	.23**	.28**	.14	.15*	.20**	-.13	-	-	-	-
3. Team OCB	4.35	.60	-.10**		**(.88)**	-.18*	.24**	.31**	.16*	.16*	.20**	-.12	-	-	-	-
4. Team relationship conflict	2.02	.95	.29**	-	-	**(.95)**	-.75**	-.63**	-.56**	-.61**	-.63**	.43**	-	-	-	-
5. Team trust	4.09	.81	-.24**	-	-	-.60**	**(.95)**	.82**	.73**	.79**	.75**	-.30**	-	-	-	-
6. TMX	4.01	.68	-.22**	-	-	-.45**	.72**	**(.90)**	.71**	.73**	.77**	-.32**	-	-	-	-
7. Team situation modification	3.54	.86	-.15**	-	-	-.34**	.53**	.57**	**(.94)**	.83**	.81**	-.16*	-	-	-	-
8. Team attentional deployment	3.69	.85	-.16**	-	-	-.40**	.55**	.61**	.75**	**(.91)**	.84**	-.19*	-	-	-	-
9. Team cognitive change	3.72	.84	-.15**	-	-	-.42**	.60**	.63**	.74**	.75**	**(.96)**	-.25**	-	-	-	-
10. Team response modulation	1.92	1.04	.14**	-	-	.29**	-.16**	-.19**	.01	-.02	-.06	**(.95)**	-	-	-	-
11. Individual situation modification	3.72	.73	-.04	-	-	-.12**	.22**	.26**	.34**	.30**	.35**	.01	**(0.83)**	-	-	-
12. Individual attentional deployment	3.76	.78	-.03	-	-	-.07*	.17**	.20**	.28**	.32**	.30**	.05	.60**	**(0.89)**	-	-
13. Individual cognitive change	3.78	.73	-.04	-	-	-.07	.15**	.19**	.30**	.28**	.33**	-.01	.63**	.59**	**(0.91)**	-
14. Individual response modulation	1.95	.95	.10**	-	-	.13**	-.01	-.02	.04	.08*	0.01	.44**	-.01	.04	-.01	**(0.9)**

Note: ** p < .01, * p < .05. Numbers in parenthesis indicate de reliability of scales. Values below and above the diagonal represent individual- and team-level correlations respectively. N = 856, 187 teams

7.6.3.2. Hypothesis testing

Results for the proposed mediation model indicated good model fit, χ^2(df) = 11553.39 (913), CFI = 0.95, TLI = 0.95, RMSEA = 0.03, SRMR = 0.06, $SRMR_w$ = 0.03, $SRMR_b$= 0.10. Thus, the robustness of the measurement multilevel mediation model involved in testing the hypotheses was supported. Figure 7.5 and Table 7.17 depict MSEM analysis results.

Direct Effects

Hypothesis 1 stated that team antecedent-focused IER strategies will be negatively related to (a) team relationship conflict and positively related to (b) team member exchange quality and (c) team trust. The results show a negative and significant relationship between team antecedent-focused IER strategies and team relationship conflict (γ = -.60, p < .01), and a positive and significant relationship between team antecedent-focused IER strategies and TMX (γ = .80, p < .01), and team trust (γ = .76, p < .01). Therefore, Hypothesis 1 was supported.

Hypothesis 2 stated that team response-focused IER strategies will be positively related to (a) team relationship conflict, and negatively related to (b) team member exchange quality and (c) team trust. The results show a positive and non-significant relationship between team response-focused IER strategies and team relationship conflict (γ = .29, p > .05) and a negative and non-significant relationship between team response-focused IER strategies and TMX (γ = -.15, p > .05), and team trust (γ = -.14, p > .05). Thus, Hypothesis 2 was not supported.

Hypothesis 3 stated that team antecedent-focused IER strategies will have an effect over and above individual-level IER strategies on (a) team relationship conflict, (b) TMX, and (c) team trust. Table 7.18 depicts the results, showing that team antecedent-focused IER strategies were negative and significantly related to team relationship conflict (γ = -.45, p < .01), and positive and negatively related to TMX (γ = .61, p < .01) and team trust (γ = .57, p < .01). These relationships were higher than individual member antecedent-focused IER strategies, which are a negative and significantly related to team relationship conflict (γ = -.16, p < .05) and a positive and significantly associated with TMX (γ = .22, p < .05) and team trust (γ = .20, p < .05). Thus, Hypothesis 3 was supported, in the sense that the study results show that team

antecedent-focused IER strategies did show stronger effects than individual member IER strategies.

Hypothesis 4 stated that team response-focused IER strategies will have an effect over and above individual-level IER strategies on (a) team relationship conflict, (b) TMX, (c) team trust. The results show that team response-focused IER strategies are positive and significantly related to team relationship conflict ($\gamma = .21$, $p < .05$), and negative and non-significantly related to TMX ($\gamma = -.11$, $p > .05$), and team trust ($\gamma = -.11$, $p > .05$). These relationships were higher than individual member response-focused IER strategies, which are a positive and significantly related to team relationship conflict ($\gamma = .09$, $p < .05$) and a negative and non-significant relationship was found between team response-focused IER strategies and team trust ($\gamma = -.05$, $p > .05$), and TMX ($\gamma = -.05$, $p > .05$). Thus, Hypothesis 4 was partially supported, in the sense that team- and individual-level strategies only show a significant relationship in the case of team relationship conflict.

Hypothesis 5 stated that team relationship conflict will be negatively related to (a) team performance (task performance and OCB), and positively related to (b) team member emotional exhaustion. The results show a positive and non-significant relationship between team relationship conflict and team performance ($\gamma = -.19$, $p > .05$), and team OCB ($\gamma = -.02$, $p > .05$), and a positive and non-significant between team relationship conflict and team member emotional exhaustion ($\gamma = .42$, $p > .05$). Thus, Hypothesis 5 was not supported.

Hypothesis 6 predicts that TMX will be positively related to (a) team performance (task performance and OCB), and negatively related to (b) team member emotional exhaustion. The results show a positive and non-significant relationship between TMX and team performance ($\gamma = .39$, $p > .05$) and team OCB ($\gamma = .53$, $p > .05$), and a negative and non-significant between TMX and team member emotional exhaustion ($\gamma = -.59$, $p > .05$). Therefore, Hypothesis 6 was not supported.

Hypothesis 7 stated that team trust will be positively related to (a) team performance (task performance and OCB), and negatively related to (b) team member emotional exhaustion. The results show a positive and non-significant relationship between team trust and team performance ($\gamma = .13$, $p > .05$), a negative and non-significant with team OCB ($\gamma = .02$, $p > .05$), and a positive and non-significant

between team trust and team member emotional exhaustion ($\gamma = .10$, $p > .05$). Thus, Hypothesis 7 was not supported.

Mediation effects

Hypothesis 8 stated that the positive relationship between team antecedent-focused IER strategies and team performance will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust. As the direct effect between team relationship conflict, TMX, team trust, and team performance and team OCB were non-significant, the mediation is not likely. Thus, Hypothesis 8 was not supported.

Hypothesis 9 stated that the negative relationship between team response-focused IER strategies and team performance will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust. As the direct effect between team relationship conflict, TMX, team trust, and team performance and team OCB were non-significant, the mediation is not likely. Thus, Hypothesis 9 was not supported.

Hypothesis 10 predicts that the positive relationship between team antecedent-focused IER strategies and team member well-being will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust. As the direct effect between team relationship conflict, TMX, team trust, and team member emotional exhaustion was non-significant, the mediation is not likely. Thus, Hypothesis 10 was not supported.

Hypothesis 11 stated that the negative relationship between team response-focused IER strategies and team member well-being will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust. As the direct effect between team relationship conflict, TMX, team trust, and team member emotional exhaustion was non-significant, the mediation is not likely. Thus, Hypothesis 10 was not supported.

Table 7.17. Study 3 - Multilevel Structural Equation Modelling for Team Antecedent- and Response-focused Strategies, Team Conflict, Team Trust, TMX, Team Performance, Team OCB and Team Member Emotional Exhaustion

Variable	Team relationship conflict	TMX	Team trust	TPER	TOCB	Emotional Exhaustion
Control						
Team Size	.07 (.01)	-.01 (.01)	.01 (.01)	-.03 (.01)	.01 (.01)	.01 (.01)
Member interaction frequency	.06 (.13)	.04 (.07)	-.01 (.15)	-.04 (.22)	-.12 (.14)	-.12 (.14)
Direct effects						
Team antecedent-focused IER strategies	-.60 (.19)**	.80** (.13)	.76** (.19)			
Team response-focused IER strategies	.29 (.24)	- .15 (.20)	- .14 (.23)			
Team relationship conflict				- .19 (.47)	- .02 (.56)	.42 (.59)
Team member Exchange (TMX)				.39 (.05)	.53 (.72)	-.59 (.07)
Team trust				.13 (.17)	.02 (.34)	.13 (.17)
R^2 Model	.53*	.73**	.65*	.10	.12	.71

Note. N = 856, 187 teams. Standardized estimates. * p <.05. ** p <.01

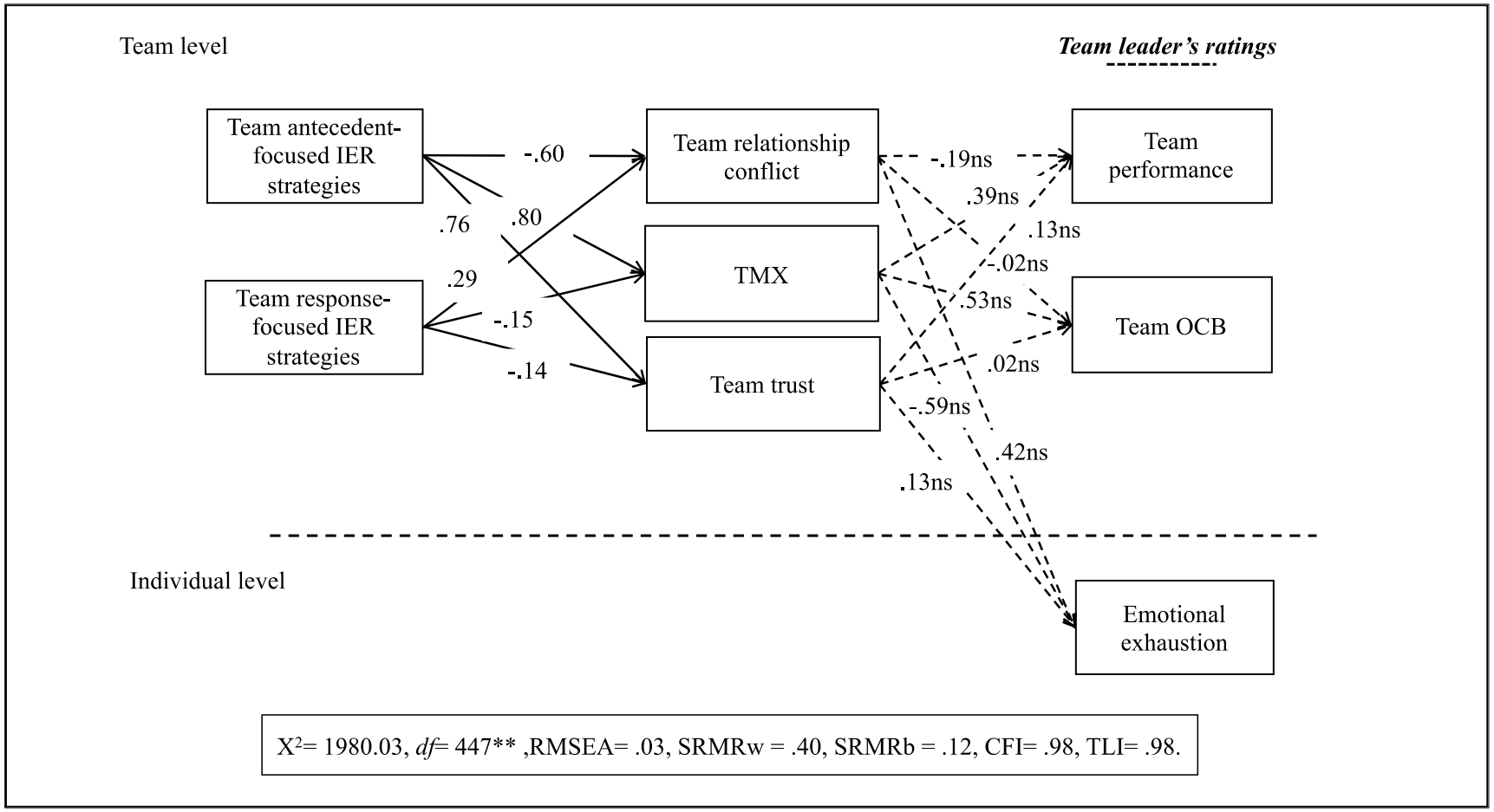


Figure 7.5. Multilevel Structural Equation Modelling (latent variables) for team antecedent- and response-focused strategies, team conflict, TMX, team trust, team performance, team OCB and team member emotional exhaustion. Due to the complexity of the multilevel model, only latent and not observed variables are depicted.

Table 7.18. Study 3 - Multilevel Model Comparing Team and Individual Level IER Scales (Second Order Factor of Antecedent and Response-focused Strategies

Team relationship conflict		
	B	SE
Direct effect		
Team antecedent-focused strategies	-0.45**	0.08
Individual antecedent-focused strategies	-0.16*	0.07
Team response-focused strategies	0.21*	0.09
Individual response-focused strategies	0.09*	0.04

Team trust		
	B	SE
Direct effect		
Team antecedent-focused strategies	0.57**	0.07
Individual antecedent-focused strategies	0.20*	0.08
Team response-focused strategies	-0.11	0.08
Individual response-focused strategies	-0.05	0.04

Team member exchange (TMX)		
	B	SE
Direct effect		
Team antecedent-focused strategies	0.61**	0.03
Individual antecedent-focused strategies	0.22*	0.03
Team response-focused strategies	-0.11	0.03
Individual response-focused strategies	-0.05	0.04

Note. N = 856, 187 teams. Standardized estimates. * p <.05. ** p <.01

7.7. Study 3. Post-hoc analyses

Whereas the multi-level SEM analyses showed differences between team- and individual-level IER strategies with other team processes and emergent states, they were unable to detect multilevel mediation effects. Therefore, post-hoc analyses were performed using only the team level variables (same as Study 1). These analyses included aggregated scores of team IER, team relationship conflict, TMX, team trust, team performance and team OCB. These results complemented the above and are presented below.

7.7.1. Results of Measurement Models

Table 7.19 depicts the results of Confirmatory Factor analysis (CFA) for the ten-factor model (Model 1) with testing the variables underlying the hypotheses, described by a second-order factor of team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2), team trust (Level 2), team performance (Level 2), and team OCB (Level 2). This model showed excellent goodness-of-fit χ^2(df) = 1071.10 (641), CFI = 0.95, TLI = 0.94, RMSEA = 0.06, SRMR = 0.06, and was compared to the same five alternative solutions used in multilevel model results. As these models have a significant increase in the number of variables involved, they are depicted in Figure 7.6 to facilitate the interpretation of the CFA results.

This original ten-factor solution (Model 1) was not significantly different than a ten-factor alternative solution (Model 2), which loaded all team antecedent-focused IER strategies separately (Level 2), team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2), team trust (Level 2), team performance (Level 2), and team OCB (Level 2), χ^2(df) = 1056.91 (629), CFI = 0.95, TLI = 0.94, RMSEA = 0.06, SRMR = 0.06, $\Delta\chi^2(12) = 14.19$, $p > .01$.

Furthermore, the original ten-factor solution (Model 1) was significantly better than four alternative models (see Table 7.19). Specifically, Model 3 represents of one eight-factor solution consisting of loading all team antecedent-focused IER strategies on one single factor, as well as team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2) team trust (Level 2), team performance (Level 2), and team OCB (Level 2), χ^2(df) = 1396.62 (644), CFI = 0.91,

TLI = 0.90, RMSEA = 0.08, SRMR = 0.04, $\chi^2(3) = 325.52$, $p < .01$. Model 4 depicts a ten-factor solution which loaded both outcomes (team performance and OCB) on a single factor (Level 2), in addition to one second-order factor of team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 2), team relationship conflict (Level 2), TMX (Level 2), team trust (Level 2), TMX, $\chi^2(df) = 1222.59$ (647), CFI = 0.93, TLI = 0.92, RMSEA = 0.07, SRMR = 0.04, $\Delta\chi^2(6) = 151.49$, $p < .01$.

Model 5 represents a five-factor solution consisting of loading all positive valence team constructs: team antecedent-focused IER strategies, TMX and team trust in one single factor (Level 2), and all negative valence team constructs: team response-focused IER strategies, and team relationship conflict in a single factor (Level 2), in addition to team performance (Level 2), and team OCB (Level 2), $\chi^2(df) = 3220.95$ (659), CFI = 0.69, TLI = 0.67, RMSEA = 0.14, SRMR = 0.15, $\Delta\chi^2(18) = 2149.85$, $p < .01$. Model 6 depicts a nine-factor alternative solution loaded all team processes mediator variables (e.g. team relationship conflict, TMX and team trust) on one single factor (Level 2), in addition to one second order team antecedent-focused IER strategies (involving factors of team situation selection, attentional deployment, and cognitive change strategies), team response-focused IER strategies (Level 2), team performance (Level 2), and team OCB (Level 2), $\chi^2(df) = 2001.21$ (652), CFI = 0.84, TLI = 0.82, RMSEA = 0.11, SRMR = 0.12, $\Delta\chi^2(11) = 930.11$, $p < .01$.

In summary, these models show the same pattern than multilevel models. Specifically, Model 1 and 2 are not statistically different between each other, being both significatively better than all the other alternative models. Thus, taken these findings together with the results from EFA and CFA, in addition to a parsimony criterion, the analyses were performed using the original model (Model 1), which involves a second-order factor of antecedent-focused strategies.

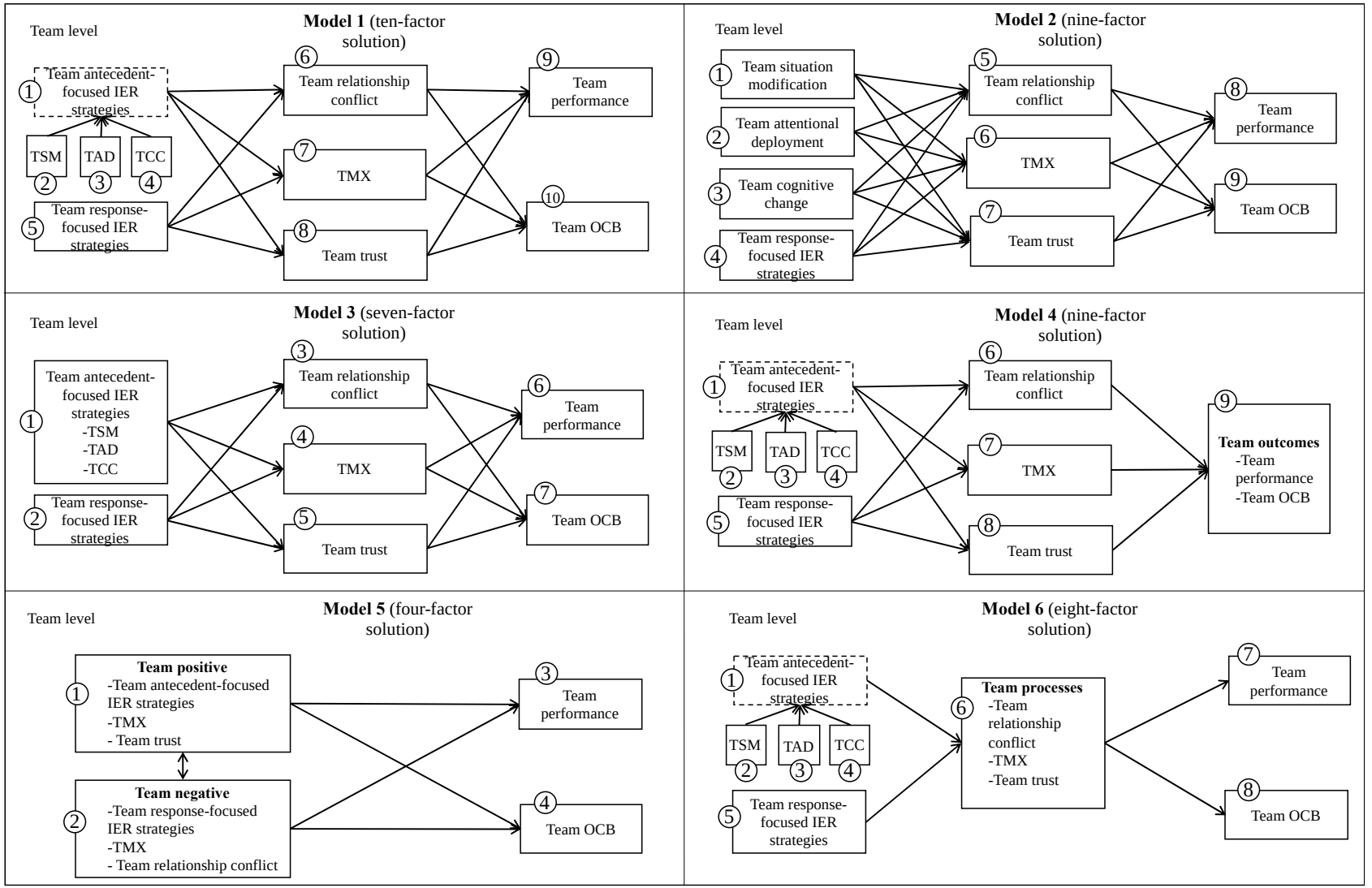


Figure 7.6. Alternative factorial models tested, team-level models. Dash lines represent second order factors. TSM = team situation modification; TAD = team attentional deployment; TCC = team cognitive change.

Table 7.19. Study 3 - Confirmatory Factor Analysis – Comparison of Measurement Models – Fit indices

Model	Factors	df	χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA	SRMR
Model 1	Ten factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TRC, TT, TMX, TPER, TOCB	641	1071.10		.95	.94	.06	.06
Model 2	Nine factors: TSM, TAD, TCC, TRM, TRC, TT, TMX, TPER, TOCB	629	1056.91	14.19	.95	.94	.06	.06
Model 3	Seven factors: TANT (TSM + TAD + TCC), TRM, TRC, TT, TMX, TPER, TOCB	644	1396.62	325.52**	.91	.90	.08	.04
Model 4	Nine Factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TRC, TT, TMX, OUT (TPER + TOCB)	647	1222.59	151.49**	.93	.92	.07	.04
Model 5	Four Factors: TPOS (TSM + TAD + TCC + TT + TMX), TNEG (TRM + TRC), TPER, TOCB	659	3220.95	2149.85**	.69	.67	.14	.15
Model 6	Eight Factors: one 2nd order factor TANT (including TSM, TAD and TCC), TRM, TPR (TT + TMX + TRC), TPER, TOCB	652	2001.21	930.11**	.84	.82	.11	.12

Note: N = 856. ** p < .01. TSM = Team situation modification. TAD = Team attentional deployment. TCC =Team cognitive change. TRM = Team response modulation. TANT = Team antecedent-focused strategies (including TSM, TAD and TCC). TRC = Team relationship conflict. TT = Team trust. TMX = Team member exchange. TPER = Team performance. TOCB = Team organisational citizenship behaviour. OUT = Team outcomes (including TPER and TOCB in a single factor), TPOS = Team positive (including TSM, TAD, TCC, TT and TMX in a single factor). TNEG = Team negative (including TRM and TRC in a single factor).

7.7.2. Results of Structural Equation Modelling (SEM)

Results for the proposed mediation model indicated good model fit, χ^2(df) = 1185.35 (707), CFI = 0.94, TLI = 0.94, RMSEA = 0.06, SRMR = 0.06. Thus, the robustness of the measurement mediation model involved in testing the hypotheses was supported. Figure 7.7 and Table 7.20 depict SEM analysis results.

7.7.2.1. Hypotheses testing

Direct Effects

Hypothesis 1 stated that team antecedent-focused IER strategies will be negatively related to (a) team relationship conflict and positively related to (b) team member exchange quality and (c) team trust. The results show a negative and significant relationship between team antecedent-focused IER strategies and team relationship conflict (b = -.60, p < .01), and a positive and significant relationship between team antecedent-focused IER strategies and TMX (b = .79, p < .01), and team trust (b = .75, p < .01). Therefore, Hypothesis 1 was supported.

Hypothesis 2 stated that team response-focused IER strategies will be positively related to (a) team relationship conflict, and negatively related to (b) team member exchange quality and (c) team trust. The results show a positive and non-significant relationship between team response-focused IER strategies and team relationship conflict (b = .31, p > .05) and a negative and non-significant relationship between team response-focused IER strategies and TMX (b = -.15, p > .05), and team trust (b = -.14, p > .05). Thus, Hypothesis 2 was not supported.

Hypothesis 5 stated that team relationship conflict will be negatively related to team performance (task performance and OCB). The results show a positive and non-significant relationship between team relationship conflict and team performance (b = .23, p > .05) and team OCB (b = .14, p > .05). Thus, Hypothesis 5 was not supported.

Hypothesis 6 stated that TMX will be positively related to team performance (task performance and OCB). The results show a positive and significant relationship between TMX and team performance (b = .39, p < .05) and team OCB (b = .52, p < .05). Therefore, Hypothesis 6 was supported.

Hypothesis 7 stated that team trust will be positively related to team performance (task performance and OCB). The results show a negative and non-significant relationship between team trust and team performance (b = -.03, p > .05),

a negative and non-significant with team OCB (γ = -.01, p > .05). Thus, Hypothesis 7 was not supported.

Mediation effects

Hypothesis 8 stated that the positive relationship between team antecedent-focused IER strategies and team performance will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust. The results show a positive and significant indirect effect via TMX; task performance (b = .31, p < .05) and OCB (b = .42, p < .05). Thus, Hypothesis 8 was partially supported, specifically, only 8b was supported, and Hypothesis 8a and 8c were not supported.

Hypothesis 9 stated that the negative relationship between team response-focused IER strategies and team performance will be mediated by (a) team relationship conflict, (b) team member exchange quality (TMX), and (c) team trust. The results show a negative and non-significant indirect effect via TMX; task performance (b = -.06, p > .05) and OCB (b = -.08, p > .05). Thus, Hypothesis 8 was not supported.

Table 7.20. Study 3 - Structural Equation Modelling for Team Antecedent- and Response-focused Strategies, Team Conflict, Team Trust, TMX, Team Performance, Team OCB and Team Member Emotional Exhaustion

Variable	Team relationship conflict	TMX	Team trust	Team performance	Team OCB
Control					
Team Size	.07 (.01)	-.01 (.01)	.01 (.01)	-.03 (.01)	.01 (.01)
Member interaction frequency	.06 (.13)	.04 (.07)	-.01 (.15)	-.04 (.22)	-.12 (.14)
Direct effects					
Team antecedent-focused IER strategies	-.60 (.12)**	.79 (.07)**	.75 (.09)**	-.15 (.19)	-.18 (.20)
Team response-focused IER strategies	.31 (.07)**	- .15 (.04)*	- .14 (.06)*	-.11 (.09)	-.02 (.09)
Team relationship conflict		-.14 (.01)	-.50 (.02)**	.23 (.11)	- .01 (.09)
Team member exchange (TMX)	-.14 (.01)		.50 (.01)**	.39 (.24)*	.52 (.23)*
Team trust	-.50 (.02)**	.50 (.01)**		.14 (.18)	-.03 (.15)
R^2 Model	.55*	.71*	.64**	.15*	.11*
Indirect effect					
(Bootstrap = 20,000) [CI 95%]					
Mediator: Team relationship conflict					
Team antecedent-focused IER strategies					
Team response-focused IER strategies					
Mediator: TMX					
Team antecedent-focused IER strategies				.31 [.01, .62]*	.42 [.11 .72]*
Team response-focused IER strategies				-.06 [-.13, .01]	-.08 [-.17 .01]
Mediator: Team trust					
Team antecedent-focused IER strategies					
Team response-focused IER strategies					

Note. N = 187 teams. Standardized estimates. * p <.05. ** p <.01

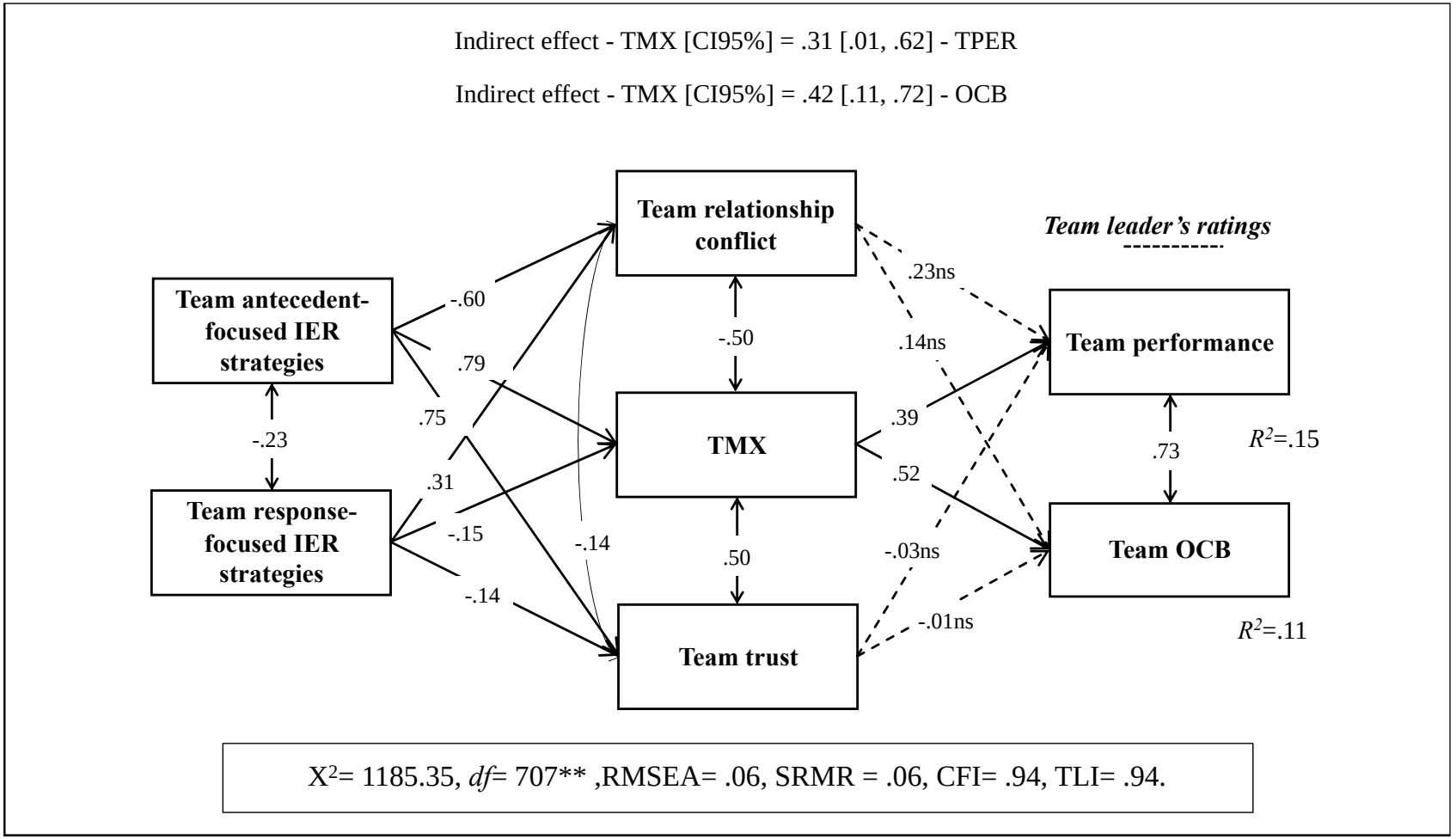


Figure 7.7. Structural Equation Modelling (latent variables) for team antecedent- and response-focused strategies, team conflict, TMX, team trust, team performance and team OCB. Due to the complexity of the multilevel model, only latent and not observed variables are depicted.

7.7.3. Summary of Study 3 Results

In summary, these results follow a similar pattern to Studies 1 and 2 with regard to the opposite effects of antecedent- and response-focused strategies on team relationship conflict, extending these findings to other 'positive' team processes and emergent states. Study 3's results also extend previous studies by showing that team IER has a stronger effect on other team processes and states than individual member IER behaviours.

Contrary to expectations, the results of the multilevel mediation models were not significant for all three mediators, and regarding the mediation model at the team level, only team member quality of relationship (TMX) was significant. Specifically, Study 3 was not able to confirm the mediated effect of team relationship conflict found in Studies 1 and 2. In contrast, this study did confirm the mediated effect of TMX, extending previous results in terms of mediating effects. It is important to notice here that zero-order correlations between team relationship conflict and team OCB, and team trust and both team performance indicators, were statistically significant and in the expected direction. However, they became non-significant when they were included in the SEM model. The possible explanation for such an effect will be addressed in the Discussion Chapter.

7.8. Chapter Summary: Integration of the Results of Studies 1-3

This chapter has described the results of the three studies conducted in this thesis. The first section reviewed the results of both Exploratory and Confirmatory Factor Analyses utilising the data of the three studies. These findings supported the factorial consistency of the scales, depicting four different team interpersonal emotion regulation strategies. Team situation modification, attentional deployment, and cognitive change constitute a second-order factor of antecedent-focused strategies, and team response modulation represents the response-focused strategies.

Overall, the results are consistent, showing that team IER has a significant effect on team performance via other team processes and emergent states. Specifically, the findings of Studies 1 and 2 show a significant indirect effect of team antecedent-focused IER strategies on team OCB (Study 1) and team performance (Studies 1, 2)

via team relationship conflict. Likewise, the results of Study 3 reveal a significant indirect effect through TMX. Regarding team member well-being, the Study 2 findings show a significant indirect effect of team antecedent-focused IER strategies on team member emotional exhaustion. Notwithstanding, the results of team response-focused IER strategies were more inconsistent. Whereas these strategies were significantly correlated with other team processes as expected, the effect sizes were low and none of the models shows a significant indirect effect on team performance or well-being.

In term of multilevel models, the findings of Study 2 reveal that team antecedent-focused IER strategies show variance at the between (team) and within (individual) level, and these different components of variance have a significant indirect effect on team performance and team member well-being respectively. Furthermore, the Study 3 results show that, in general, team antecedent- and response-focused IER strategies have stronger effects on team conflict, TMX, and team trust than individual member IER strategies. However, this study does not show significant results with regard to the mediating role of team processes and emergent states in the relationship between team IER and team outcomes (team performance and well-being) in multilevel models. These results will be discussed in detail in the last chapter, comprising the thesis's discussions.

So far, I have mainly focused the argumentation of the thesis on team-level effects, in terms of a referent shift composition model (Chan, 1998). This type of model assumes that team members agree about their perception of what occurs within their teams. However, it is likely that team members will vary in their perception or in the strategies that they use to regulate team members' emotions in the team context. This can be observed in the inter-rater agreement indices (e.g., in Table 7.6, 7.10 and 7.14), which, while appropriate to justify data aggregation, show a substantial amount of variation between the teams. Therefore, the next chapter will analyse team IER from the perspective of a dispersion model, analysing within-team IER variation.

CHAPTER 8. TEAM INTERPERSONAL EMOTION REGULATION: VARIATION AMONG TEAM MEMBER STRATEGIES

8.1. Chapter Overview

Previous chapters of this thesis have determined how social context influences team member interpersonal emotion regulation. Specifically, using a referent shift consensus model (Chan, 1998), this research has shown that team interpersonal emotion regulation (IER) is associated with team processes and emergent states (e.g., relationship conflict, TMX, and team trust), and, in turn, influences team performance and team member well-being. As addressed in Chapter 3, referent-shift consensus models are based on team member agreement and team average, assuming that members engage in similar interpersonal emotion regulation strategies or that they have a similar perception of the team reality. However, in practice, individuals engage in particular strategies depending on their previous experiences, cultural differences, and their specific appraisals of situations (Harrison & Klein, 2007; Mathieu et al., 2017). Thus, a more comprehensive account of team IER should pay attention not only to the team 'average' and 'agreement' but also to the differentiated impact that each member's behaviours or particular conceptualisation of the team reality may bring to the team, namely team IER diversity. In Chapter 3, I refer to this conceptualisation as a dispersion model of team IER in which the focus is on the variation and not the average. Therefore, in the chapter that follows, I address the fourth objective of this thesis, exploring a diversity account of team IER and its relationship with team relationship conflict and team performance.

This chapter is structured differently from the previous ones in the sense that each section has its own theoretical framework, methods, and results. This method was selected because it facilitates the exposition of more complex models which include additional variables compared to the mediation model already tested (e.g., mediated moderation models). Particularly, the first section provides the construct

definition of an account of team IER diversity, establishing two ways of operationalising such a construct, namely, *within-team IER variation* and *team IER configurations*. The second section addresses within-team IER variation. This section provides a brief theoretical framework, specific hypotheses, methods, and results. Using the same structure, the third section addresses several team IER configurations based on teams' shape of the distribution. The last section of this chapter integrates the two results, providing a reflection of the study of diversity in team processes specifically related to IER.

8.2. Diversity in Team Processes

Whereas the research on diversity or differences in team members' attributes has a long history in the study of organisational behaviour (Williams & O'Reilly, 1998), recent theoretical developments have allowed scholars to investigate more specifically differences in team processes and emergent states (van Knippenberg & Mell, 2016). In general terms, diversity refers to "the distribution of differences or variation among the members of a unit [an area, group or team] with respect to a common attribute, which is a unit-level compositional construct" (Harrison & Klein, 2007, p. 1200).

Particularly helpful for an inquiry into diversity in team processes, van Knippenberg and Mell (2016) describe a classification that distinguishes three fundamental forms of diversity: trait diversity (i.e. variation in team members' stable characteristics, such as gender or personality), state diversity (i.e. variation in team members' malleable characteristics defined independently from the team, for instance, diversity in preferences), and emergent diversity (i.e. variation in team processes and psychological states defined in reference to the team, for example, diversity of team emotion or cognition). This classification goes beyond previous distinctions which focused on the nature of the attribute, including surface- or deep-level constructs (Bell, 2007; Harrison, Price, Gavin, & Florey, 2002), or the relationship between the lower-level units, such as separation, variety, and disparity (Harrison & Klein, 2007), integrating the two, using the classic inputs-process-outputs framework (also described as the IPSO model; Marks et al., 2001).

8.2.1. Team IER diversity: construct definition

As can be observed, this IPSO framework is the same as that applied in this thesis to understand the relationship between team IER (as team 'average') and processes, such as, team relationship conflict, and outcomes, for example, team performance. Therefore, it seems theoretically reasonable to explore the effect of team IER diversity on other team processes and outcomes, using van Knippenberg and Mell's (2016) account to conceptualise this unit-level compositional construct.

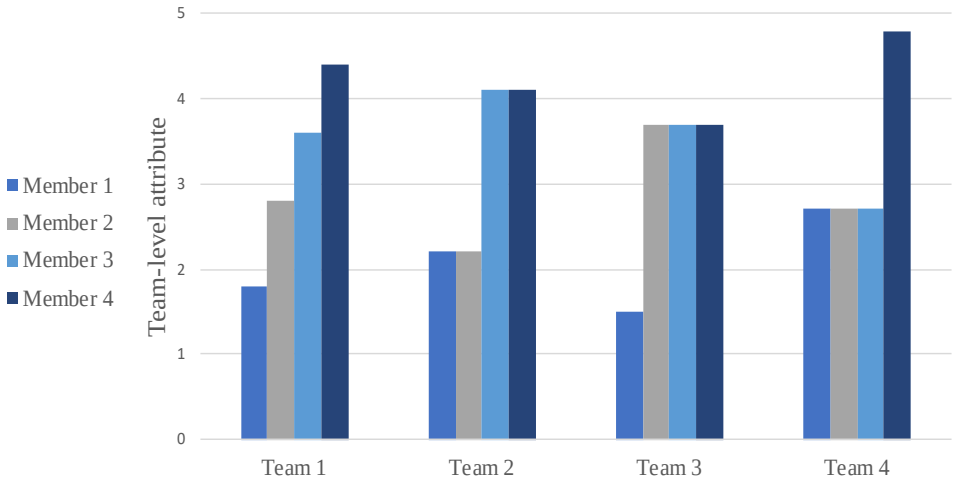
Thus, following this justification, team IER diversity can be defined as the heterogeneity or variation in the strategies used by team members to manage other members' emotions in reference to the team. This represents a team-level emergent diversity phenomenon that accounts for the variation in team members' behaviours or their perception about team level reality relating to the process of interpersonal emotion regulation.

8.2.2. Operationalisation of team IER diversity

The theoretical arguments addressed above shine a light into a construct definition of team IER diversity. In empirical terms, previous research on unit diversity has recognised the advantages of using within-team dispersion indicators to operationalise group or team variation (González-Romá, Peiró, & Tordera, 2002; Henderson, Liden, Glibkowski, & Chaudhry, 2009; Jehn et al., 2010; Liu et al., 2011). Following the theory of dispersion models (cf. Chan, 1998), academics have traditionally utilised means of within-unit variability statistics, such as the standard deviation or variance, and agreement or disagreement indices, such as r_{WG} or average deviation (AD), to operationalise their constructs (Dawson, 2012).

Recently, scholars have also recognised of the limitations of these indicators, claiming that they are not sufficient to fully understand within-unit variation because they cannot convey all the information about the dispersion within a work unit (DeRue et al., 2010; González-Romá & Hernández, 2014). This has led them to propose using the shape of the distribution of individual members' scores as an alternative way to analyse within-team dispersion. Such a case can be graphically observed in Figure 8.1, which shows the distributions of individual-level scores for four hypothetical work teams where both team-level mean and standard deviation scores are the same (mean = 3.2, SD = 1.1).

Despite this similarity, the emerging pattern of each team is discernibly different. For instance, Team 2 may represent a situation of subgroups in which the half of the members have high-scores and the other half show low-scores. This may represent a different situation compared to Team 3 and Team 4, which display a majority with high scores and a majority with low scores respectively, and Team 1, with a fragmented pattern.



Team Average	3.2	3.2	3.2	3.2
Team SD	1.1	1.1	1.1	1.1

Figure 8.1. Team scores for a hypothetical team-level attribute (e.g., team IER) on a 1-5 Likert scale.

Taken together, these arguments suggest two noticeably different routes to analysing diversity in team IER: one directed to understanding within-team dispersion or variation (using for example team SD), and another exploring the shape or pattern of possible configurations of interpersonal emotion regulation that different teams may show.

Therefore, in the following sections of this chapter, I will present the principal findings of the current investigation of these two distinctive forms of team IER diversity: *within-team IER variation*, which represents team-level heterogeneity or the degree of dispersion among individuals' perceptions of team interpersonal emotion regulation, and *team IER configurations*, which characterise the pattern of

heterogeneity that emerges from team members' perceptions of team interpersonal emotion regulation.

As mentioned above, although all the following sections represent different ways to analyse the same data used in previous models (now from a perspective of dispersion constructs), for clarity of exposition, each is organised as an independent study. Thus, each sub-section offers a brief theoretical justification, description of measures, analysis strategy, and results. Specifically, three mediated moderation models are explored (see Figure 8.2). Models A and B include team IER diversity as a moderating variable in the core mediational processes analysed in previous chapters. In addition, Model C evaluates the interaction between the two forms of team IER diversity on team relationship conflict and team performance.

Particularly, using the team standard deviation of team IER measure, the next section explores the moderating role of within-team IER variation on team relationship conflict and, in turn, team performance, namely, how the effect of the unit average constructs (e.g., team IER) may vary depending on the distribution of scores within the unit (Model A, Figure 8.2). The following section of this chapter investigates the moderating effects of team IER configurations on the same mediator and outcome variable, using different patterns of team member distributions. Particularly, it seeks to understand how the unit average (Model B, Figure 8.2) and within-unit distribution (Model C, Figure 8.2) may vary depending on the specific form that it can take.

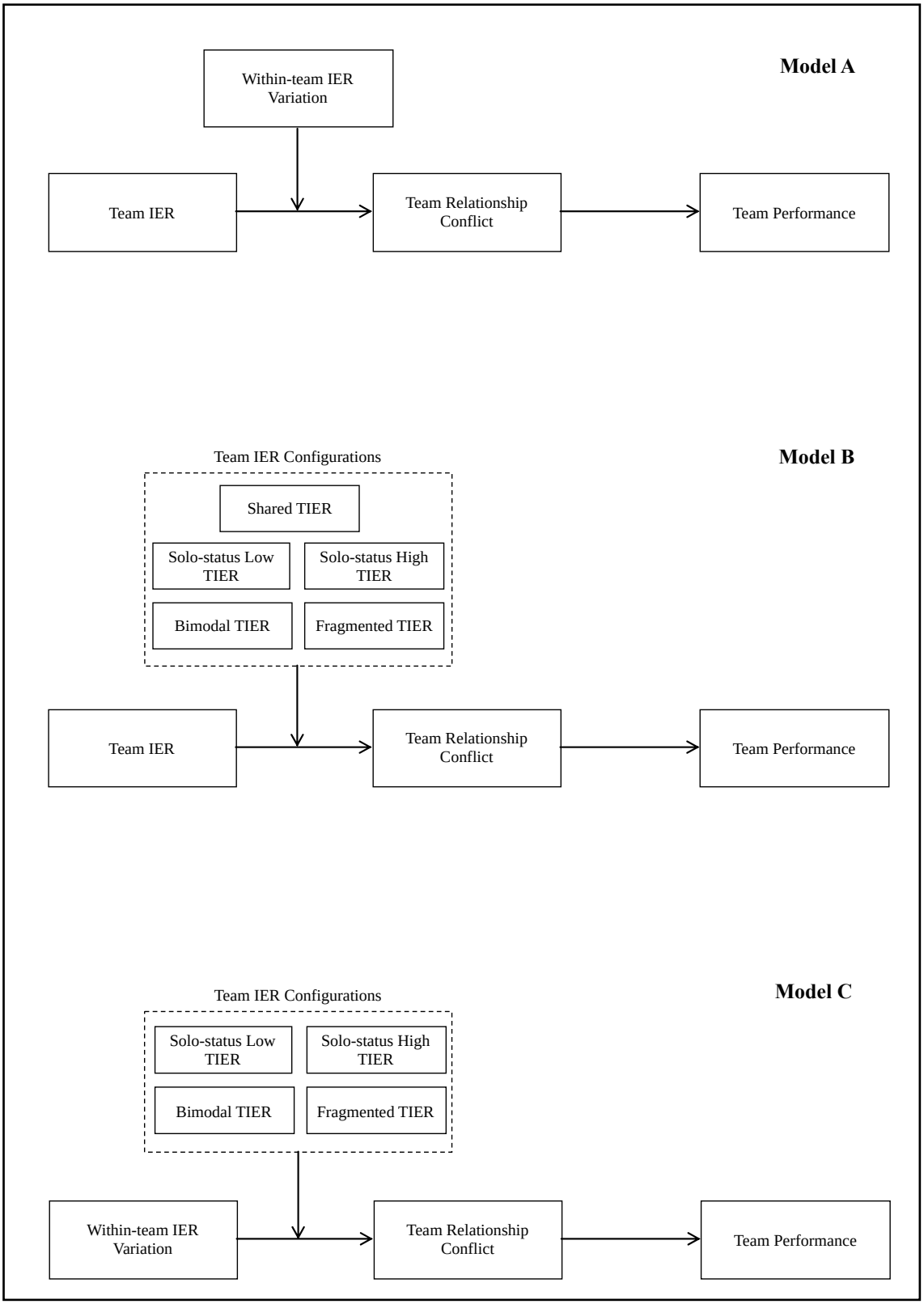


Figure 8.2. Theoretical mediated moderation models representing the moderating effect of team IER diversity on the relationship between team-level interpersonal emotion regulation, team relationship conflict, and team performance.

8.3. Within-team interpersonal emotion regulation variation (Model A)

This form of diversity in team interpersonal emotion regulation (IER) represents the team-level heterogeneity or the degree of dispersion among individuals' perceptions of team interpersonal emotion regulation. Therefore, following classic dispersion models (Chan, 1998), the essence of the construct resides in the variability among lower-level units (e.g. team members) in the perception of a focal team IER process. Similar examples of this way to operationalise team-level dispersion constructs can be found in the notion of climate strength (Dawson, González-Romá, Davis, & West, 2008; González-Romá et al., 2002), LMX variability (Liden, Erdogan, Wayne, & Sparrowe, 2006), and TMX differentiation (Liu et al., 2011), and it is commonly measured using team SD, variance, or an agreement index (e.g., r_{WG} or AD). This variation among members in terms of their perception of team-level interpersonal emotion regulation could have a specific and variable impact within work teams, affecting emergent states, team processes, and team outcomes. However, will this variation be beneficial or rather detrimental for team processes and outcomes?

Evidence from team processes research suggests an overall negative impact of team variation (cf. De Jong & Dirks, 2012; González-Romá et al., 2002; Liu et al., 2011). Indeed, the accumulated body of research on this topic has traditionally attributed negative effects of diversity to other constructs, appealing to social categorisation processes that may occur within teams (Hogg & Terry, 2000; Turner & Reynolds, 2011; van Knippenberg, de Dreu, & Homan, 2004) in which groups are split into subgroups (e.g. in an 'us vs them' relationship). For instance, variations in team members' appraisals with respect to team-level IER may represent a situation in which there are different evaluations among members regarding the extent to which they engage in actions to manage members' negative emotions.

In preceding chapters, two distinct sets of team IER strategies were distinguished, namely team antecedent- and response-focused IER strategies. Team antecedent-focused IER strategies comprise team members attempting to change the causes of other members' undesired emotions, such as modifying the situation or deploying their attention or their appraisals to change other members' negative emotions. Conversely, team response-focused IER strategies involve team members' behaviours directed to changing the physiological characteristics of an emotional

response, such as telling other members to suppress the expression of their negative emotions. The results of the previous analyses considering team "average" effects exhibited a differential effect of these strategies on team relationship conflict and team performance. Thus, the next section uses this differential effect to support the relationship of within-team IER variation and these variables.

8.3.1. Within-team antecedent and team response IER variation and team conflict (Model A)

The findings of this research have shown a negative effect of team antecedent-focused IER strategies, and a positive one of response-focused IER strategies on team relationship conflict (see Chapter 7). Similar effects are expected for diversity of team IER on team relationship conflict. Specifically, teams in which there is agreement about antecedent-focused strategies being frequently displayed indicate a supportive team context, protecting members against resource losses associated with interpersonal conflict and helping them to cope with the associated demanding characteristics (Zhang, 2009). Following this rationale, teams with high levels of disagreement about how team members regulate other members' negative emotions may suggest variations in members' perceptions of the distribution of this resource, which likely involves a situation of conflict (Li & Cropanzano, 2009; Törnblom & Vermunt, 1999). In support of this view, research has demonstrated that variability in the perception of an important resource for team members (e.g. leader-member quality of relationship) is positively related to interpersonal conflict perceived by team members (Hooper & Martin, 2008). Likewise, research into perceptions of organisational justice has shown that perceived inequity may result in greater amounts of perceived conflict (cf. Cropanzano, Bowen, & Gilliland, 2007).

Conversely, team response-focused IER strategies represent a situation of resource loss, which may increase the likelihood that interpersonal disagreement will turn into a state of conflict. These effects will be observed especially when there is a shared perception among members. Therefore, a variation in team response-focused IER strategies involves heterogeneity in terms of members' perceptions of the requirement from colleagues to use personal resources to regulate their expression of negative emotions, reflecting a more honest and natural expression of feelings (cf. Grandey, Foo, Groth, & Goodwin, 2012; Mesmer-Magnus, DeChurch, & Wax, 2012).

Thus, the higher the disagreement among members about interpersonal suppression of negative emotions, the lower the likelihood of ending up in a situation of interpersonal conflict.

Exploring the possible direct effect of within-team IER variation on team relationship conflict, it is clear that variation and agreement are theoretically considered in relation to a 'team average'. In other words, agreement and disagreement can occur in teams with a high or low average of group-level interpersonal emotion regulation, expressed in four extremes values: High team-average IER and high agreement, low team-average IER and low agreement, high team-average IER and low agreement, low team-average IER and low agreement. This implies that the effect of within-team IER variation should not only be considered in isolation but also as a contextual condition that modifies the main effects of team-level IER.

8.3.2. Within-team IER variation as a boundary condition (Model A)

Previous research into team diversity brings support for the use of the variation of a focal team-level construct as a boundary condition in the relationship between the focal construct and other team processes and outcomes. Consistent with this argument, research in TMX and organisational climate, for instance, has established that the effects of average levels of these team constructs depend on the extent of variability between members (González-Romá et al., 2002; Liu et al., 2011). For example, Liu et al. (2011) found that TMX differentiation represents a boundary condition for the relationship between TMX and cohesion and team performance. Particularly, their findings show that group team member exchange relations are more likely to result in higher performance in a team with low TMX differentiation than in a team with high TMX differentiation. These results suggest that high team member quality of relationship (the focal team-level construct) may not necessarily lead to increased performance if the variation of exchange working relationships among team members is high.

Applied to the context of this thesis, when team IER levels are high on average, and the perceived team IER is similar for all members (low within-team IER variation), a stronger relationship with other constructs, such as team conflict or team performance, is expected. This because teams with complete agreement among members about the fact that they frequently regulate each other's negative emotions

make interpersonal conflict very unlikely. This, in turn, may impact on team performance according to the mediational process previously described. Also, team member agreement in terms of their individual scores would likely make team-level scores (e.g., team average) more extreme in terms of their distribution. As such, the negative effect of team IER on team relationship conflict and the positive one on team performance will be stronger when there is no variation in members' perceptions. As a consequence, the effect will be less pronounced when disagreements among members exist.

8.3.3. The moderating role of within-team antecedent and team response IER variation (Model A)

When team members perceive that antecedent-focused IER behaviours are frequently displayed by their team (e.g., team members modify some characteristics, or refocus attention from a situation that is causing negative emotions in members), its variation would attenuate the strength of the relationship with team conflict, diminishing its protective function with regard to conflict when they are high. In contrast, the negative relationship between team antecedent IER and conflict suggests that low levels of team IER are associated with higher levels of conflict. It is difficult to predict here the effect of team member variation because on the one hand, some evidence suggests that members' disagreement may make conflict even worse (Tyler & Blader, 2003), and, on the other hand, some suggests that it might be rendered less intense, because in a situation like this at least some members perceive that these actions actually are displayed by the team (Kabanoff, 1991). Nevertheless, overall, low levels of team IER would show high levels of conflict regardless of its variation. Thus, the following hypothesis is presented.

Hypothesis 12: Within-team antecedent IER variation will moderate the negative relationship between team antecedent IER and team relationship conflict, such that this relationship will be stronger when within-team antecedent IER variation is low rather than high.

In contrast, when team members disagree about how they interpersonally suppress other members' negative emotions, the level of interpersonal conflict will be lower. In other words, the positive relationship between team response-focused strategies and team relationship conflict will be lower when within-team variation IER

is high. In a situation like this, there are still at least some dissenting members who often perceive that the team does not encourage its members to suppress their negative emotions (Kabanoff, 1991). In addition, based on the concept of positive illusions (Taylor & Brown, 1994) and the cognitive processing view of conflict (e.g., Carnevale & Probst, 1998), researchers (e.g., Jehn et al., 2010) propose that variations among members concerning a negative team process imply the existence of optimistic members who differ from the rest of the team. These "positive perceivers" would facilitate positive social processes related to low interpersonal conflict. Thus, variation within a team about team response-focused IER strategies (e.g. interpersonal suppression of negative emotions) would imply the presence of members' disagreements, which would weaken the negative relationship between team response-focused strategies and team relationship conflict. Given this, the following hypothesis is presented:

Hypothesis 13: Within-team response IER variation will moderate the positive relationship between team response IER and team relationship conflict, such that this relationship will be stronger when within-team response IER variation is low rather than high.

8.3.4. Within-team IER variation, team relationship conflict, and team performance (Model A)

It is expected that within-team variation will also have an impact on team performance through its effect on team relationship conflict (Model A). Research on diversity has appealed to social categorisation theory to explain the negative effects of several attributes of team diversity on team performance (van Knippenberg and Mell, 2016). These arguments hold that disagreements among members would increase interpersonal friction and harm the minimal social integration necessary to carry out team tasks.

In this case, teams with high levels of disagreement about the extent to which team members regulate colleagues' negative emotions may suggests variations in members' perception of resource distribution, lack of coordination, and interpersonal conflict, all of them negatively associated with team performance. Previous work on shared mental models brings indirect support to these claims, for instance, showing that having team members with a shared perception or agreement about the team

increases team performance (e.g., Marks, Sabella, Burke, & Zaccaro, 2002). Also, the results of this thesis and accumulated meta-analytical evidence support a general negative relationship between team relationship conflict and performance (De Dreu & Weingart, 2003; de Wit et al., 2012).

As within-team antecedent and response IER variation have opposite moderating effects on the relationship between team IER and team relationship conflict, a corresponding differential indirect effect on team performance is expected. Specifically, when team antecedent-focused IER is high, within-team variation weakens the negative association with team conflict, increasing, as a consequence, the performance of the team. This effect follows the same line of reasoning expressed in the study by Liu et al. (2011), whose findings suggests that team member exchange relations are more likely to result in higher performance in a team with low TMX differentiation than in a team with high TMX differentiation, because of its association with team commitment. Conversely, a variation in team response-focused IER strategies implies a decrease in interpersonal demands, allowing members to focus on the task ahead, reducing conflict and increasing team performance (Jehn et al., 2010). These arguments support two mediated moderation hypotheses:

Hypothesis 14: Within-team antecedent IER variation will moderate the strength of the mediation between team antecedent IER, team relationship conflict, and team performance, such that the mediation will be stronger when within-team antecedent IER variation is low rather than high.

Hypothesis 15: Within-team response IER variation will moderate the strength of the mediation between team response IER, team relationship conflict, and team performance, such that the mediation will be stronger when within-team response IER variation is low rather than high.

8.3.5. Methods (Model A)

***Procedure and Sample*.** The data collected for Study 2 was used to conduct the analyses and test the hypotheses regarding within-team IER variation because it is the study with the largest sample size at the team level (N= 697 teams). Therefore, the procedure and sample are the same as detailed in the methods section of Study 2 (see

Chapter 6 for a detailed description of the procedure employed and sample characteristics). In summary, Study 2 was conducted in a multinational Latin American financial company in the private sector whose headquarters are located in Chile. This study utilised two surveys: One for team members (assessing team IER and team conflict) and one for team leaders (assessing team performance), with a period of two weeks between them. As was mentioned, the sample of Study 2 contained 4,659 employees in 697 teams. The average team size was 9.05 members (SD = 4.76), with the range being from a minimum value of 3 members to a maximum value of 20 members.

Measures. *Within-Team Interpersonal Emotion Regulation Variation* was measured using the standard deviation (SD) of the team IER measure, which comprises twelve items adapted from the Interpersonal Emotion Management Scale (IEMS) (Little et al., 2012). Thus, this construct reflects the extent to which team members vary in their ratings of what all team members do in their respective teams. Standard deviation has been typically used in past research to calculate the score of within-team variation (cf. Liu et al., 2011). *Within-team antecedent IER variation* corresponds to respective means of within-team standard deviation of the subscales of situation modification, attentional deployment, and cognitive change. *Within-team response IER variation* was operationalised based on means of within-team standard deviation of the response modulation subscale. Higher within-team SD represents higher within-team IER variation.

The same scales were also employed as in Study 2 to assess team relationship conflict and team performance. *Team relationship conflict* was measured using four items from the relationship conflict subscale from the Intragroup Conflict Scale developed by Jehn (1995). *Team performance* was measured by team leaders' ratings of three items from the team productivity subscale developed by Kirkman & Rosen (1999). Similar to Study 2, team member interaction frequency and team size were used as control variables. These variables were included on the assumption that the variation in team interpersonal emotion regulation might have lower effects if members frequently interact with each other and if the team is small in terms of opportunities for social interaction.

Analysis strategy. A two-step strategy was conducted in order to analyse the data. First, all variables were operationalised to reflect their respective team-level construct. As the variables reflect different composition models (Chan, 1998), their operationalisation was slightly different, according to the following procedure. Within-team IER variation constructs are based on a dispersion model, therefore the means of within-team SD were calculated to reflect this construct. Team relationship conflict is based on a referent shift consensus model, involving team members' ratings of a team-level construct. Thus, team members' scores were aggregated to reflect a team-level value. In order to justify team-level aggregation, inter-rater reliability (IRR) and agreement (IRA) analyses were conducted (Lebreton & Senter, 2008) using the same procedure described in the methods section of Study 2. Finally, as team performance was assessed using team leaders' ratings, this construct already represents a team-level score; consequently, no additional calculation was needed.

Second, hypothesis testing was conducted using regression analyses with PROCESS (Hayes, 2013), which is a macro for SPSS that allows examination of multivariate models such as mediation, moderation, and moderated-mediation. Following the guidelines of Aiken & West (1991) for testing and interpreting interactions, all continuous variables were centred before entering them in the regression equation as this reduces possible multicollinearity and helps address the interpretation of intercepts and the variance of random intercepts across groups (Hofmann & Gavin, 1998). In the case of moderation analysis, I adopted the conditional indirect model proposed by Preacher, Rucker and Hayes (2007) to test the proposal that the mediation process between team IER, team relationship conflict and team performance depends on the degree of team IER variation. Within-team antecedent IER variation and within-team response IER variation were tested in two separate models. In the models used, the indirect process described by team IER and team conflict on team performance is conditional on the moderation effect of within-team variation for the link between team IER and team relationship conflict. As mentioned, this analysis includes team size and team member interaction frequency to control for its possible influence. The slopes were calculated at +/- 1 standard deviation of the moderator (Bauer et al., 2006).

8.3.6. Results (Model A)

8.3.6.1. Reliabilities and Zero-order correlations

Table 8.1 shows means, standard deviations, and zero-order correlations for all variables in the study. Almost all zero-order correlations are statistically significant, and the values are in the expected direction. For example, within-team antecedent IER variation was positively related to team conflict and negatively related to team performance, $r = .19$, $p < .01$, and $r = .12$, $p < .01$ respectively. Means of within-team SD of antecedent and response IER reflect that there is variation within the teams as to members' team IER ratings, within-team antecedent IER variation, $\overline{X} = 0.88$, and within-team response IER variation, $\overline{X} = 1.1$.

Table 8.1. Correlation matrix: Within-team IER Variation.

	Mean	SD	1	2	3	4	5	6
1. Team performance	4.09	0.64	-					
2. Team relationship conflict	2.06	0.6	-.31**	-				
3. Team antecedent IER	3.57	0.5	.23**	-.60**	-			
4. Team response IER	2.68	0.63	-0.03	0.07	.21**	-		
5. Within-team antecedent IER variation	0.88	0.29	-.12**	.19**	-.35**	-0.01	-	
6. Within-team response IER variation	1.1	0.33	-0.01	0.01	.12**	.14**	.17**	-

Note. N = 697; * p <.05. ** p <.01.

8.3.6.2. Hypothesis testing

Hypothesis 12 stated that within-team antecedent IER variation will moderate the negative relationship between team antecedent-focused IER and team relationship conflict, such that this relationship will be stronger when within-team antecedent IER variation is low rather than high. Results (Table 8.2) showed an interaction between within-team antecedent IER variation and team antecedent-focused IER affecting team relationship conflict, $b = .23$, $SE = .11$, $p < .05$. Further examination of the conditional effect of team antecedent-focused IER on team relationship conflict

indicated that, when values of within-team antecedent IER variation were low, b = -.76, p < .01, the effect was stronger than when values of within-team antecedent IER variation were high, b = -.62, p > .01 (Figure 8.3). Thus, Hypothesis 12 was supported.

Hypothesis 13 stated that within-team response IER variation will moderate the positive relationship between team response IER and team relationship conflict, such that this relationship will be stronger when within-team IER response variation is low rather than high. Results (Table 8.2) showed a non-significant interaction between within-team response IER variation and team response-focused IER on team relationship conflict, b = -.17, SE = .09, p = .05. Thus, Hypothesis 13 was not supported.

Hypothesis 14 stated that within-team antecedent IER variation will moderate the strength of the mediation between team antecedent IER, team relationship conflict, and team performance, such that the mediation will be stronger when within-team antecedent IER variation is low rather than high. Results of conditional indirect analysis (moderated mediation, Table 8.2) showed that the interaction between within-team antecedent IER variation and team antecedent IER has a conditional indirect effect, indicating that within-team antecedent IER variation moderated the mediation process between team antecedent IER, team relationship conflict, and team performance, such that this mediation was stronger when within-team antecedent IER variation was low, b = .22, p < .05 than when within-team antecedent IER variation was high, b = .18, p < .05. Thus, Hypothesis 14 was supported.

Hypothesis 15 stated that within-team response IER variation will moderate the strength of the mediation between team response IER, team relationship conflict, and team performance, such that the mediation will be stronger when within-team response IER variation is low rather than high. Results of conditional indirect analysis (moderated mediation, Table 8.2) showed that the interaction term between within-team response IER variation and team response IER was not related to team relationship conflict, b = -.17, SE = .09, p = .05, which meant that a moderated mediation process was not possible. Thus, Hypothesis 15 was not supported.

Table 8.2. Regression Results of The Moderation Effect of Within-Team IER Variation on the Relationship between Team IER, Team Conflict, and Team Performance

	Model 1		Model 2	
Variable	Team Relationship Conflict	Team Performance	Team Relationship Conflict	Team Performance
	B (SE)	B (SE)	B (SE)	B (SE)
Intercept	3.04** (0.25)	3.75** (0.33)	4.11** (0.3)	3.29** (0.33)
Team size	-0.16 (0.11)	0.17 (0.15)	-0.16 (0.14)	0.17 (0.15)
Member interaction frequency	-0.18** (0.05)	0.04 (0.07)	-0.4** (0.06)	0.14* (0.07)
Independent variable				
Team antecedent-focused IER	-0.69** (0.04)	0.26** (0.05)		
Within-team antecedent IER variation	-0.04 (0.07)	-0.11 (0.09)		
Team response-focused IER			0.03 (0.04)	-0.03 (0.04)
Within-team response IER variation			-0.08 (0.07)	0.01 (0.08)
Interaction term				
Team ant IER X TAIERV	0.23* (0.11)	-0.14 (0.15)		
Team resp IER X TRIERV			-0.17† (0.09)	0.01 (0.1)
R2 Model	.62**	.25**	.28**	.11**
Conditional indirect effect [Bootstrap = 1000]	Low (-1SD) = .22* [.14, .31], High (+1SD) = .18* [.11, .26]		Low (-1SD) = -.03[-.06,-.00], High (+1SD) = .01 [-.04, .05]	

Note. N = 695, Unstandardized estimates. p <.05. ** p <.01. Team ant IER = Team antecedent-focused IER; TAIERV = Within-team antecedent IER variation; Team resp IER = Team response-focused IER; TRIERV = Within-team response IER variation. Model 1 corresponds to regression in which Antecedent-focused Team IER is the predictor; Model 2 corresponds to regression in which Response-focused Team IER is the predictor. Unstandardized estimates. * p <.05. ** p <.01. † = .05

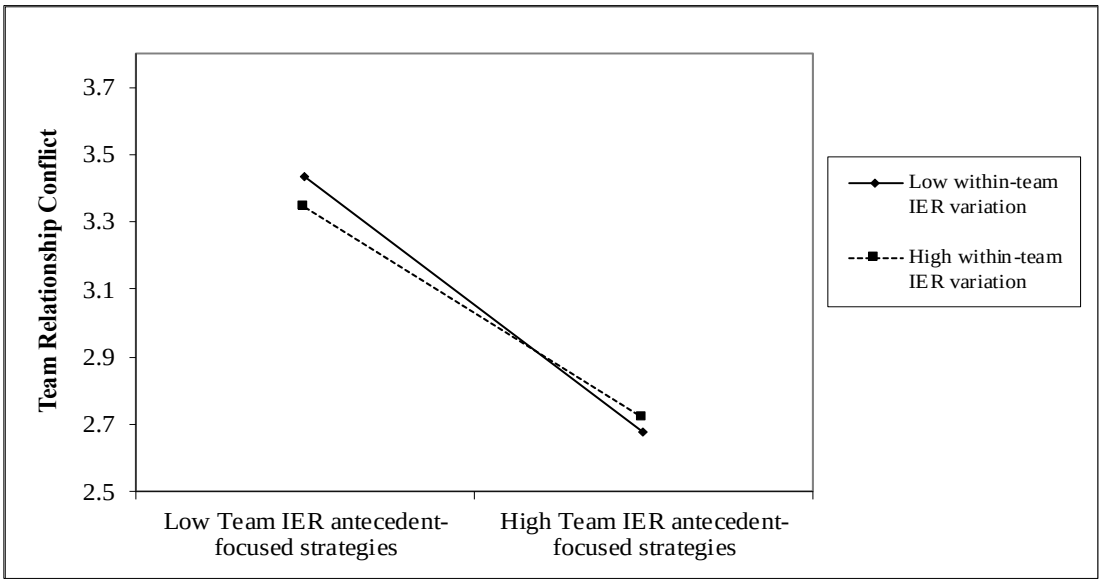


Figure 8.3. Interaction Effect of Within-Team antecedent IER Variation and Team Antecedent-focused IER on Team Relationship Conflict

8.4. Team Interpersonal Emotion Regulation Configurations (Models B and C)

In the preceding paragraphs, I have focused on how the degree of variation in IER within the team affects team relationship conflict and, in turn, team performance (Model A). However, in addition to the magnitude of within-team IER variation, the pattern of team IER might also play a critical role in the relationship between diversity in team IER, team processes, and outcomes. Team IER configurations represent the shape of heterogeneity that emerges at the team level from team members' perceptions of team interpersonal emotion regulation (González-Romá & Hernández, 2014; Kozlowski & Klein, 2000). This pattern provides information about the shape of individual unit scores.

As described in the introduction to this chapter, a number of scholars (cf. DeRue et al., 2010; González-Romá & Hernández, 2014) have acknowledged the limitations of within-unit variation indicators, such as unit standard deviation, to fully understand team diversity because they cannot communicate all of the information about the dispersion within a work unit. Cases like this are represented in Figure 8.1 (page 179), which depicts four teams with the same team average and standard deviation but different patterns of distribution. Thus, this section differs from the previous one focused on within-team IER variation, analysing team IER configurations based on the shape of the distribution of team members' scores.

Specifically, grounded on the theoretical work of DeRue et al. (2010) on distributions of team self-efficacy, this part describes four general forms of distribution (i.e. shared, minority belief, bimodal, and fragmented) that can be applied to the study of team level interpersonal emotion regulation (see Figure 8.4a-b). *Shared team IER* refers to a situation in which there exists a high level of agreement or lack of divergence among team members. *Minority belief* corresponds to a situation of diversity in which only one member or a few members differ from the rest of the team. Unlike shared configuration, minority belief can take two different forms, based on whether the person who differs has high or low levels of perceived IER strategies, namely *solo-status high team IER* and *solo-status low team IER* (Figure 8.4b). In the *solo-status high configuration*, only one member or a subset of members (a minority) perceive a high frequency of use of these strategies to regulate members negative' emotions, and the rest of the team (the majority), perceive a low prevalence of these

behaviours. Conversely, in the *solo-status low configuration*, only one or a few members perceive that these behaviours are barely performed, and everyone else considers that these behaviours are highly prevalent in the team. *Bimodal team IER* configuration corresponds to a classic in-group and out-group situation in which around half of the team consider there to be a great extent of prevalence and the other half perceive a limited presence of these interpersonal behaviours. Finally, f*ragmented team IER configuration* represents a situation of variability in which each team member has a unique perception of the extent to which other team members perform IER-related behaviours. Thus, a way to analyse the effect of team IER diversity is to consider the relationship between team IER configurations and other processes and outcomes.

Similar to what was done in the preceding section regarding within-team IER variation, in the following paragraphs, I will provide evidence that supports the relationship between each team IER configuration, team relationship conflict, and team performance. However, unlike the previous section, here I only address configurations of team antecedent-focused IER strategies. This is for two main reasons. Firstly, previous analysis at the team level revealed that only this set of strategies is negatively related to conflict, as interpersonal suppression seems to increase conflict. Thus, antecedent-focused strategies are more representative of an 'effective' regulation of negative emotions, making it more valuable to explore the probable negative effect of its distribution within the team (Webb et al., 2012). Secondly, the scant previous research into patterns of distribution has been mostly focused on variation in positive team attributes, such as team member climate perceptions, team efficacy, and LMX (DeRue et al., 2010; González-Romá & Hernández, 2014; Li & Liao, 2014). Thus, analysing team antecedent-focused IER strategies allows this research to be connected with previous studies in the field.

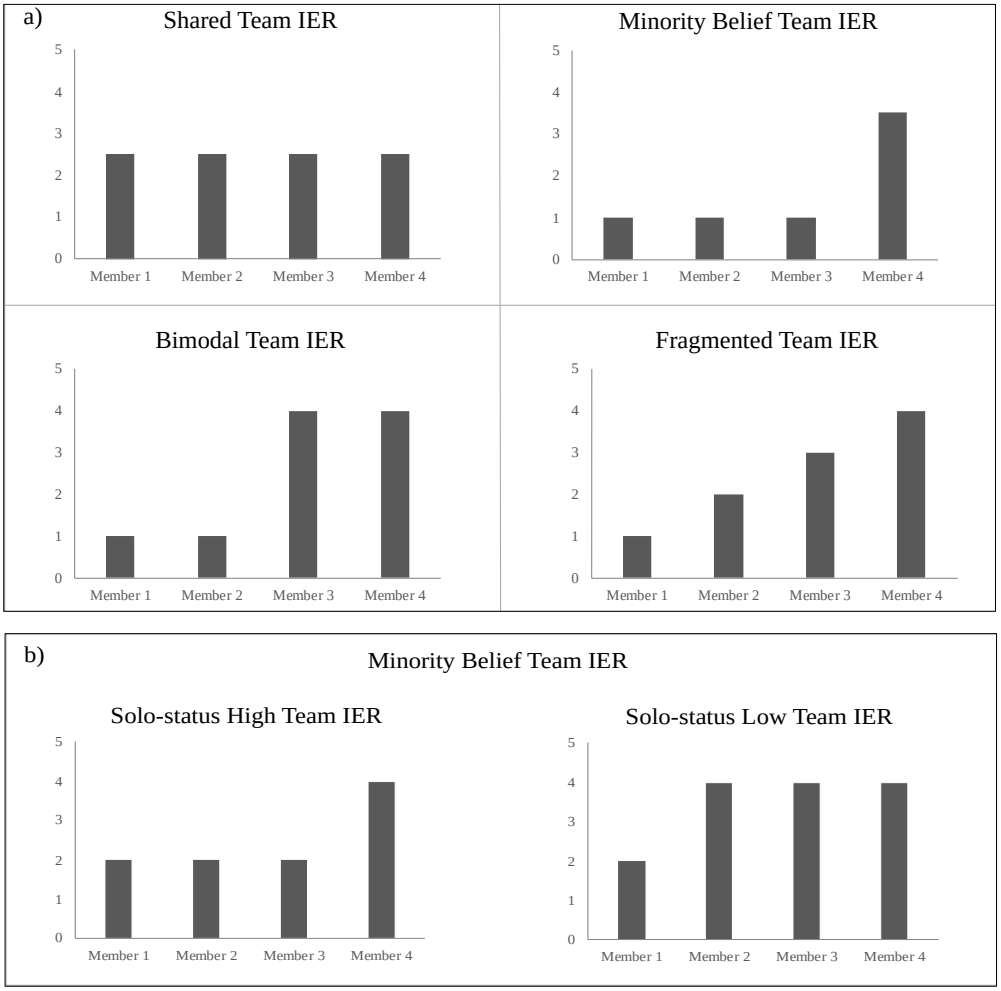


Figure 8.4. Team IER configurations. a) Team scores represent distinct forms of dispersion, shared (homogeneous) team IER, minority belief team IER, bimodal team IER, and fragmented team IER. b) Two specific forms of minority belief team IER: Solo-status high team IER and solo-status low team IER.

8.4.1. Uniform vs non-uniform distributions and team relationship conflict (Model B)

The first noticeable difference observed between the five forms of team IER configurations (i.e., shared, solo-status low, solo-status high, bimodal, and fragmented) lies in the homogeneity or heterogeneity of the pattern that they may show. In fact, the main objective of differentiating patterns of distribution is to compare team members' agreement versus disagreement (DeRue et al., 2010; González-Romá & Hernández, 2014; Li & Liao, 2014). Previous research has shown how differences in terms of categories of differentiation of a focal team-level construct can have an impact on team processes and outcomes. Particularly, González-Romá

and Hernández (2014) have shown that teams with weak dissimilarity and non-uniform patterns tended to show higher levels of task conflict and lower levels of team communication quality than teams with uniform climate patterns. Likewise, Li and Liao (2014) found that the relationship between LMX and role engagement differed between a shared LMX configuration and a fragmented LMX configuration. As team IER configurations represent different 'categories' into which teams can be classified, more than the degree of variation (e.g. represented in within-team IER variation), these relationships will be theoretically described and empirically explored based on comparisons between categories.

Shared team IER represents a pattern of uniformity, based on a very high level of agreement among team members. This represents a 'deeper' or 'clearer' form of team IER. In contrast, all the other four configurations represent non-uniform patterns, based on distinctive forms of team member disagreement. In that regard, research into diversity, grounded on social categorisation theory, proposes that as long as members' disagreements involve the formation of subgroups, members' social integration will inevitably be impaired, affecting desirable team processes and, in consequence, team outcomes (Carton & Cummings, 2012).

When social categorisation involves inter-group bias to the extent that dissimilar others are seen as a threat to a valued in-group identity, for example by changing valued elements of team or group identity, team member personal conflicts are likely to occur (Hogg & Terry, 2000). For instance, Tse et al. (2018), in their assessment of the effects of dissimilarity in LMX between team members, show that LMX differentiation disrupts interpersonal harmony through creating relational imbalance among team members, which in turn leads to emotional hostility. In fact, according to Kozlowski & Klein's (2000) theory of emergence, team member disagreement is indeed indicative of conflict or of opposing perspectives within the unit. Hence, the detrimental effect of team heterogeneity is produced by the salience of social categorisations based on comparisons among group members. In terms of this research, this would imply a scenario of variation in the perceived available resources to regulate negative emotions on the part team members, in which some members perceive a high frequency of use, compared to a low frequency as perceived by others.

In contrast, when team members shared their vision regarding the team, for example regarding the extent to which team members regulate their negative emotions, the existence of a unique social identity for the whole team is very likely (Kelly, 1993; Tanis & Postmes, 2005). This common identity will protect team members in the context of possible disagreements, and therefore facilitate beneficial processes and outcomes, such as team efficacy and trust (Lewis, 2011). This is especially important considering the fact that the shared team IER configuration represents a category in which members highly agree regarding the frequency of use of IER strategies within their team. Therefore, team members' agreements about the support delivered by team members for the management of negative emotions, such as anger, may lead to team conflict; a situation of high agreement would by definition imply less interpersonal conflict.

8.4.2. Uniform vs non-uniform distributions as a boundary condition (Model B)

Here, I propose that the team-level IER interacts with the pattern of disagreements among members, such that it will show a differential effect on conflict when the average level of team IER is high versus when it is low. This effect may be particularly noticeable in the shared team IER configuration. When team members share their vision regarding the team, the presence of a unique social identity for the whole team is very likely (Kelly, 1993; Tanis & Postmes, 2005). This common identity will protect team members from possible disagreements, such as conflict (Lewis, 2011). This argument holds true only for teams with high average levels of team IER, because they represent unity based on a positive team attribute. Thus, the negative relationship between team IER and conflict will be stronger in the shared team IER configuration than it will be in teams that have non-uniform distributions, as this implies differences in perspective or behaviour that have the potential to lead to conflict (Carton & Cummings, 2012). Therefore, non-uniform distributions will disrupt the strength of this negative relationship between team IER and conflict, presenting high levels of conflict regardless of the average level of team IER. This would be especially noticeable in the case of bimodal team IER, which represents almost by definition a situation of rival subgroups with opposing views of the team reality. Thus, I propose the following hypothesis:

Hypothesis 16: The negative relationship between team IER and team conflict will be stronger in teams with the shared team IER configuration than in teams with non-uniform configurations (i.e. solo-status low, solo-status high, bimodal, and fragmented).

8.4.3. Uniform vs non-uniform distributions, team relationship conflict, and team performance (Model B)

As with the previous section, it is expected that the moderating effect of team configurations on the relationship between team IER and team relationship conflict will extend to the performance of the team. Research has generally shown that team members who are similar to their work groups report positive attitudes largely as a result of a feeling of belonging and agreement with their colleagues (Shore et al., 2011). High team member agreement implies social integration which is associated with functional team dynamics regarding team performance, such as the presence of shared mental models among members (Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000; Mohammed, Ferzandi, & Hamilton, 2010). When team members share a common view about the team and tasks, this facilitates the team coordination and communication necessary to carry on the tasks. Thus, it is expected that teams classified as having shared team IER configuration will show better performance than those with other configurations.

In contrast, the negative effect of team IER diversity on team performance has been explained through subgroup formation, translated into an 'us-versus-them' dynamic (Van Knippenberg et al., 2004). There are several ways in which the formation of subgroups may impair team performance, either through enhancing negative dynamics within the team or by impeding the minimum necessary agreement and coordination to carry out team tasks (Chatman, Polzer, Barsade, & Neale, 1998; Hinsz, Tindale, & Vollrath, 1997). Among within-team negative dynamics, perhaps the most studied is interpersonal conflict, which has been demonstrated to be negatively correlated with team performance (De Dreu & Weingart, 2003; de Wit et al., 2012). In fact, results from team-level mediational models in the present thesis (see Chapter 7) confirm this effect. Thus, as all non-uniform configurations (i.e., solo-status low, solo-status high, bimodal, and fragmented team IER configurations)

represent situations of dispersion and, therefore, subgroup formation, it is expected that shared team IER configuration will show a stronger association with team conflict, and, as a consequence, with team performance. Hence, the presence of subgroups within a team increases interpersonal conflict, complicating the social integration, coordination, and team member agreement necessary to deliver collective team performance. Thus, when team IER is high, non-uniform configurations weaken its positive effect on performance. Therefore:

Hypothesis 17: Team IER configurations will moderate the strength of the mediation between team IER, team relationship conflict, and team performance, such that the mediation will be stronger in teams with shared team IER configuration than in teams with non-uniform configurations (i.e. solo-status low, solo-status high, bimodal, and fragmented).

8.4.4. Non-uniform distributions and team relationship conflict (Model C)

Once having compared the configurations based on their uniformity (vs non-uniformity), it is possible to compare their association with team relationship conflict and performance in terms of 'the form of the' heterogeneity. Specifically, by exploring the moderating role of non-uniform configurations in the relationship between within-team IER variation and the same mediational process, involving team relationship conflict and team performance. In other words, it is possible to explore how the degree of team member differentiation affects team conflict and, as a consequence, team performance depending on the specific form of variation.

Bimodal team IER configuration. Following the arguments related to social categorisation theory, it is expected that among all non-uniform configurations, the bimodal team IER configuration shows the strongest positive association with team relationship conflict, because it represents par excellence an 'us vs them situation', in which teams are split in two halves with opposing views (DeRue et al., 2010; Hogg & Terry, 2000; Turner & Reynolds, 2011; Van Knippenberg & Mell, 2016). Team members also form an identity based on the subgroup, feeling high levels of attachment and good relationships with colleagues they consider to be their kindred spirits. In contrast, team members show less attachment to and want to distance themselves from other members who do not share their subgroup's identity (Brewer,

Manzi, & Shaw, 1993). Thus, in teams with bimodal IER configuration where identity-based subgroups hold opposing views about key team aspects (e.g. modifying a situation that is generating negative emotions for team members or helping each other to see their problems from a different perspective) the level of team conflict should be higher than in teams where this does not occur.

Solo-status low and *solo-status high IER configurations*. These two configurations involve a situation of subgroups with a majority and a minority. Solo-status low team IER configuration refers to a situation in which only one or a cluster of members perceive low frequency of regulatory behaviours engaged in by the team, and the majority of the team perceives that they interpersonally regulate other members' negative emotions to a great extent. The opposite scenario is observed in the case of the solo-status high configuration. Research on organisational justice, appealing to an equity (vs equality) norm of resource allocation, holds that members who are in a minority perceive that when the norm of equality is threatened, this may result in uncooperative or socially undermining behaviours by themselves (Tyler & Blader, 2003). This suggests a positive effect of both solo-status team IER configurations on team relationship conflict.

Yet, this effect should be lower for the solo-status low team IER configuration due to the majority highly engaging in positive regulatory behaviours. Research into organisational justice has shown that when minority members in terms of power feel unfairly treated, the result is frustration and decreased involvement, but avoidance of conflict (Kabanoff, 1991). In contrast, in the solo-status high IER configuration the majority agree that the team barely engages in team IER behaviour to regulate teammates' negative emotions; thus, a situation of interpersonal conflict is very likely. This is supported by the literature on the underrepresentation of minorities in team decision making and fairness perceptions in resource distribution, which suggests that when the majority perceive low resource distribution, workers' negative emotions and interpersonal conflict may arise (Jackson, May, Whitney, Guzzo, & Salas, 1995; Li, Karakowsky, & Siegel, 1999).

Fragmented IER configuration. Finally, the fragmented IER configuration represents a situation of variability in which each team member differs. In a general view, this complete lack of agreement among team members might be associated with

high levels of relationship conflict. However, at the same time, this lack of agreement can represent a natural distribution in a workgroup, denoted by a more realistic scenario in relation to, for example, the unlikelihood of an entirely shared situation. This also would imply that there are not clear subgroups in the team, and previous evidence into configurations of LMX supports the notion that, even though there are disagreements among members, they are less problematic in terms of interpersonal conflict because members do not have other members with whom to form a subgroup as in the bimodal or solo-status high team IER configurations (Li & Liao, 2014). Therefore, each team IER configuration may represent a particular situation for team members within teams.

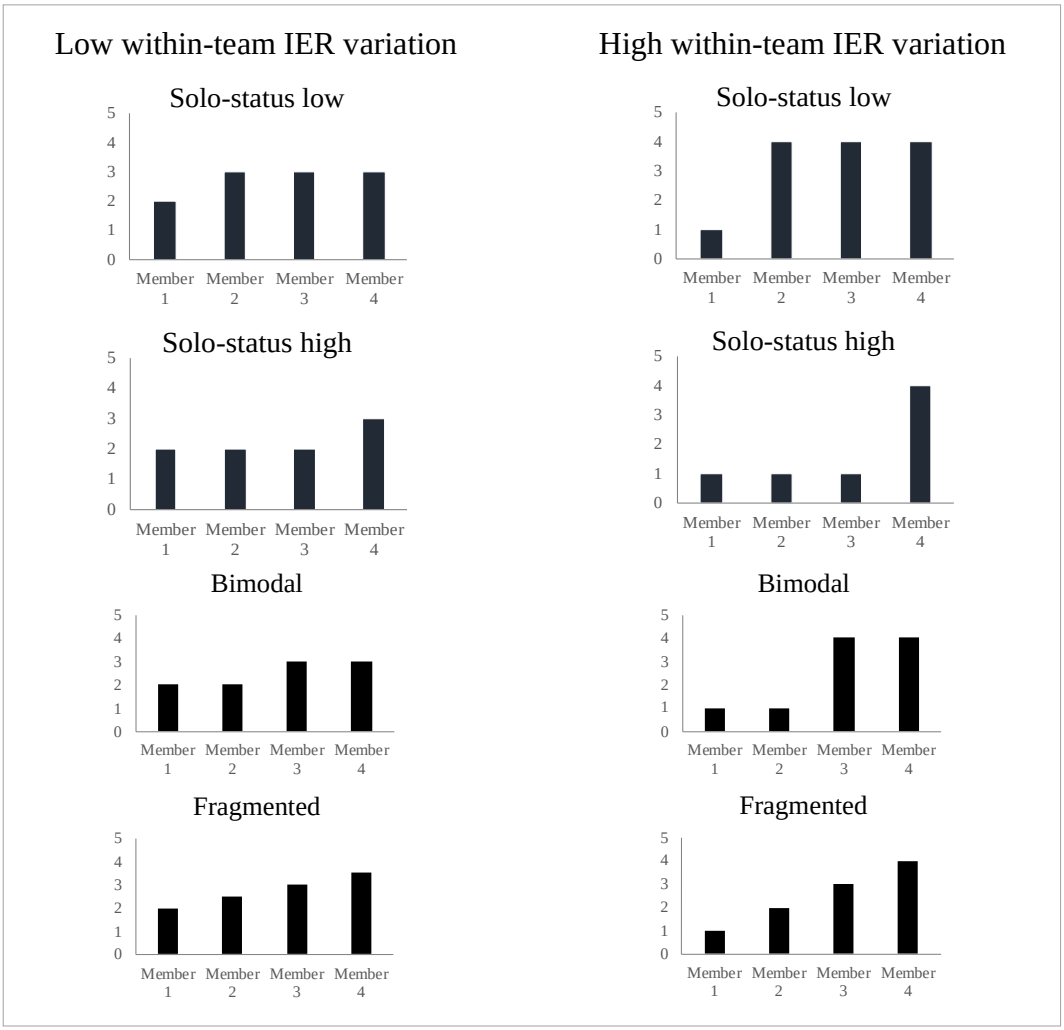


Figure 8.5. Theoretical differences in team IER configurations in relation to their level of within-team IER variation

Nevertheless, each configuration would only represent clearly its category when the within-team IER variation is extreme (see figure 8.5). This highlights the need to

examine the interaction of both forms of team IER diversity, namely within-team IER variation and team IER configurations, and how this interaction effect is related to team relationship conflict and team performance.

8.4.5. Non-uniform distributions as boundary conditions (Model C)

Bimodal vs solo-status low and solo-status high team IER configurations. These three configurations involve subgroup formation. In a context of high within-team IER variation, these configurations take extreme forms, representing two extreme opposing groups in the case of the bimodal configuration, and completely opposing scenarios for both minority belief configurations (with a majority perceiving high and low frequency of team IER behaviours respectively). As has been mentioned throughout this chapter, a bimodal configuration represents by definition an 'us vs them' situation, in which a team splits into two subgroups with opposing views (van Knippenberg et al., 2004). This opposing view among members directly implies a situation of conflict (Jehn et al., 1999), in which members may withhold information from and have difficulties working with members of the other subgroup (Sherony & Green, 2002). This situation is even more extreme when teams with high variation and bimodal distribution are considered.

Likewise, arguments developed in the previous paragraphs regarding majorities and minorities in the perception of the distribution of a resource suggest a certain degree of team conflict in both scenarios (De Dreu & West, 2001; Levine & Prislin, 2013; Sinha, Janardhanan, Greer, Conlon, & Edwards, 2016). However, as solo-status low team IER involves a majority who share a perception that team members frequently engage in actions to regulate their colleagues' negative emotions, lower general levels of conflict are expected as compared to solo-status high team IER when within-team IER variation is high. Likewise, unlike the bimodal configuration, in the solo-status high team IER configuration there is still a minority who perceive that the team regulates members' negative emotions. Therefore, whereas both configurations disrupt team performance due to detrimental subgroup formation, teams belonging to the bimodal configuration will show lower levels of team performance.

Bimodal vs fragmented team IER configurations. Whereas fragmented distributions also reflect a situation of disagreement among members, the absence of

clear subgroups suggests a less intense association with conflict. Besides, a fragmented configuration may represent a more "real" account of team dynamics in which team members differ from each other to some extent. Therefore, it is possible that the relationship between a fragmented configuration and team relationship conflict varies as regards the extent of within-team IER variation, for example, showing a negative effect on high levels and a positive effect on low levels of team antecedent-focused IER strategies as measured by the mean. Thus, it is expected that the negative effect of within-team variation on team relationship conflict will be stronger in a bimodal configuration.

Hypothesis 18: The negative relationship between within-team IER variation and team conflict will be stronger in teams with bimodal team IER configuration than in teams with solo-status low, solo-status high, and fragmented team IER configurations.

8.4.6. Non-uniform distributions, team relationship conflict, and team performance (Model C)

Subgroup formations represented by the team IER configurations can not only impair team performance, given its association with conflict (De Dreu & Weingart, 2003; de Wit et al., 2012), but can also harm positive group dynamics such as team member communication and coordination (Chatman et al., 1998; Hinsz et al., 1997). Extreme differences between the two subgroups, represented by high within-team IER variation, can take this negative effect even further. In that regard, research has shown that when co-workers form subgroups, they have a hard time working together and may experience interpersonal conflict, which may impair team performance (Sherony & Green, 2002).

Following the same rationale as previous sections, bimodal team IER configuration represents *par excellence* a situation in which the team is split into two subgroups with opposing views. Moreover, teams categorised as solo-status low configuration will show higher performance levels than those in a solo-status high configuration (Kabanoff, 1991). This because, in a context of high within-team IER variation, the solo-status low configuration necessarily implies a majority perceiving a high level of team antecedent-focused strategies (e.g. team members helping in

regulating a member's negative emotions via showing a different perspective), and dissenting members are not numerous enough to create a subgroup that greatly alters team identity and therefore positive team dynamics (De Dreu, 2007). Conversely, when within-team IER variation is high, solo-status high team IER represents a situation in which the majority of members share the perception that the team barely engages in actions to regulate members' negative emotions. Unlike these configurations, the fragmented team IER configuration represents a situation of disagreement, including specific perceived values for each member. Taken together, evidence supports the notion that in a context of high within-team variation, the bimodal team IER configuration will be the most harmful for team performance. Thus:

Hypothesis 19: Team IER configurations will moderate the strength of the mediation between within-team IER variation, team relationship conflict, and team performance, such that the mediation will be stronger in teams with bimodal team IER configuration than in teams with solo-status low, solo-status high, and fragmented team IER configurations.

8.4.7. Methods (Models B and C)

Procedure and Sample. Similar to the analysis conducted in the previous section regarding within-team IER variation, this section used the data collected for Study 2 to test the team IER configuration hypotheses because it represents the study with the largest sample size at the team level (N= 697 teams). In summary, Study 2 was conducted in a multinational Latin American financial company in the private sector whose headquarters are located in Chile. The sample of Study 2 contained 4,659 employees in 697 teams (see details in Chapter 7). The average team size was 9.05 members (SD = 4.76), with the range being from a minimum value of 3 members to a maximum value of 20 members. Under the assumption that only complete teams reflect precisely each shape of distribution, analyses were conducted using only complete teams as a sample (i.e., teams with a hundred-percent response rate, N = 309). Team IER configurations represent the shape of the distribution of team members' scores within a team, taking four general patterns (i.e. shared, minority belief, bimodal, and fragmented). Hence, only complete teams reliably reflect these forms because the addition or removal of just one or more team members may

completely change the overall pattern. Imagine the case where adding a member to a shared configuration may turn it into either a solo-status low or solo-status high one, depending on the frequency of team IER that this member may perceive. Therefore, the average team size for those teams was 5.67 members (SD = 3.30), with the range being from a minimum of 3 members to a maximum of 20 members.

Measures. *Team Interpersonal Emotion Regulation configurations* were operationalised, creating categories based on the same scale used in the team-level analysis of this thesis, namely, a twelve-item scale adapted from the Interpersonal Emotion Management Scale (IEMS) developed by (Little et al., 2012). Categories were created considering only antecedent-focused strategy subscales. For a detailed description see Chapter 7. Team IER configurations (i.e. shared, solo-status low, solo-status high, bimodal, and fragmented) were created following the procedure of DeRue et al. (2010) using the four moments of the distribution, namely mean, SD, skewness, and kurtosis of team IER scale. Skewness represents the degree of asymmetry of a distribution around its mean. In a negative skewness, the frequency scores are clustered to the right of the distribution. Conversely, positive skewness indicates a distribution in which the frequency scores are clustered to the left and the tail extends to more positive values (Brown, 1997). In order to create non-uniform distributions (i.e. solo-status low, solo-status high, bimodal, and fragmented) I used Seo and colleagues' (2017) approach, based in Latent Profile Analysis (LPA; described in detail below). This technique avoids the potential error related to manually classifying a team given a certain null distribution that can be obtained using an r_{WG} approach (DeRue et al., 2010; Li & Liao, 2014). However, it has the limitation of being unable to detect a shared (uniform) configuration. Therefore, as the two approaches are not incompatible, I used the r_{WG} approach (DeRue et al., 2010; Li & Liao, 2014) to identify teams with a shared configuration, and LPA to identify all other non-uniform configurations.

Specifically, teams were classified into non-uniform distributions (solo-status low, solo-status high, bimodal, and fragmented) following the procedure developed by Seo et al. (2017) using LPA, based on the antecedent-focused IER mean, SD, skewness, and kurtosis. The two forms of solo-status configuration can be examined by measures of skewness, where a positive skewness indicates a solo-status high and a negative skewness indicates a solo-status low. Kurtosis refers to the relative

peakedness or flatness of a distribution compared to the normal distribution. Positive kurtosis (leptokurtic) is a heavy-tailed distribution and tends to be more pointed than the normal distribution. Negative kurtosis (platykurtic) is a thin-tailed distribution and tends to be flatter than the normal distribution (Brown, 1997). Fragmented and bimodal configurations can be detected by high and very high values of kurtosis respectively (DeRue et al., 2010).

Teams were classified in the shared configuration using the r_{WG} approach (DeRue et al., 2010; Li & Liao, 2014). This approach consists in comparing team observed distributions (from the data) using values of r_{WG} from different theoretical null distributions (e.g., slightly skewed, heavily skewed, normal, uniform, etc.). Thus, "If the r_{WG} value is high, the observed data refutes the null distribution (whatever form that is), but if the r_{WG} value is low, the observed distribution matches the null distribution (whatever form that is)" (DeRue et al., 2010, p. 32). Lebreton & Senter (2008) offer the details of the variance and probability of occurrence for each distribution on a 5-point Likert scale (p. 832). As the shared team IER corresponds to a situation in which there exists a complete agreement or lack of variability among team members, teams can be classified as this configuration if and only if their r_{WG} values are high (i.e., greater than the conventional cut off value of .70), and refute all null distributions.

The same scales were employed to assess team relationship conflict and team performance. Similar to Study 2, team size was used as a control variable, on the assumption that the variation in team interpersonal emotion regulation might have lesser effects if the team is small in terms of opportunities for social interaction.

Analysis strategy. A three-step strategy was conducted in order to analyse the data. First, team IER configurations were identified following the procedure described above for uniform and non-uniform configurations (DeRue et al., 2010; Li & Liao, 2014; Seo et al., 2017). Second, as team relationship conflict represents a team-level construct measured by team members ratings, team members scores were aggregated.

Third, hypotheses testing was conducted using regression analyses with PROCESS (Hayes, 2013), which is a macro for SPSS that allows examination of multivariate models such as mediation, moderation, and moderated-mediation. Following the guidelines of Aiken & West (1991) for testing and interpreting

interactions, all continuous variables were centred before entering them in the regression equation as this reduces possible multicollinearity and helps address the interpretation of intercepts and the variance of random intercepts across groups (Hofmann & Gavin, 1998). Team relationship conflict and team performance were used as the dependent variable in individual models. Regarding the moderating role of team IER configurations, all configurations were dummy coded because of their categorical nature, thus, n-1 dummy codes were included and one configuration treated as the reference group. According to Cohen, Cohen, West, & Aiken (2013), the regression coefficients for the dummy codes' variables in the regression equation and their significance tests represent a comparison of the mean of one of the groups with the mean of the reference group.

I followed the recommendations of Hayes & Montoya (2017) to test and interpret interaction effects involving a multi-categorical variable. Particularly, four models were estimated: Models 1 and 2 represent the direct effects of the predictor and moderator respectively on the dependent variable (i.e. team relationship conflict and team performance). Models 3 and 4 show the extent to which the effect of the predictor on the dependent variable differs between each team IER configuration (e.g. using n-1 dummy codes and a category as reference group). This analysis also includes team size to control for its possible influence. The indirect effects of the moderated mediation models were calculated using 95% confidence intervals (CIs) with 1,000 bootstrap samples following difference test procedures for moderated mediation as outlined by Edwards and Lambert (2007). Consistent with this approach and previous research (e.g. Seo et al., 2017), one-tailed tests of significance were used in the analyses to test the hypotheses which were directional.

8.4.8. Results (Models B and C)

8.4.8.1. Latent Profile Analysis (LPA)

Table 8.3 shows the fit indices of LPA models. Based on the theoretical assumptions presented above, four general configurations were expected: solo-status high, solo-status low, bimodal, and fragmented. Shared team IER configuration was not expected due to its being very improbable that in a team, all team members have the exact same score. In fact, only one of the 697 teams present in this study had an

absolutely shared team configuration. This result confirms the use of the r_{WG} approach (DeRue et al., 2010; Li & Liao, 2014) to classifying teams in this category (details below).

Table 8.3. Fit Indices for Latent Profile Analyses (LPA)

LPA models	AIC	BIC	SABIC	Entropy	BLRT
1-Profile					
2-Profile	5092.088	5150.368	5109.093	0.548	-2591.924
3-Profile	4874.702	4955.398	4898.248	0.84	-2533.044
4-Profile	4811.716	4914.828	4841.803	0.791	-2419.351
5-Profile	**4761.256**	**4886.783**	**4797.883**	**0.821**	**-2382.858**
6-Profile	4715.844	4863.786	4759.011	0.803	-2352.628
7-Profile	4666.451	4836.809	4716.159	0.812	-2315.727(*)

Note. AIC = Akaike information criterion. BIC = Bayesian information criterion. SABIC = sample-size adjusted BIC. Entropy = probability of membership for each group. BLRT = Bootstrap Likelihood Ratio Test, a parametric LRT test that adopts resampling methods

In order to choose the final number of classes, the analysis should consider the theoretical confirmation of the profile model, the nature of the groups, and the interpretation of goodness-of-fit indices and tests of statistical significance (Marsh, Lüdtke, Trautwein, & Morin, 2009). In order to select the best solution, five relative goodness-of-fit indices were used: the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), sample-size adjusted BIC (SABIC), entropy indicator, and Bootstrap Likelihood Ratio Test. Lower Bayesian Information Criterion (BIC) and Sample-size adjusted BIC (SABIC) values suggest a better fitting model. The entropy is a standardized index of model-based classification accuracy, with higher values indicating more precise assignment of individuals to latent profiles. Previous research suggests that entropy values exceeding .80 represent a good classification (Muthén, 2004). BLRT is helpful when comparing models, as BLRT compares a k-profile model with a k-1-profile model. Thus, a significant BLRT indicates that the k-1-profile model should be rejected in favour of a k-profile model. Although BLRT is helpful in ruling out models, other goodness of fit indices, in combination with the BLRT, should be considered to select a final model along with theoretical conformity and parsimony (Seo et al., 2017).

Goodness-of-fit indices supported a 5, 6, and 7-configuration model, rather than the original 4-configuration model proposed (table 8.4). Similar to Seo et al., (2017) 5, 6, and 7-class models identify solo-status high, solo-status low, and bimodal

configurations, as well as differences in the number of classes of fragmented shapes. Therefore, a 5-configuration model was selected because it represents a more parsimonious solution in relation to the theoretically expected configurations, including two forms of fragmented configuration. Table 8.4 depicts the average posterior probabilities of profile membership for the 5-configuration model ranging from .87 to .95, which suggests distinctive and explicit profiles (Morin, Morizot, Boudrias, & Madore, 2011).

Table 8.4. Classification Probabilities for the Most Likely Latent Class Membership

Profile	n	1	2	3	4	5
Profile 1 - Bimodal	23	**0.87**	0.072	0	0	0.059
Profile 2 - Solo-status low	62	0.015	**0.878**	0	0	0.071
Profile 3 - Solo-status high	78	0	0	**0.945**	0.055	0
Profile 4 - Fragmented A	190	0.029	0.099	0.016	**0.855**	0.001
Profile 5 - Fragmented B	344	0	0.082	0	0	**0.918**

Note. N = 697 teams, n represent the number of teams in each category. Posterior probabilities are the probability that a group belongs to the assigned profile. The average posterior probabilities (bold values) are associated with the profiles to which groups were assigned.

8.4.8.2. *Team IER configurations*

Table 8.5 summarises the descriptive statistics for the five team IER configurations. As can be seen, all configurations shared similar mean and SD values. These findings corroborate the arguments elaborated in previous sections regarding the need to use the shape of the distribution to give a more precise account of team diversity (DeRue et al., 2010; González-Romá & Hernández, 2014). Also, teams are disproportionately distributed across the different categories, the fragmented configurations being those with larger sample sizes. This is not surprising given the arguments discussed in previous paragraphs related to this category: it may represent a more realistic scenario in terms of group uniformity/non-uniformity. Likewise, skewness and kurtosis values provide information to distinguish the two forms of fragmented configuration. Fragmented A configuration shows higher negative skewness and positive kurtosis compared to Fragmented B configuration, which shows skewness values close to zero and negative kurtosis. This means that Fragmented A configuration represents a form with an uneven and flatter pattern, having more values of high frequency of strategies (i.e., more similar to solo-status

low team IER configuration). Fragmented B configuration also represents a heterogeneous pattern, but, in contrast, shows values concentrated in different sections of the distributions (i.e. more similar to a bimodal configuration).

Table 8.5. Descriptive Statistics for Five IER Antecedent-focused Configurations

Profile	n	Mean	SD	Skw	Kur
Profile 1 - Bimodal	23	3.62	0.547	-0.08	-4.29
Profile 2 - Solo-status low	62	3.60	0.733	-1.75	3.76
Profile 3 - Solo-status high	78	3.68	0.547	1.38	2.29
Profile 4 - Fragmented A	190	3.52	0.844	-1.01	1.04
Profile 5 - Fragmented B	343	3.56	0.742	-0.03	-0.81

Note. N = 697, n represents the number of teams in each category. Mean = corresponds to average values of team IER. SD = Standard Deviation. Skw = Skewness. Kur = Kurtosis

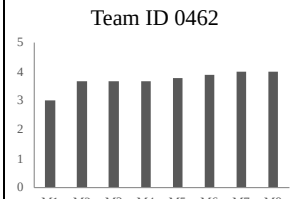
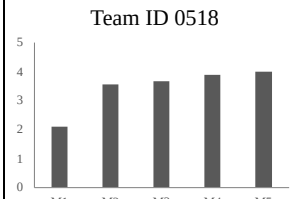
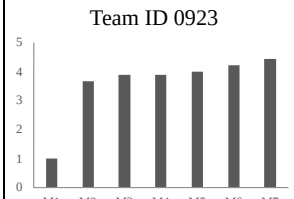
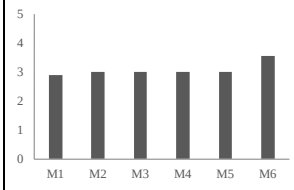
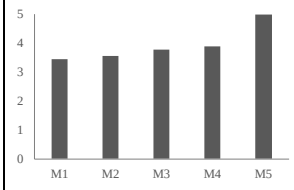
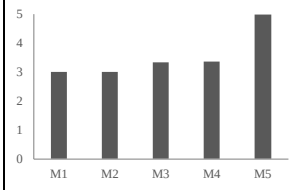
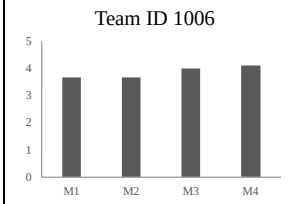
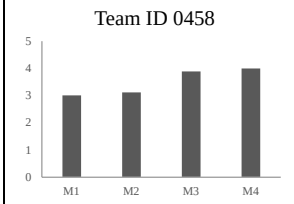
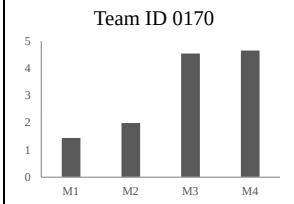
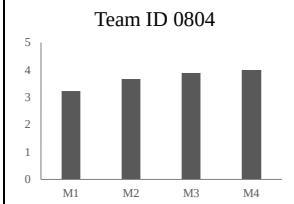
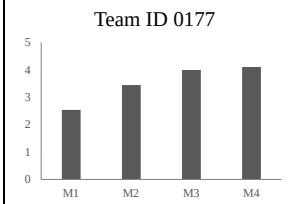
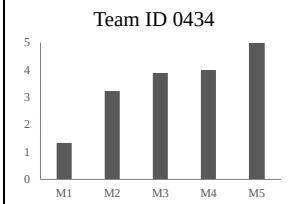
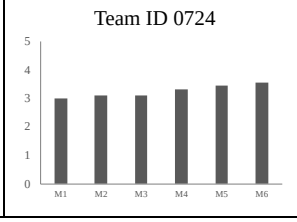
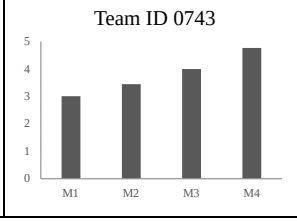
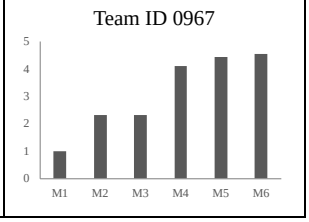
8.4.8.3. Team IER non-uniform configurations

In order to visually confirm the configurations, specific team IER shapes were examined. Table 8.6 provides representative teams from the dataset for each configuration and at three different levels of IER diversity (low, medium, and high) and provides descriptive statistics for each group. As seen in Table 8.6, Team 0170 represents a bimodal team IER configuration, showing 2 team members that perceive a great prevalence and two members perceiving a limited amount of these interpersonal behaviours in their team. Regarding solo-status-high and solo-status low team IER configurations, Team 0923 and Team 0009 clearly illustrate a situation of a majority of members showing agreement with regard to a high or low-frequency of use of strategies to regulate team member negative emotions by the team. Finally, Teams 0434 and 0967 provide visual confirmation of the differences between the forms of fragmented configurations, both showing an uneven pattern but in one case with team members' scores grouped in terms of high frequency (Fragmented A), versus a distribution with distinctive subgroups (Fragmented B).

These results confirm the fact of variation within each team IER configuration (i.e. solo-status low, solo-status high, bimodal, or fragmented). For example, teams 0462 and 0923 in solo-status low, and teams 1006 and 0170 in bimodal IER configuration, represent a completely different situation in terms of within-team IER variation, the one with almost a shared configuration, the other with a quite distinctive and noticeable shape. Thus, there is empirical justification for the study of the

interaction effect between within-team IER variation and team IER configurations proposed in Hypotheses 18 and 19.

Table 8.6. Magnitude of Team IER Configuration and Visual Representation at low, medium, and high Variation Values.

	Low variation				Medium variation				High variation			
	Mean	SD	Skw	Kur	Mean	SD	Skw	Kur	Mean	SD	Skw	Kur
Solo-status low	3.07	0.24	2.25	5.36	3.93	0.62	1.80	3.49	2.76	1.28	0.93	2.21
Solo-status high	3.71	0.32	-1.75	3.90	3.44	0.77	-1.94	3.99	3.59	1.17	-2.39	6.01
Bimodal	3.86	0.23	0.20	-4.86	3.50	0.52	0	-5.55	3.17	1.68	-0.09	-5.44
Fragmented A	3.69	0.34	-1.14	0.76	3.53	0.71	-1.14	0.33	3.49	1.36	-1.05	1.77
Fragmented B	3.26	0.22	0.25	-1.83	3.81	0.77	0.53	-0.63	3.13	1.45	-0.45	-1.61
Solo-status low (N = 62)												
Solo-status high (N = 78)												
Bimodal (N = 23)												
Fragmented A (N = 190)												
Fragmented B (N = 344)												

Note. N = 697, N represents the number of teams in each category. Mean = corresponds to average values of team IER. SD = Standard Deviation. Skw = Skewness. Kur = Kurtosis.

8.4.8.4. Team IER uniform configuration

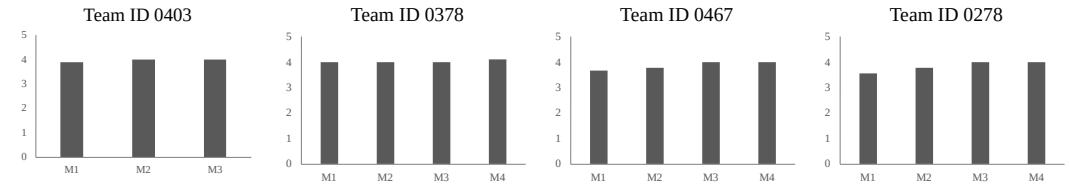
After the whole sample of teams was classified for the non-uniform categories using the Latent Profile Analysis (LPA) approach (Seo et al., 2017), the r_{WG} approach (DeRue et al., 2010; Li & Liao, 2014) was conducted in order to find teams with a shared configuration. This order in the procedure was selected for three reasons. First, the two approaches are not incompatible, thus they can be used in combination to find both uniform and non-uniform categories. Second, similar to exploratory factor analysis, LPA is sensitive to the data available to conduct the analysis, hence it seems more appropriate to include all teams first and then reclassify those with a shared configuration. This is especially significant considering that only one team has a complete level of agreement. Third, LPA is a more precise approach, involving the confirmation of a theorised set of classes, and eliminates decisions by researchers regarding the null distribution, detection of a bimodal distribution, and the cut-off value used to indicate a rejection of the null distribution (Seo et al., 2017, p. 7). Therefore, given the large sample size at the team-level (N = 697), LPA ensures a more accurate classification of teams.

As mentioned above, the r_{WG} approach (DeRue et al., 2010; Li & Liao, 2014) consists in comparing observed distributions of team data using values of r_{WG} from different theoretical null distributions (e.g., slight skewed, heavily skewed, normal, uniform, etc.). If the r_{WG} value in a given team is high, the observed data refutes the null distribution (DeRue et al., 2010, p. 32). Lebreton & Senter (2008) offer details of the variance and probability of occurrence for highly skewed, normal, and uniform distributions on a 5-point Likert scale (p. 832) and Li and Liao (2014) suggest a way to identify a bimodal null distribution using r_{WG}, using the formula described by James, Demaree, and Wolf (1984). As the shared team IER configuration corresponds to a situation in which there exists a complete agreement or lack of variability among team members, teams can be classified into this configuration if and only if their r_{WG} values are high (i.e. greater than the conventional cut-off value of .70) and refute all null distributions. Out of all teams, only 19 team refute all null distributions, representing teams with high levels of agreement regardless of the distribution with which they are compared. Table 8.7 shows the number of teams now classified into the shared configuration and specific examples of teams for each configuration.

Table 8.7. Teams Classified as Shared Team IER Configuration post r_{WG} Approach

	N previous	N after	%	Cu. %	Team ID
Shared	1	19	2.73%	2.73%	-
Solo-status low	62	57	8.18%	10.90%	e.g., 0403
Solo-status high	78	71	10.19%	21.09%	e.g., 0378
Bimodal	23	22	3.16%	24.25%	e.g., 0467
Fragmented A	190	190	27.26%	51.51%	-
Fragmented B	343	338	48.49%	100.00%	e.g., 0278

Visualisation of teams classified as shared team IER



Note. N = 697. N previous and N after = the number of teams previous to and after the r_{WG} procedure was conducted respectively. % = percentage of teams of each category. Cu. % = Cumulative percentage of each category. Team ID represents the codes of teams in the sample.

Table 8.8 shows the final number of teams in each IER configuration corresponding to the complete teams, namely, the teams in which all members reported their assessment of team reality.

Table 8.8. Team IER Configurations, Number of Teams Per Category Using Only Teams with Complete Response Rate

	N	%	Cu. %
Shared	10	3.24%	3.24%
Solo-status low	23	7.44%	10.68%
Solo-status high	33	10.68%	21.36%
Bimodal	11	3.56%	24.92%
Fragmented A	96	31.07%	55.99%
Fragmented B	136	44.01%	100.00%

Note. N = 309. N = the number of teams per category. % = percentage of teams of each category. Cu. % = Cumulative percentage of each category. Team ID represents the codes of teams in the sample.

8.4.8.5. Reliabilities and Zero-order correlations

Table 8.9 shows means, standard deviations, and zero-order correlations for all variables in the study. Almost all team-level direct correlations are statistically significant, and the values are in the expected direction. Regarding team IER configurations, none were significantly related to team conflict or performance.

Table 8.9. Correlation Matrix Team IER configurations Study

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Team performance	4.11	.61	-									
2. Team relationship conflict	1.99	.62	-.35**	-								
3. Team antecedent IER	3.57	.50	.23**	-.62**	-							
4. Team antecedent IER variation (SD)	.86	.30	.01	.05	-.24**	-						
5. Shared team IER [a]	.03	.18	-.09	-.01	0.01	-.41**	-					
6. Solo-status low team IER [a]	.07	.26	.02	-.03	0.03	-.04	-.05	-				
7. Solo-status high team IER [a]	.11	.31	.05	.11	-0.06	-.13*	-.06	-.10	-			
8. Bimodal team IER [a]	.04	.19	-.04	.06	0.03	-.13*	-.04	-.05	-.07	-		
9. Fragmented A team IER [a]	.31	.46	-.09	.07	-0.13*	.31**	-.12*	-.19**	-.23**	-.13*	-	
10. Fragmented B team IER [a]	0.44	0.50	0.10	-0.13*	0.13*	0.01	-.16**	-.25**	-.31**	-.17**	-.60**	-

Note. N = 309; * p <.05. ** p <.01. [a] Represent dummy codes of team IER configurations

8.4.8.6. Hypothesis testing (Models B and C)

Uniform vs non-uniform distributions (Model B). Hypothesis 16 stated that the negative relationship between team IER and team conflict would be stronger in teams with shared team IER configuration than in teams with non-uniform configurations. The results of the regression analyses using team conflict as dependent variable are provided in Table 8.10. Models 1 and 2 represent the direct effects of team IER and team IER configurations on team relationship conflict respectively. The results show that team IER is negatively and significantly related to team conflict, $b = -.83$, $p < .01$. Model 2 shows the main effect of the team IER configurations with the shared configuration serving as the reference group and the direct effects of configurations, in which only the bimodal configuration is significantly different compared with the shared configuration, $b = -.41$, $p < .05$.

Model 3 show the results of categorical moderation (Table 8.10), the shared team IER configuration serves as the reference group, and, therefore, regression coefficients for the dummy codes compare each configuration against the shared team IER configuration. The main effect of team IER on team relationship conflict in the shared team IER configuration is represented by the regression coefficient of team IER, $b = -1.11$, $p > .01$. Thus, team IER has a negative and significant effect on team relationship conflict in the shared team IER configuration. As can be seen in Model 3, the regression coefficient for the interactive effect between team IER and the dummy variable contrasting the shared team IER configuration and the bimodal IER configuration (i.e. the reference group of Model 3) is non-significant, $b = .82$, $p > .05$.

This implies that the main effect of team IER on team relationship conflict in the shared team IER configuration is not statistically different from the main effect in the bimodal team IER configuration. These results are complemented by Model 4, in which the bimodal configuration is the referent group, and no significant effects are observed (Table 8.10). In contrast, as can be seen in Model 3, the regression coefficient for the interactive effect between team IER and the dummy variable contrasting the shared and the Fragmented B team IER configuration (i.e. the reference group of Model 3) is significant, $b = 0.41$, $p < .05$. This implies that the main effect of team IER on team relationship conflict in the shared team IER configuration is statistically different from the main effect in the Fragmented B team IER configuration. The nature

of the interaction between within-team IER variation and team IER configurations is plotted in Figure 8.6, which shows the increase or decrease in team relationship conflict in high and low values of team IER for the five team IER configurations. As Figure 8.6 shows, the relationship is negative and stronger for shared team IER, $b = -1.10$, $p < .05$, than for all other configurations. In addition, the slope for bimodal team IER configuration is negative and no significant, $b = -.28$, $p > .05$. Thus, Hypothesis 16 was partially supported, in the sense that the negative effect is stronger for the shared team IER configuration and the association between team IER and relationship conflict was non-significant for the bimodal team IER configuration.

Hypothesis 17 stated that team IER configurations would moderate the strength of the mediation between team IER, team relationship conflict, and team performance, such that the mediation would be stronger in teams with shared team IER configuration than in teams with non-uniform configurations (i.e. solo-status low, solo-status high, bimodal, and fragmented). Model 5 (Table 8.10) shows the results for team performance when the shared configuration was the referent. As can be seen, team relationship conflict is negatively and significantly related to team performance $b = -.33$, $p > .01$. In order to confirm moderated mediation effect, difference tests were conducted following the recommendations of Edwards and Lambert (2007). As shown in Table 8.11, results from 1,000 bootstrap samples demonstrated that the indirect effect of the shared team IER configuration is significantly different when compared with the bimodal configuration (95% CI [-.21, -.04]). However, the shared team IER configuration is not significantly different when compared with the other non-uniform configurations (e.g., solo-status low, solo-status high, and fragmented team IER configurations). Thus, Hypothesis 17 was partially supported, in the sense that the mediation was stronger in teams with the shared team IER configuration, but only compared to the bimodal team IER configuration.

Table 8.10. Regression Results of The Mediated Moderation Effect of Team IER Configurations on The Relationship Between Team IER and Team Conflict

	Team Relationship Conflict				Team Performance
Variables	Model 1 B (SE)	Model 2 B (SE)	Model 3 Shared TIER B (SE)	Model 4 Bimodal TIER B (SE)	Model 5 Shared TIER B (SE)
Intercept	5.01** (0.23)	4.81** (0.25)	5.83** (0.61)	4.39** (1.10)	3.84** (0.82)
Team size	0.03** (0.01)	0.03** (0.01)	0.03** (0.01)	0.03** (0.01)	-0.01 (0.01)
Within team IER variation (SD)	-0.26** (0.09)	-0.28* (0.11)	-0.24* (0.11)	-0.12* (0.08)	-0.01 (0.13)
Independent variable					
Team IER	-0.83** (0.06)	-0.82** (0.06)	-1.11** (0.17)	-0.67* (0.30)	0.18 (0.21)
Within-team IER conf. dummy variables					
Shared TIER				1.12 (1.23)	
SS low TIER		0.12 (0.19)	-1.23 (1.6)	0.08 (1.19)	-0.86 (1.90)
SS high TIER		0.32 (0.18)	-0.49 (0.79)	0.84 (1.14)	1.75 (0.94)
Bimodal TIER		0.41* (0.21)	-2.60 (2.52)		2.15 (2.99)
Fragmented A		0.19 (0.18)	-0.80 (0.71)	0.43 (1.11)	0.63 (0.85)
Fragmented B		0.11 (0.17)	-1.39 (0.71)	-0.02 (1.10)	1.04 (0.84)
Interactions terms within-team IER variation					
TIER X Shared TIER				-0.35 (0.33)	
TIER X SS low TIER			0.38 (0.44)	-0.04 (0.33)	0.33 (0.52)
TIER X SS high TIER			0.21 (0.22)	-0.22 (0.31)	-0.36 (0.26)
TIER X Bimodal TIER			0.82 (0.69)		-0.52 (0.82)
TIER X Fragmented A			0.27 (0.19)	-0.14 (0.30)	-0.09 (0.23)
TIER X Fragmented B			0.41* (0.19)	-0.02 (0.30)	-0.18 (0.23)
Mediator Variable					
Team Relationship Conflict					-0.33** (0.07)
R2			.56	.43	.13

Note. N = 309 teams (only 100% response rate); Team IER (TIER) = Team Interpersonal Emotion Regulation; Shared TIER = shared team IER; SS low TIER = Solo-status low team IER; SS high TIER = Solo-status high team IER; Bimodal TIER = Bimodal team IER. Shared IER configuration is reference category for Models 2 and 3; Bimodal is reference category for Model 4.
Unstandardized estimates. * p <.05. ** p <.01.

Table 8.11. Moderated Mediation Test Results for Indirect Effects of Team IER Variation on Team Performance

Indirect effect of team IER variation on team performance (via team relationship conflict)	Estimate	95% CIs
Shared vs Bimodal team IER configuration		
Shared team IER configuration	0.34	[0.188, 0.54]
Bimodal team IER configuration	0.41	[0.243, 0.776]
Solo-status low team IER configuration	0.39	[0.177, 0.743]
Solo-status high team IER configuration	0.35	[0.123, 0.67]
Fragmented A team IER configuration	0.36	[0.164, 0.639]
Fragmented B team IER configuration	0.40	[0.193, 0.668]
Differences - Bimodal	-0.07	[-0.211, -0.038]
Differences - Solo-status low	-0.05	[-0.147, 0.082]
Differences - Solo-status high	-0.01	[-0.112, 0.14]
Differences - Fragmented A	-0.02	[-0.107, 0.048]
Differences - Fragmented B	-0.06	[-0.125, 0.004]

Note. N = 299. Bias-corrected confidence intervals (CIs) using 1,000 bootstrap samples following procedures for moderated mediation outlined by Edwards and Lambert (2007). One-tailed test.

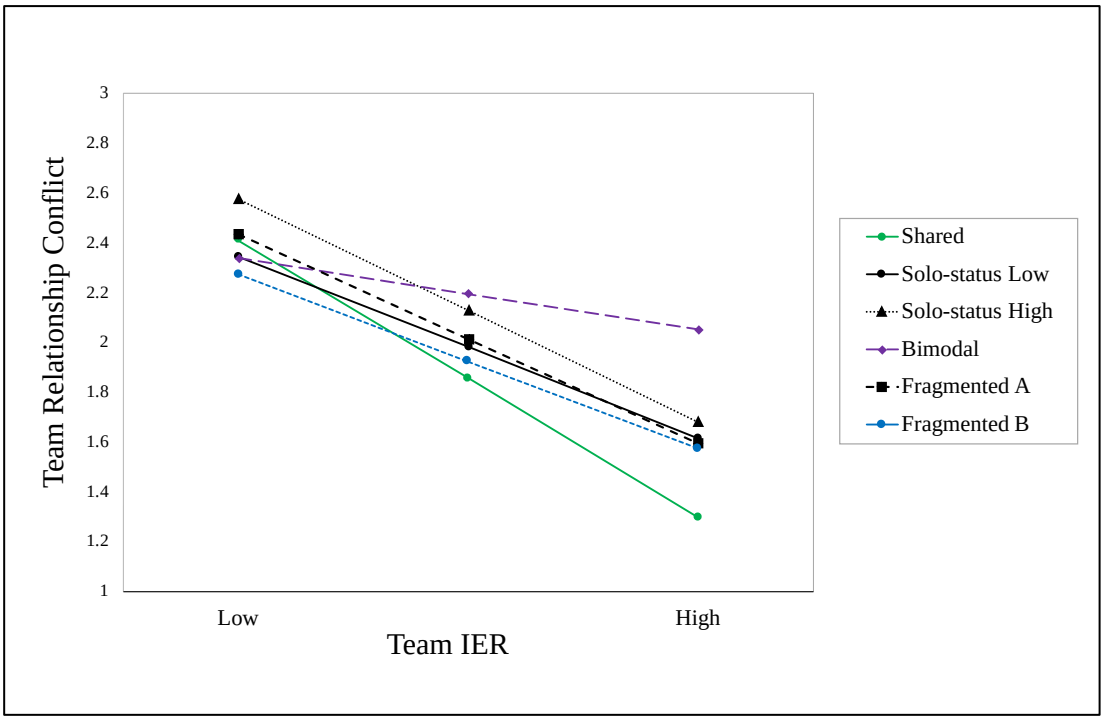


Figure 8.6. Interaction Effect of Team IER and Within-team response IER on Team Relationship Conflict

Non-uniform team IER configurations (Model C). Hypothesis 18 stated that the negative relationship between within-team IER variation and team conflict would be stronger in teams with bimodal team IER configuration than in teams with solo-status low, solo-status high and fragmented team IER configurations. The results of the regression analyses are provided in Table 8.12. Models 1 and 2 represent the direct effects of within-team IER variation and team IER configurations respectively on team relationship conflict. The results show that within-team variation is negatively and significantly related to team conflict, $b = -.26$, $p < .05$. Model 2 shows the main effect of the team IER configurations with the bimodal configuration serving as the reference group. As shown in Model 2, only Fragmented B is significantly different compared with the bimodal configuration, $b = -.23$, $p < .05$.

In Model 3 (Table 8.12), the bimodal team IER configuration serves as the reference group and therefore, regression coefficients for the dummy codes compare each configuration against the bimodal team IER configuration. The main effect of within-team IER variation on team relationship conflict in the bimodal team IER configuration is represented by the regression coefficient of within-team IER variation, $b = -.34$, $p > .05$. Thus, within-team IER variation has a negative and non-significant effect on team relationship conflict in the bimodal team IER configuration. As can be seen in Model 3, the regression coefficients for the interactive effect between within-team IER variation and the dummy variable representing the bimodal and other non-uniform team IER configurations are also non-significant. This implies that the main effect of within-team IER variation on team relationship conflict in the bimodal team IER configuration is not statistically different from the main effect in fragmented team IER configurations. These results are complemented by Model 4, in which the solo-status low team IER configuration is the referent group (Table 8.12). As can be seen in Model 4, the regression coefficient for the interactive effect between within-team IER variation and the dummy variable contrasting the solo-status low and the solo-status high team IER configuration (i.e., the reference group of Model 3) is significant, $b = 1.18$, $p < .05$. This implies that the main effect of within-team IER variation on team relationship conflict in the solo-status low configuration is statistically different from the main effect in the solo-status high team IER configuration. The nature of the interaction between within-team IER variation and team IER configurations is plotted in Figure 8.7, which shows the increase or decrease

in team relationship conflict for high and low values of within-team IER variation for the four non-uniform team IER configurations. As Figure 8.7 shows, the relationship is positive for solo-status low team IER ($b = -.74$, $p < .05$) and negative and non-significant for the solo-status team IER configuration ($b = .44$, $p > .05$). However, as Hypothesis 18 proposes that bimodal configuration will show the stronger effect, Hypothesis 18 was not supported.

Hypothesis 19 stated that team IER configurations would moderate the strength of the mediation between within-team IER variation, team relationship conflict, and team performance, such that the mediation would be stronger in teams with bimodal team IER configuration than in teams with solo-status low, solo-status high, and fragmented team IER configurations. Model 5 (Table 8.12) shows the results for team performance when the bimodal configuration was the referent. As can be seen, team relationship conflict is negatively and significantly related to team performance, $b = -.34$, $p > .01$. In order to confirm the moderated mediation effect, difference tests were conducted following the recommendations of Edwards & Lambert (2007). As shown in Table 8.13, results from 1,000 bootstrap samples demonstrated that the indirect effect of the bimodal team IER configuration is not significantly different when compared with all other non-uniform configurations (e.g., solo-status low, solo-status high, and fragmented team IER configurations). Thus, Hypothesis 19 was not supported.

Table 8.12. Regression Results of the moderation effect of non-uniform team IER configurations on the relationship between within-team IER variation and team relationship conflict

	Team Relationship Conflict				Team Performance
	Model 1	Model 2	Model 3 Bimodal TIER	Model 4 SS low TIER	Model 5 Bimodal TIER
Variables	B (SE)	B (SE)	B (SE)	B (SE)	
Intercept	5.01** (0.23)	4.77** (0.22)	5.03** (0.42)	5.11** (0.38)	5.55** (0.57)
Team size	0.03* (0.01)	0.03** (0.01)	0.03** (0.01)	0.03** (0.01)	0.01 (0.01)
Team IER	-0.83** (0.06)	-0.78** (0.06)	-0.75** (0.06)	-0.75** (0.06)	0.01 (0.09)
Independent variable					
Within team IER variation (SD)	-0.26* (0.10)	-0.26* (0.10)	-0.34* (0.45)	-0.74* (0.36)	-0.96* (0.42)
Within-team IER configs. dummy variables					
SS low TIER		-0.16 (0.14)	0.08 (0.46)		-1.72* (0.54)
SS high TIER		0.01 (0.13)	-0.67 (0.45)	-0.75 (0.42)	-0.78 (0.49)
Bimodal TIER				-0.08 (0.46)	
Fragmented A		-0.17 (0.12)	-0.24 (0.39)	-0.32 (0.36)	-0.8 (0.42)
Fragmented B		-0.23* (0.11)	-0.39 (0.38)	-0.47 (0.34)	-0.76 (0.4)
Interactions terms within-team IER variation					
TIERV X SS low TIER			-0.39 (0.60)		2.26* (0.7)
TIERV X SS high TIER			0.79 (0.60)	1.18* (0.51)	1.15 (0.6)
TIERV X Bimodal TIER				0.39 (0.60)	
TIERV X Fragmented A			0.06 (0.51)	0.45 (0.40)	0.92 (0.47)
TIERV X Fragmented B			0.12 (0.51)	0.52 (0.40)	0.99* (0.46)
Mediator Variable					
Team Relationship Conflict					-0.34* (0.07)
R2			.43	.39	.12

Note. N = 299 teams (only 100% response rate); TIERV = Within team IER variation; Team IER = Team Interpersonal Emotion Regulation; SS low TIER = Solo-status low team IER; SS high TIER = Solo-status high team IER; Bimodal TIER = Bimodal team IER. Bimodal is reference category for Models 2 and 3; SS low TIER is reference category for Model 4.
Unstandardized estimates. * p <.05. ** p <.01.

Table 8.13. Moderated Mediation Test Results for Indirect Effects of Within-team IER Variation on Team Performance

Indirect effect of within-team IER variation on team performance (via team relationship conflict)	Estimate	95% CIs
Bimodal vs Solo-status low team IER configuration		
Bimodal team IER configuration	0.228	[0.047, 0.472]
Solo-status low team IER configuration	0.265	[-0.039, 0.889]
Solo-status high team IER configuration	0.054	[-0.556, 0.453]
Fragmented A team IER configuration	0.264	[0.05, 0.618]
Fragmented B team IER configuration	0.261	[0.048, 0.566]
Differences - Solo-status low	-0.038	[-0.322, 0.008]
Differences - Solo-status high	0.174	[-0.048, 0.860]
Differences - Fragmented A	-0.037	[-0.172, 0.008]
Differences - Fragmented B	-0.033	[-0.13, 0.003]

Note. N = 299. Bias-corrected confidence intervals (CIs) using 1,000 bootstrap samples following procedures for moderated mediation outlined by Edwards and Lambert (2007). One-tailed test.

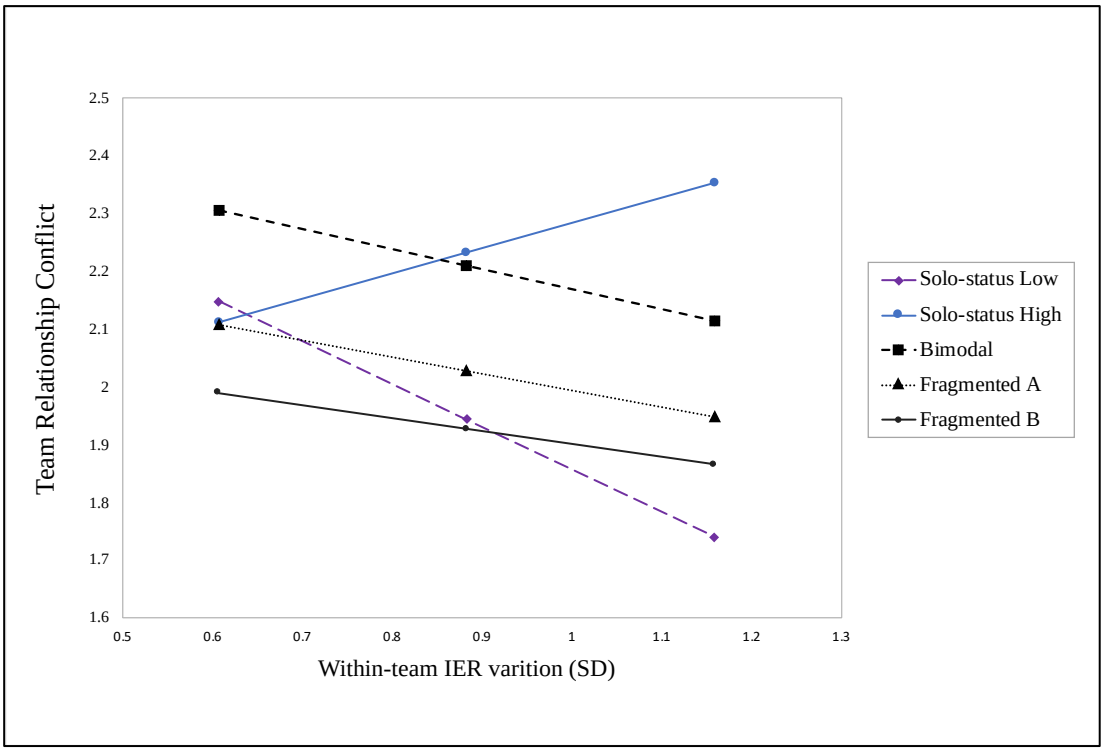


Figure 8.7. Interaction Effects of Team IER Configurations and Within-team IER Variation on Team Relationship Conflict

8.5. Chapter summary

In conclusion, both ways of conceptualising team IER diversity, namely, within-team IER variation and team IER configurations, have a particular effect on team relationship conflict and, in turn, team performance. Results of the moderation role of team IER diversity on the relationship between team-level IER and outcomes show significant effects. Particularly, within team-IER variation has a significant although small moderating effect on the relationship between antecedent-focused IER strategies and team conflict, which in turn is related to team performance. However, these results were not significant in the case of team response-focused IER strategies. These results suggest that the negative impact of team member IER variation on team conflict and team performance is weak and only in the case of 'positive' valence behaviours.

The moderating role of the team IER configurations shows similar findings. First, the results show a significant moderating effect of uniform compared to non-uniform configurations on the relationship between team IER and conflict, and an indirect effect on team performance, but these results were only significant when the shared and the bimodal team IER configurations were compared. These results show a similar pattern to the above, suggesting again that team IER diversity only has an impact on team processes and outcomes when it takes extreme values. Second, the results of the moderating role on each non-uniform configuration for the relationship between within-team variation and outcomes also shows some significant effects. Specifically, findings shown that the interaction effect between solo-status low IER and within-team IER variation is significantly different from the effect of solo-status high configuration on team conflict. However, contrary to expectations, the bimodal configuration was not significantly different compared to the other non-uniform configurations, and no indirect effect on team performance was observed.

Taken together, these results suggest that whereas there is a negative impact of team IER diversity on the strength of the relationship between team-level IER and other team processes and team performance, this effect is not substantial and only significant when extreme configurations are compared (e.g. shared vs bimodal or solo-status low and high). Thus, overall, these results support the notion of providing evidence about team member agreement when the relationships between team-level

phenomena are examined. The particular implications of these results are detailed in the next and final chapter.

CHAPTER 9. THESIS DISCUSSIONS

9.1. Chapter Overview

The main objective of this thesis has been to understand interpersonal emotion regulation (IER) in the team context. In this final chapter, I summarise and discuss in detail the main theoretical and empirical implications of this thesis's findings. After discussing the findings, this chapter addresses the strengths and potential limitations of this research, bringing suggestions for future enquiries in the field and practice. The last part of this chapter summarises and brings together the main areas covered in the thesis with a particular emphasis on the benefits of studying emotion regulation in the team context.

9.2. Theoretical and Empirical Discussion of Findings

In order to understand IER in teams, this thesis proposed a multilevel mediation model that relates team IER and its diversity to team conflict, trust, and TMX, which in turn relate to team performance and team member well-being. This model implies a mediation effect, in which team member IER may influence not only team performance, but also other team processes and emergent states. Thus, this first section discusses the main results, following this model structure, in three specific subsections. First, I review and discuss the effects of IER on a range of team processes and emergent states, considering the effects of team IER at the individual and team level. Second, I examine and discuss the indirect effects of team IER on team performance and member well-being, via its association with the same processes and emergent states. Third, I discuss the moderated mediation effect of team IER diversity on team IER, team relationship conflict, and team performance.

This thesis provides four main contributions to the research on organisational behaviour. First, this thesis extends our knowledge of interpersonal emotion regulation

by applying this construct to the work team context, considering its multilevel nature and describing a series of strategies used by team members to regulate their colleagues' negative emotions. Second, this research contributes to our theoretical and empirical understanding of models of team effectiveness by developing, testing, and supporting a model that studies the mechanism by which team member affect management is related to team performance and team member well-being. Third, in terms of diversity, this research offers an empirical examination of diversity in a team processes and shows how different team uniform and non-uniform configurations may act as a contextual factor in the relationship between team IER, relationship conflict, and team performance. Fourth, the findings make a significant contribution in practical terms, by showing that, as the use of IER strategies by team members can be developed and may affect team members' well-being, team processes, and performance, it is important that they be fostered by organisations. Each of these contributions will be discussed in detail in the following sections.

9.2.1. Team IER is related to Team Processes and Emergent States

A key finding of this thesis is that team members' strategies to regulate colleagues' negative emotions are associated with other team processes and emergent states. Specifically, this thesis's findings show that team antecedent-focused IER strategies (i.e. situation modification, attentional deployment, and cognitive change) are negatively and significantly related to team conflict, in all studies. In addition, Study 3's findings complement the above by showing that these strategies are also positively related to team trust and TMX, and that team-level effects are over and above individual-level strategies. Moreover, contrary to expectations, Study 3's results show that team response-focused IER strategies have an effect over and above individual-level IER strategies only on team relationship conflict, but was not related to team trust and TMX.

9.2.1.1. Team member IER strategies in models of team effectiveness.

These findings generally support the conceptual model developed in this thesis. Therefore, this research has advanced our theoretical and empirical understanding of models of team effectiveness. In particular, this thesis's results bring clear empirical support, for the first time, to the theoretical claim proposed by team effectiveness

models (Ilgen et al., 2005; Kozlowski, 2015; Mathieu et al., 2019) that interpersonal team processes, such as team member affect management, are indeed positively related to other beneficial team phenomena (e.g. team trust and TMX) and negatively related to detrimental processes, such as team relationship conflict.

Researchers of team effectiveness models have not addressed team member affect management in much detail, confining their arguments to a general overview of the phenomenon and providing examples of how team IER can be observed in team members' everyday interactions (Ilgen et al., 2005; Marks et al., 2001). This reflects a profound lack of theoretical elaboration, not being able to describe the specific psychological or interpersonal mechanisms that explain the relationship between team processes and team performance beyond emotional contagion and the direction in which teamwork flows (e.g. from inputs to outputs). Therefore, the results of this thesis extend models of team effectiveness, supporting the idea that in the team context, team members actively engage in behaviours to change their colleagues' emotions.

An important contribution of these studies is to elaborate the specific processes by which team members modify their colleagues' negative emotions. Particularly, this thesis's findings reveal that not all strategies are equivalent since they operate at different stages of the emotion generation process (e.g. from the triggers of another's emotion to their emotional response itself). Thus, team members can focus their actions on the causes of other members' negative emotions (e.g. modifying the situation that is generating negative emotions in their colleagues, and changing their attention or appraisals), or can focus on others' expression of emotions (e.g. interpersonally asking others to suppress their negative emotions; Diefendorff et al., 2008; Gross, 2015; Webb et al., 2012). Thereby, these findings show that these two sets of strategies have specific consequences for team dynamics and outcomes.

These results are generally consistent with previous research on interpersonal emotion regulation (Griffith et al., 2014; Little et al., 2012; Webb et al., 2012) that found separate effects for each of the antecedent- and response-focused strategies of Gross's (1998) model on other constructs such as interpersonal trust, conflict, and other work-related behaviours (Webb et al., 2012). As mentioned in Chapter 2, there are several alternative approaches to comprehending team member interpersonal emotion regulation in the workplace. From these, Gross's (1998) process model of

emotion regulation emerged as the most parsimonious framework to conceptualise the emotion regulation phenomenon, involving two overarching categories, namely, antecedent- and response-focused strategies. This thesis's results extend our knowledge by showing that these strategies are also present in work teams.

Otherwise, these results are not consistent with previous research which has explicitly used Gross's (1998) framework in the interpersonal domain. For instance, Little and colleagues (2016) found that leaders use antecedent- and response-focused strategies (problem- and emotion-focused strategies in their terminology) to regulate followers' negative emotions. In their study, the authors classified situation modification and cognitive change as problem-focused strategies, and attentional deployment and response modulation as emotion-focused strategies. The findings of this thesis differ from this conceptualisation of interpersonal emotion regulation, representing more accurately Gross's (1998) original formulation. Specifically, exploratory and confirmatory factor analysis results show that interpersonal attentional deployment, i.e., focusing others' attention away from their problems, should be classified under antecedent- rather than response-focused strategies. One possible explanation for this difference may be that the interpersonal meaning of the use of these strategies can vary in terms of the balance of the underlying intentions, motives, status, and power between interaction partners (Gross, 2015; van Kleef, 2016). I delve into this point more extensively in the following paragraphs.

9.2.1.2. Strategies to regulate others' emotions differ in social meaning.

Following the arguments expressed in the literature review (Chapter 5), interpersonal behaviour theory (IBT; Horowitz et al., 2006) can be used to explain the differential effects of antecedent- and response-focused IER strategies in the social domain. This theory proposes that interpersonal behaviours follow a complementarity principle, in which actions invite corresponding responses in kind from interaction partners. Thus, team antecedent-focused IER strategies can be characterised as friendly (i.e. warmth or love in the original formulation) behaviours, which invite reciprocal affiliative behaviours from interaction partners. Conversely, team response-focused IER strategies are more representative of unfriendly (cold or distant) behaviours, which generates reciprocal cold behaviours in return. This

complementarity principle also depends on the perceived intentions or motivation of others' actions (Horowitz et al., 2006; Markey et al., 2003; Wiggins & Trobst, 1997).

Particularly, IBT suggests that to produce the complementarity principle, the behaviours must match with individuals' intentions (Horowitz et al., 2006). For instance, when people receive advice, to produce a reciprocal friendly reaction, the interaction partner must perceive that such behaviour is motivated by affiliative reasons, such as a true concern for their well-being. If this condition is not fulfilled, and individuals recognise, for example, an attempt at manipulation or control, the response is a distant as opposed to a friendly behaviour. On a related note, as antecedent-focused strategies are directed to regulating the causes of interaction partners' negative emotions, they have a more explicit prosocial underlying motive (e.g. individuals signal 'you are having problems, I want to help you'). In contrast, as response-focused strategies are directed to regulating the expression of negative emotions and not the causes they are generated by, the underlying motive is more ambiguous. For example, it is possible to expect different outcomes if a team member thinks that other members are asking him to suppress his negative emotions for a warm-friendly reason (e.g. to remain focused on a particular task, because of their care about his good performance) versus a cold-unfriendly reason (e.g. he is being annoying).

In chapter 3 and 5 was argued that when these interpersonal behaviours occur very often in teams, they can constitute a team-level phenomenon, described in this thesis as team IER. Social identity and social categorisation theories explain the transition from the individual and interpersonal level to the group or team level of analysis (Hogg & Terry, 2000; Tanis & Postmes, 2005). Particularly, when individuals work together in a team, they begin to integrate other members into their collective self and create a social identity as a function of this collective entity (Ellemers et al., 2013). This social context shapes team members' behaviours in terms of social comparisons with other members and by engaging in behaviours for the sake of the team.

Therefore, team antecedent-focused IER strategies can be characterised as collective friendly behaviours in terms of interpersonal behaviour theory (Horowitz et al., 2006), in which team members show concern for their colleagues via performing

concrete actions to regulate their negative emotions. As these behaviours involve explicit actions directed to regulating members' negative emotions, team members may perceive that such behaviours are motivated by communal motives related to affiliation and camaraderie. In this regard, prosocial behaviour theory highlights the fact that individuals are motivated to help and assist others, especially when they are closer in terms of their relationship, relatives, or friends (Grant & Berg, 2011). Then, they reciprocate teammates' behaviour with similar actions in kind, which may generate a positive cycle within the whole team. This suggests that a cycle of continuous, reciprocal and complementary actions is perceived by team members when they report that in their teams 'team members very often modify a situation' or 'give advice in order to make their colleagues feel better'. Thus, this feeling of affiliation and camaraderie produced by constant and reciprocal use of antecedent-focused IER strategies engaged in by team members may explain the negative association with the presence of interpersonal friction among members, and also the positive relationship of team antecedent-focused IER and team trust with overall team level of good quality relationships.

In line with these claims, previous research into teams has described a negative association between team identification and relationship conflict, proposing that team identification is associated with feelings of cooperation and team member alignment in thoughts, feelings, and actions, and therefore low levels of conflict (Han & Harms, 2010). More closely to team IER, prior research in team-level emotional intelligence has reported an overall negative relationship between team emotional intelligence and conflict (Curşeu et al., 2015; Jordan et al., 2006; Pluut & Curşeu, 2013). As described in Chapter 2, although emotional intelligence is a more complex phenomenon than IER, involving the recognition and regulation of one's own and others' emotions, the authors of these studies have highlighted the importance of the regulation of other members' negative emotions to explain the effect of team member emotional intelligence in reducing conflict, via the regulation of negative emotions and the increase in positive emotions. Specifically in terms of the relationship between positive group emotions and team conflict, Gamero and colleagues (2008), using a longitudinal design, report a negative relationship between team positive affective tone and team relationship conflict. The results of this thesis follow the same pattern as above, suggesting that collective affiliative behaviours directed to reducing

negative emotions and consequently elevate positive emotions are negatively associated with interpersonal conflict.

Following a similar rationale, prior studies have highlighted the positive effects of social support in team members' trust and quality of relationships, especially when the support is provided by co-workers (Fujiwara, Tsukishima, Tsutsumi, Kawakami, & Kishi, 2003; Sheng, Tian, & Chen, 2010). These studies have appealed to positive exchanges among members, cooperation, and affiliative behaviours to explain the positive effects of co-worker social support. Likewise, previous research on collective emotional intelligence has described a positive association of this construct with group cohesion and affective similarity among members (Curşeu et al., 2015). Specifically, in terms of IER, previous evidence, such as Little and colleagues' (2016) field study, shows a positive relationship between leaders' use of strategies to regulate followers' antecedents of their negative emotions and the quality of their relationship. Therefore, the results of this research complement and extend the above by showing that team members' actions to regulate the antecedents of colleagues' negative emotions can be a specific mechanism to reduce interpersonal conflict and increase trust and good quality of relationships in teams.

In contrast, interpersonal behaviour theory suggests that team response-focused IER strategies can be broadly characterised as collective dominant and non-affiliative behaviours which invite reciprocal unfriendly responses from interaction partners. As these behaviours are ambiguous in terms of the underlying motivations of interaction partners, their effects on team processes may be more variable than antecedent-focused strategies. In line with this argument, the findings of this thesis show that response-focused strategies (e.g. interpersonal suppression of negative emotions) were positively and significantly related to team conflict in all three studies. This implies that the frequent occurrence of such behaviours in teams (e.g. demanding other members to not express their negative feelings) can create a social context of friction and isolation, because team members interpret such behaviours as signalling that other team members do not care about their negative emotions and what is generating them. This is also in line with Rimé's (2009) account of social sharing of emotions, reviewed in Chapter 2, which proposes that when individuals share their emotions, they invite complementary responses from interaction partners. When people share positive emotions, they expect camaraderie and mutual joy from other

people. In contrast, when they share negative emotions, they expect reciprocal affiliative responses and their unpleasant emotions to be regulated (e.g. via providing affective support or cognitive reappraisal). Thus, when team members request others to suppress negative feelings, they are denying the positive effects of social sharing, which can be associated with a rise in interpersonal conflict.

Moreover, one unanticipated finding was that interpersonal suppression of negative emotions is not related to levels of relationship quality and trust. The lack of a clear direct effect may also suggest that the relationship between team response-modulation IER strategies and positive team processes and emergent states may depend on other variables which may act as moderators. For instance, the specific context, previous negative or positive experiences among members, and the level of closeness in their relationship. From the argument elaborated in previous paragraphs, possible candidates for this moderating role can be team members' motivations and the history of the relationship between interaction partners (Horowitz et al., 2006).

In terms of employees' motivations to regulate others' emotions and based on self-determination theory, Niven (2016) developed a framework that involves several motivations which may vary depending on the levels of autonomy, competence, and relatedness. Likewise, Tamir (2016) has highlighted the role of prosocial and instrumental motives when people regulate their own emotions. For example, a team member attempting to regulate a colleague's expression of anger at their leader may be guided by a prosocial motive: their leader is present, and he does not want that his colleague's anger expression to end up with his teammate being fired; but also, there can be an egoistic instrumentality motive: he knows that the display of anger may make other members uncomfortable, impairing their performance, so he decides to demand that his colleague suppress that emotion because of this. The research into motives for regulating others' emotions is still in its infancy; therefore, further research is necessary to clarify how people's motives for regulating others' emotions may play a role in the engagement in these behaviours by members in a team.

9.2.1.3. Team-level interpersonal emotion regulation.

A second major contribution of this research to the interpersonal emotion regulation literature is in advancing our knowledge at the team level of analysis. Particularly, the findings of this thesis show that teams can be compared in terms of

interpersonal emotion regulation, and that team-level IER predicts team-level constructs (i.e. conflict, trust, and TMX) over and above individual level IER strategies. To briefly recap, in the literature review, it was noted that previous studies have applied the interpersonal emotion regulation construct to the team context, but mainly focused on how team leaders influence team dynamics via the regulation of followers' affect (Little et al., 2016; Vasquez et al., 2020). Furthermore, albeit with some exceptions related to leader influence on team member behaviours (Madrid et al., 2019; Madrid, Totterdell, Niven & Barros, 2016), this body of literature mainly focuses on individual- or dyadic-level effects (Troth et al., 2018). The current research extends interpersonal emotion regulation research by showing team-level effects of this kind of behaviour from the team member perspective.

Particularly related to the team level, based on the literature on composition models, two conceptualisations of team IER were hypothesised, one based on a referent shift composition model and other related to a dispersion model (Chan, 1998). Findings of the current research bring support to both conceptual forms of interpersonal emotion regulation at the team level of analysis. First, in support of a referent-shift composition model for team IER, indicators of inter-rater agreement, multilevel factor analysis, and multilevel models showed that team members shared a common perception of what occurs within their teams as regards IER strategies when a team member experiences negative emotions. Second, the findings of this thesis also support a dispersion model; however, these particular results will be discussed together with the moderated mediation models in the specific section on team IER diversity in the following pages. Supporting these two conceptualisations is important for two main reasons. First, it empirically demonstrates the existence of a shared perception of the IER strategies used by members within teams. Second, it shows that this team-level phenomenon can be understood from the perspective of members' agreement and disagreement on this team-level phenomenon.

Furthermore, another important contribution of this thesis is comparing team- and individual-level IER strategies. When the relationships between the team-level referent shift IER construct and other team processes were explored, team-level IER predicted team-level constructs (i.e. conflict, trust, and TMX) over and above individual level IER strategies. Specifically, these findings show that teams in which the members collectively engage more often in behaviours to interpersonally regulate

their negative emotions, for example, modifying a distressing situation, create a positive setting within teams, characterised by a high quality of relationships, trust, and low interpersonal friction among members. The effect of this shared team setting on other team phenomena is stronger than particular team members' strategies to regulate other colleagues' negative emotions.

In terms of multilevel effects, these results are in line with previous research that has found different results when the relationships between constructs at different levels are explored (Killumets, D'Innocenzo, Maynard, & Mathieu, 2015; Kozlowski & Bell, 2013; Kozlowski et al., 2016). For example, there is a large amount of research that has shown both team- and individual-level effects of leadership on team processes and follower behaviours (Braun et al., 2013; Liu & Phillips, 2011; Tse et al., 2018). More specifically related to team member behaviours, Costa and colleagues (2018) show how team trust can have both individual- and team-level effects on other variables such as team member communication, knowledge sharing, team information processing, and psychological safety (Breuer et al., 2016; Edmondson, 2004).

This combination of findings provides support for the conceptual premise that the multilevel structure of organisations should be considered when employees' behaviours are studied in organisations, particularly here related to interpersonal emotion regulation (Ashkanasy, 2003; Ashkanasy & Dorris, 2017). For example, in a theoretical review of emotion regulation in the workplace, Ashkanasy and colleagues (2017) claim that emotion regulation may operate at different levels in the workplace, specifically, at within-person, between-person interpersonal interaction, groups and team, and organisation-wide levels. Similarly, Troth and colleagues (2018) in a theoretical review of interpersonal emotion regulation in the workplace, discuss the possibility of multilevel effects of this construct upon other variables. This thesis's results are in line with those of previous conceptual reviews in describing a theoretical account of how to conceptualize IER in teams and in empirically showing that both individual and team-level IER have a differential impact on team processes and emergent states.

To sum up, this research contributes to team effectiveness models by providing a theoretical elaboration of team member affect management, proposing specific mechanisms by which team member IER is related to other team processes and

emergent states. Specifically, this thesis empirically shows that not all IER strategies have the same effects on other team-level constructs, which may well suggest that these strategies operate through different psychological mechanisms in the social realm and have distinctive effects on other team processes and emergent states. Likewise, this thesis's results contribute to the interpersonal emotion regulation literature, extending our knowledge to the team level of analysis by showing that teams can be compared in terms of interpersonal emotion regulation. The findings of the thesis show that this effect can take place at multiple levels, affecting other members and also the whole group.

9.2.2. The role of team IER in improving team performance and team member well-being

In addition to the relationship of team IER with other processes and emergent states, another major contribution of this thesis is in expanding the number of mechanisms by which team IER can affect team performance, such as team conflict and TMX, and extending outcomes by including team member well-being. Particularly, mediation models show significant indirect effects of team antecedent- and response-focused IER strategies on team performance. Study 1 and Study 3 show team-level mediation effects via team conflict (Study 1) and TMX (Study 3). However, contrary to expectations, only Study 2 shows a significant multilevel indirect effect of team IER strategies on team performance via team conflict. This implies that this research was unable to compare indirect effects at the individual and team level in the case of team performance. In terms of the effects on team member well-being, only Study 2's results supported an indirect effect of both sets of strategies on this outcome. The specific reasons will be discussed in the limitations section of this chapter. Taken together, these findings show that team interpersonal emotion regulation matters for team performance and team member well-being, such that teams whose members engage more often in behaviours to interpersonally regulate their negative emotions show not only lower levels of team conflict, better quality of relationships, and higher levels of trust compared with teams that barely engage in these affect regulatory behaviours, but also better team performance and member well-being.

9.2.2.1. Team IER and team performance

As stated in the previous section, when team members provide advice or regularly use humour to modify their colleagues' negative emotions, this facilitates team performance via their effects on positive team dynamics (such as team member exchange quality) and the inhibition of negative team dynamics (such as team relationship conflict). Previous studies have supported the effect of similar constructs to IER on performance via its influence on team processes. For example, LePine et al. (2008) explore the association between several team processes (e.g. conflict management, goal specification, and monitoring) and emergent states (e.g. cohesion and potency) with team performance. Likewise, Lin, He, Baruch and Ashforth (2017) found a positive indirect effect between positive team affective tone and team performance through team identification and cooperation. In a more related phenomenon, Rezvani et al. (2018) describe a significant indirect effect of team level emotional intelligence on team performance via team trust. On the topic of interpersonal emotion regulation in the workplace, previous evidence has shown the effect of such behaviours on the quality of relationship, customer service interaction, employee emotions, and performance (Holman & Niven, 2019; Little et al., 2012; Niven, Macdonald, & Holman, 2012). This thesis's findings add more empirical evidence to support the relationship between team processes and performance, particularly related to team interpersonal emotion regulation.

In accordance with the present results, previous studies have broadly demonstrated the negative relationship between team conflict and team performance (De Dreu & Weingart, 2003; de Wit et al., 2012; O'Neill, Allen, & Hastings, 2013). Given the detrimental role of conflict, it is important to understand what factors in teamwork might reduce the conflict, which, in turn, leads to the increase in team performance. This thesis's results posit team antecedent-focused IER strategies as one those factors. Similarly, prior studies have identified team trust and TMX as important determinants of team performance (De Jong et., 2016; Liu et al., 2011). Findings from Study 3 bring additional evidence to these associations and extend our knowledge about the processes that increase the levels of trust and good quality of relationships among team members.

These mediational effects further support the idea, derived from conservation of resources (COR) theory, that team member antecedent-focused IER strategies can be understood as a social resource that allows members to cope with demanding situations and gives members the necessary state to focus their effort on team tasks to perform well (Hobfoll et al., 2018; Hobfoll et al., 1990). Thus, teams in which the members often engage in IER strategies, such as 'taking concrete actions to change a situation that generates negative emotions in a colleague' or in team members who 'try to help a teammate by putting their problems in perspective', have far more resources (e.g. social support, good quality of exchanges) to confront stressful situations than do those in which these behaviours are barely used. This increase in resources is given because when these behaviours are frequent, this *ipso facto* assures members that they are going to receive support when they need it. Thus, these results are in line with previous research on co-worker social support and other team processes, such as team collaboration, which suggests that by providing support, employees bring affective and instrumental resources to their colleagues, which strengthens their relationship based on positive social exchanges (Beck & Clark, 2009; Hobfoll et al., 1990). Here, this research adds in specificity by showing particular strategies by which team members regulate their colleagues' negative emotions (i.e. from focusing their attention on more pleasant stimuli to modifying an aspect of the situation).

A different mechanism could be involved in response-focused strategies because they involve an explicit solicitude shown by a colleague for an individual to suppress his or her negative emotions. By using COR theory, a case like this could be interpreted as an unambiguous external demand to use more resources on the part of team members to interpersonally regulate an emotional response. In addition, a demand like this might be interpreted by team members as a sign that the causes of their negative feelings are not important. Indirect support for these claims can be found in the emotional labour literature. As described in Chapter 2, emotional labour refers to the process by which individuals have to regulate their emotions to comply with certain emotional display rules required by organisation/context.

Particularly, surface acting has been defined as the process by which employees suppress the expression of negative feelings or enhance their expression of positive feelings. Here, team response-focused IER strategies can be conceptualised

as a concrete and specific example by which co-workers demand the suppression of negative emotions on the part of their colleagues, and prior meta-analytical evidence has supported an overall negative effect on employee surface acting and their performance (Hülsheger & Schewe, 2011). This effect has been explained in terms of conservation of resources, because regulating the expression of emotions is a highly demanding and taxing situation for individuals. Thus, team response-focused IER strategies may impair team performance via affecting social integration, by intensifying negative processes, and by increasing demands among members.

9.2.2.2. Team IER and team member well-being.

In addition to the effects on performance, team IER also was associated with team member well-being. These findings are in line with previous studies that have described a positive relationship between the two variables (Martínez-Íñigo et al., 2013; Niven et al., 2009b; Niven et al., 2012). For example, Niven and colleagues (2012) found that strategies to improve another's affect are positively associated with their sense of well-being. This research extends previous findings by showing that team antecedent-focused IER strategies have an indirect negative effect, through the mechanism of interpersonal conflict, on team member emotional exhaustion (and are therefore positively associated with team member well-being). Taken together, these results indicate that not all IER strategies are equivalent in terms of team member well-being.

In terms of the direct effect of team conflict on impairing team member well-being, previous research has broadly shown the negative effects of interpersonal conflict among people on their sense of wellness (De Dreu et al., 2004; Dijkstra, van Dierendonck, & Evers, 2005; de Wit et al., 2012). Likewise, according to job demands and resource theory (Bakker & Demerouti, 2017; Tims, Bakker, & Derks, 2013), interpersonal conflict is classified as a stressful job demand which can have a detrimental impact on individuals' well-being. For example, Dijkstra et al. (2005) found that the occurrence of interpersonal conflict is indirectly related to individuals' well-being via organisational stress. These negative effects of conflict on well-being can even spill over to non-work domains (Martinez-Corts, Demerouti, Bakker, & Boz, 2015). This thesis's findings are congruent with those of previous studies by showing a negative relationship between team conflict and team member well-being. In

addition, the results of this thesis demonstrate that team members can increase colleagues' sense of well-being via reducing conflict when they use antecedent focused strategies or impair colleagues' well-being when they use response focused strategies.

As mentioned in Chapter 5, these effects can be explained in terms of conservation of resources. While engaging in active actions to regulate others' emotions implies effort and, therefore, depletion of resources (Martínez-Íñigo et al., 2013), COR theory suggests two ways in which individuals can gain resources even though they engage in actions that involve effort: first, via the social cross-over of resources, and second, via feedback processes from interaction partners when the negative emotions are successfully regulated.

In terms of cross-over of social resources, constant reciprocal positive exchanges among members, such as providing advice, focusing attention away from problems, or modifying the causes of their negative emotions, signal to team members that they are likely going to have the support of team colleagues when they need it. This may generate a team member experience of a positive balance of resources because they perceive that most of the other team members very often engage in such regulatory behaviours. This positive balance in terms of resources can be a way of conceptualising well-being, especially when the fact that here was assessed as emotional exhaustion is considered (Gorgievski & Hobfoll, 2008; Ito & Brotheridge, 2003). As a consequence, team members that participate in teams in which they support each other and frequently engage in actions to change negative emotions are going to feel less emotionally exhausted. This may occur because they frequently engage in affiliative behaviours of social support and care (Markey et al., 2003; Sadler & Woody, 2003).

Likewise, as antecedent-focused IER strategies are directed to helping others who are experiencing negative emotions, via modifying the causes of their emotional responses, team members also receive resources from their interaction partners via feedback processes. For example, Chapter 2 described Zaki and Williams' (2013) account of interpersonal emotion regulation, which posits IER as the 'social space' in which individuals interpersonally regulate their own or others' emotions. These regulatory attempts can be performed independently from or in response to the

feedback provided by interaction partners. Thus, the gain in resources in regulators provoked by the feedback given by the target individual can be described as response-dependent extrinsic IER in Zaki and Williams (2013) terminology. Particularly, this phenomenon suggests a reciprocal positive effect for both regulators and interaction partners when the emotions have been effectively regulated, especially related to development of supportive relationships (Williams et al., 2018; Zaki & Williams, 2013).

In contrast, as the intentions behind team member response-focused IER strategies are potentially more ambiguous, the positive reciprocal effect from colleagues' feedback is unlikely. This fact has possible consequences for all team members (regulators and targets) in terms of resource expenditure because regulating another's emotions via interpersonal suppression may be an activity that: (a) involves effort, (b) has no guarantee of a potential return in resources, and (c) targets experience of the action as an interpersonal demand to use personal resources to regulate the target's own emotions. Notwithstanding the above, these interpretations must be taken with caution because, as in this study, the relationship between response-focused IER strategies and individuals' emotional exhaustion was small and, in some studies, non-significant. This could mean that these effects might depend on other factors, such as the previous closeness or trust between individuals, that might act as moderators. This can be illustrated briefly by an example of behaviour presented in the qualitative study of Campo et al. (2016), in which a Rugby player demanded of his teammate to suppress an over-excited feeling before the match ended. In this case, the teammate interpreted this expression of solicitude as "I needed to calm down because the match had not finished [yet]" (p. 8), showing a positive effect of this type of interpersonal emotion regulation strategy.

In synthesis, the findings of this thesis contribute to team effectiveness models by showing how an interpersonal process such as team member IER can directly improve team performance and also do so indirectly via its association with other team processes and emergent states. This thesis's results also contribute to the literature on team conflict, trust, and TMX: first, by confirming the relationship between these team phenomena and team performance; second, by showing the additional role of team IER strategies in influencing these processes and emergent states, and in turn, affecting team performance. In terms of well-being, this thesis's findings bring additional

evidence to the already existing literature that supports the relationship between these two constructs. Specifically, these results show that not all IER strategies have the same effects on team member well-being when they are collectively used in teams.

9.2.3. Diversity in team interpersonal emotion regulation

The results of this thesis contribute to the theory, methodology, and empirical evidence of the research into team diversity. First, this thesis advances theory by providing two different ways to conceptualise team member variation regarding a team process (e.g. within-team IER variation and team IER configurations). Second, this thesis contributes to the current methodologies to classify team-level distributions by integrating two different approaches (r_{WG} and LPA). Third, this thesis contributes empirically by testing these two conceptualisations and by showing how they are related to performance, via the mechanism of team relationship conflict.

9.2.3.1. Composition models and operationalisation of team IER diversity.

Dispersion models propose that the meaning of a team-level construct lies in individual members' variation regarding this team-level attribute (Chan, 1998). Chapter 8 presented two ways to empirically operationalise team IER diversity, namely within-team variation and team IER configurations, which can be utilised to address this objective. Following the traditional literature on diversity, this thesis has conceptualised this dispersion construct as within-team variation by using team standard deviation (Dawson et al., 2008; Liden et al., 2006; Liu et al., 2011). Then, by recognising the potential limitations of such a form of operationalisation, this thesis has developed the concept of team IER configurations.

This builds on and extends current developments in team research that suggest that team member perceptions of team-level attributes may represent specific configurations (DeRue et al., 2010; González-Romá & Hernández, 2014). Thus, the theoretical elaboration developed in this thesis brings support to this by showing how team members vary as regards the perception of team-level interpersonal emotion regulation. These results bring additional evidence to the conceptualisation of diversity using different configurations by showing that there are nuances in the

meaning of the results depending on the way in which team diversity is operationalised.

Indeed, based on DeRue and colleagues' (2010) work on team collective efficacy, empirical studies have used two different methodologies to identify such configurations. For example, Li & Liao (2014) utilised r_{WG} scores to identify the different configurations. This methodology allows them to identify shared, bimodal, minority belief, and fragmented distributions. Likewise, Seo and colleagues (2017) utilised latent profile analysis to classify teams in larger samples, and to distinguish forms of minority beliefs, solo-status high, and solo-status low. However, they fail to catch the shared configuration. Therefore, this thesis methodologically contributes to research by integrating both methodologies by first using LPA with large samples, and then using the r_{WG} approach to identify teams with shared perceptions.

9.2.3.2. Moderated mediation models

Particularly, in terms of within-team variation, findings of the moderated mediation analysis show that team-level IER may not have a positive influence on diminishing team relationship conflict if the variation in IER among team members is high. In addition, the results of the moderating role of team IER configurations complement the above by showing that when team member agreement is especially high within teams (i.e., the shared team IER configuration), lower levels of relationship conflict are seen compared to teams with subgroups with opposing views (i.e., the bimodal team IER configuration). These effects on decreasing the likelihood of team relationship conflict are translated into better team performance.

These findings are in line with previous research on teams which has shown a negative relationship between team identification and team relationship conflict (Han & Harms, 2010). Thus, this thesis's results bring important nuances to consider when behaviours directed to decreasing the level of interpersonal conflict are addressed by researchers. Specifically, the minimal presence of conflict in teams is achieved only when there is a high frequency of antecedent-focused strategies and team members strongly agree about the existence of this phenomenon. Conversely, regardless of the average level of team antecedent-focused IER strategies, if teams are split into subgroups, they are going to present a situation of interpersonal conflict.

In terms of the research on diversity in team processes, these results are in line with previous literature (Harrison & Klein, 2007; van Knippenberg & Mell, 2016; Williams & O'Reilly, 1998). Specifically, the findings of this thesis support the negative effect of team member diversity in the team context. As stated in the literature review, based on social identity and self-categorisation theory (Chapter 7), when teams are split into subgroups an 'us vs them' situation may arise, which can be highly prejudicial for teams, because it may represent a conflictive reality with opposing points of view (Turner & Reynolds, 2011; van Knippenberg et al., 2004). These results also highlight the importance of considering team member agreement when team-level constructs are explored (Chan, 1998; Woehr et al, 2015). This is because the stronger effects between team IER and team relationship conflict are observed in cases of high member agreement, conceptualised either as within-team IER variation or team IER configurations.

Notwithstanding the above, there were a number of findings that did not support the hypotheses. Particularly, contrary to my expectations, variation in team response-focused strategies does not appear to have a significant effect on team relationship conflict, and therefore on team performance. The reasons for this are not clear but can be addressed from a statistical and theoretical point of view. In statistical terms, the general mean level of team response-focused IER strategies was low, with little variation between teams. This makes a significant effect very unlikely. In theoretical terms, similar to team-level effects, it may be because of the ambiguity that these behaviours have in the social domain (Horowitz et al., 2006). Thus, as these behaviours may be ambiguous in terms of their motivation, variation in their perception is tainted by the different motivations that individuals attribute to such actions, making unlikely their association with other constructs. For example, if some members assume good intentions, variation in those behaviours would be similar to the tendency to antecedent-focused strategies, suggesting a generally negative effect. Moreover, if members perceive a negative motivation, the variation will be beneficial. This thesis proposed that when these behaviours occur often in the team, this implies a negative motive; however, the findings of the diversity analyses do not support this claim. These results bring additional evidence for the necessity of studying individuals' intentions and motives to regulate others' emotions already discussed in

previous sections. Therefore, future research could include members' motives for regulating others' emotions in their models as a way to probe this question.

Regarding team IER configurations, contrary to expectations, when non-uniform team IER configurations (i.e. solo-status low, solo-status high, bimodal, and fragmented) were compared in terms of level of differentiation, the bimodal configuration was not significantly worse than the other configurations in terms of team conflict and team performance. In that regard, the only significant difference found was in terms of both forms of solo-status team IER configuration. Specifically, teams in which the majority of team members perceive high team IER show lower conflict in comparison with teams in which the majority perceive low frequency of use of team IER strategies. These results may suggest that more than the specific configuration that the diversity in a process may take, the key is having a majority perceiving high levels of a group phenomenon to observe significant relationships with other team constructs.

To summarise, this thesis's findings provide a more comprehensive understanding of team-level IER phenomena by showing that it is important to account for team member agreement and disagreement. Particularly, findings related to team IER configurations shows that not all non-uniform configurations have the same impact on teamwork, the bimodal configuration being the more harmful. Taking these results together, it is possible to conclude that perhaps team member differences should not be analysed in isolation from the team average. This is because even when this is done, the only meaningful observed difference was related to a majority vs a minority observing a high prevalence of interpersonal behaviours in their teams. Together, these results contribute to the knowledge of diversity in team processes and emergent states, and how this can impact on team performance.

9.3. Potential Limitations and Future Research

Despite its strengths, such as the use of multi-source data (e.g. including leader ratings of team performance) and multilevel analysis based on hundreds of teams across three separate studies, as with any research enterprise, this thesis is not without its limitations. This section describes the main potential limitations of this research, which are organised into two subsections. First, I refer to the main theoretical

limitations of this research, such as constraints inherent in the described theoretical mechanisms, antecedent processes, and omitted variables. Second, I address the methodological limitations related to the research design selected and generalisability of the results. Together with the limitations, I propose specific actions that future research may take in order to clarify the potential issues and advance the theoretical, empirical, and practical study of interpersonal emotion regulation in the team context.

9.3.1. Theoretical limitations

9.3.1.1. Alternative mechanisms

In this thesis, not all possible mechanisms were tested. The same theories used to explain the effect of team IER on other processes, emergent states, and outcomes suggest some candidates at the interpersonal and intrapersonal level.

Interpersonal mechanisms. Interpersonal and prosocial behaviour theories emphasise the importance of accounting for individuals' motivations or the perception thereof by interaction partners in order to explain both individuals' involvement in actions to help others and the likelihood of complementary responses by interaction partners (Horowitz et al., 2006). Thus, according to these theories, a possible additional mechanism could be the perception of others' intentions to regulate their negative emotions. This is in line with other theoretical accounts, such as emotion-as-social-information (EASI) theory (van Kleef, 2009), which suggest that people draw inferences about other's affective reactions and that these inferences impact on their behaviour.

In terms of team effectiveness research (LePine et al., 2008; Marks et al., 2001), alternative interpersonal processes and emergent states that may act as mechanisms can be conflict management, motivation building, team harmony, affective tone, cohesion, and team identity. Regarding alternative processes, previous research into team goal orientation (Gong, Kim, Lee, & Zhu, 2013; Rietzschel, 2011) has highlighted the positive effect of collective promotion focus on team performance, as team members proactively engage in task accomplishment. Thus, due to team IER being directed to modifying negative emotions and as a consequence improve others' feelings, an alternative way to impact team performance may be via motivation building. In terms of team emergent states, for example, by regulating others' negative emotions, team members may facilitate the emergence of a common affective tone,

team identity, or sense of cohesion, which may increase team performance (Collins et al., 2013; Evans & Dion, 1991; LePine et al., 2008; Lin et al., 2017; Ünal, Chen, & Xin, 2017).

Intrapersonal mechanisms. Social extensions of COR theory highlight the significance of accounting for people's self-esteem as a major likely outcome of resource gain cycles (Hobfoll et al., 2018). Unfortunately, this research was unable to measure these important variables, mainly due to the main objective being to understand interpersonal emotion regulation in the team context and not to confirm or refute the principles of these theories. A similar pattern can be observed in previous studies on IER in the workplace (Little et al., 2016; Madrid et al., 2019), which have appealed to social exchange theory or emotion as social information theory to indirectly explain the effect of these interpersonal behaviours (Cook, Cheshire, Rice, & Nakagawa, 2013; Cropanzano & Mitchell, 2005; van Kleef, 2009). Taken together, this potential limitation shows a lack of an overarching theory able to explain the effects of interpersonal emotion regulation (as a specific behaviour) on other variables. Thus, future research is needed to explain why individuals regulate other people's emotions and what the social consequences of these interpersonal behaviours are.

9.3.1.2. Contextual moderators

Related to the above limitation, besides alternative mediators, there are a number of potential moderators that were not included in this thesis and could be explored in future research.

Team member IER motives. From the arguments developed in the previous paragraphs regarding team member intentions (Horowitz et al., 2006), a good starting point might be the current increasing research into why people engage in interpersonal emotion regulation at work (Netzer, van Kleef, & Tamir, 2015; Niven, 2016; Niven, Troth, & Holman, 2019), which has highlighted the role of prosocial, egoistic, or instrumental motives and their consequences. For example, Tamir (2016) distinguishes two overarching motives of why people regulate their own emotions, namely hedonic (related to pleasure and feeling better) and instrumental (related to performance and social reasons).

Likewise, applied to the interpersonal domain, Niven and colleagues (2019) describe two general motives for why people regulate other's emotions: egoistic (to

benefit themselves) and prosocial motives (to benefit others). This account seems to be in the same vein as interpersonal behaviour theory (Horowitz et al., 2006). As mentioned, these authors suggest that to generate complementary responses, interpersonal actions need to fit with their intentions, being these either affiliative (similar to prosocial), or dominant, related to personal gain and performance (similar to egoistic and instrumental). Thus, further research is needed to understand the role of individuals' motives for regulating others' emotions, and their effects on selecting specific strategies over others.

Team member intrapersonal emotion regulation. As the title of this thesis suggests, this research has only focused on team member interpersonal emotion regulation, leaving aside team members' behaviours to regulate their own emotions in the team. Taking together the emotional labour literature (Becker & Cropanzano, 2015; Becker, Cropanzano, Van Wagoner, & Keplinger, 2017; Grandey & Gabriel, 2015) and research into norm formation in groups (Bettenhausen & Murnighan, 1991; Feldman, 1984), it is possible to predict that teams can develop emotion expression rules which will have an impact on intra- and interpersonal strategies used by team members to regulate their own and others' emotions. In fact, as discussed earlier, interpersonal suppression can be characterised as one of those norms.

Here again, an account of team members' motives for regulating their own and others' emotions can be beneficial. For example, in cases where team members regulate their own emotion expression (e.g. via suppression) in order to express positive emotions and regulate their colleagues' emotions via contagion (Forgas & George, 2001; Ilies et al., 2007; Sy & Choi, 2013) and then, to ensure team harmony or good performance. Also, especially in social interactions, people regulate others' emotions to feel better, for instance, regulating their own emotions as a consequence (Zaki & Williams, 2013). Thus, future research could explore the interactive effect between the two forms of regulation.

Besides all this, when team-level effects are considered, the boundary between intra- and interpersonal emotion regulation is less clear than when individual-level behaviours are studied. In other words, the social characteristics of a group/team cause intra- and interpersonal emotion regulation to overlap in terms of their behavioural expression. This means that saying that the team – as a whole – regulate their own

emotions implies that team members could achieve such regulation via both intra- and interpersonally regulating their emotions. Thus, future research might explore the dynamics between the two forms of emotion regulation in the team context to generate a fine-grained knowledge of this phenomenon in teams. A possible inquiry could be uncovering what team members actually think when they conceptualise their teams 'as a whole' in terms of the use of strategies to regulate others' emotions (Ellemers et al., 2013; Faddegon, Scheepers, & Ellemers, 2008).

Role of team leaders. Related to the team context, another potential limitation of this research is that while it did concentrate on teams, it only focused on team members' behaviours to regulate other members' emotions and not team leaders' behaviours, even though they are important team members. This because there is an extensive amount of field and experimental research that has already described the role of leaders in regulating the emotions of particular followers (Little et al., 2016; Thiel et al., 2015; Vasquez et al., 2020) or the team as a whole (Madrid et al., 2019). Notwithstanding, including team leader IER behaviours is important for two main reasons.

First, they occupy a special position in the team in terms of power and status (Chi & Ho, 2014; Tse et al., 2018). Earlier arguments in this thesis have highlighted the importance of power and status in interpersonal behaviours, especially considering the arguments around people's behaviours and intentions in terms of dominance and warmth (Horowitz et al., 2006). Also, because of their position of power and status, leaders can promote or inhibit team members' attempts to regulate their colleagues' negative emotions. Take for example a case in which a team member is experiencing negative emotions because of work overload. A teammate may inhibit an attempt to regulate his/her stress by sharing the tasks because he/she may think that it is up to the team leader to decide on actions like this. Besides, certain leadership styles might promote (or impede) a climate of support within the team, increasing the likelihood that team members will engage in regulatory actions with their peers.

Second, team leaders represent a source of affective events for team members (Cropanzano, Dasborough, & Weiss, 2017; Dasborough, 2006; Tse et al., 2018). Previous literature on leadership has shown how beneficial leadership styles, such as the transformational or charismatic, are associated with positive emotions in followers

(Walter & Bruch, 2009). Research has also shown how unfavourable leadership styles such as the autocratic or laissez faire are related to negative emotions in employees (Einarsen, Aasland, & Skogstad, 2007; Schyns & Schilling, 2013). For example, team members' behaviours to regulate other members' emotions can be triggered by the negative emotions caused by a leader. In such scenarios, team members can use their sense of humour in order to shift colleagues' attention from the leader figure.

Thus, further research that combines leaders' and team members' IER behaviours is needed, especially, in order to detect whether team members' behaviours have an effect over leader IER. Similar efforts have been made in order to clarify the effect of LMX and TMX on other process and outcomes (Banks et al., 2014; Tse et al., 2005). Therefore, future research into team interpersonal emotion regulation could follow a similar path.

9.3.1.3. Range of IER strategies studied

In terms of interpersonal emotion regulation, this research is limited by the fact that it did not evaluate the use of interpersonal emotion regulation strategies focused so as to down-regulate positive or sustain negative states. While the focus of this research has been on those strategies directed to changing negative emotions in others given their negative impact in the work setting, it is true that regulating positive emotions such as overenthusiasm or excessive calm can be useful in certain work contexts. In the qualitative study of Campo and colleagues (2016) in a sports team, it is possible to see the benefits of the interpersonal suppression of positive emotions, which can be beneficial for team performance. For example, when a team member told a colleague to not show his joy yet because the match had not finished, that allowed the colleague to remain focused.

In the organisational context, it is possible to imagine similar situations in which the down-regulation of positive emotions can be useful. For example, when a team member sees a relaxed colleague in the office, and he knows that a deadline is approaching and needs the collaboration of the colleague to complete the task. In such a scenario, team members can make others feel guilty or stressed in order to adjust their behaviour to the context's demands. Team members can also regulate colleagues' positive emotions for other reasons, for example, when they feel unfairly treated or want others to feel bad to preserve their dominant position in the team. Literature on

organisational justice, counterproductive work behaviours, and workplace bullying has given much attention to such interpersonal behaviours (Nielsen, Hoel, Zapf, & Einarsen, 2015; Fox, Spector, & Miles, 2001; Hoel, Glasø, Hetland, Cooper, & Einarsen, 2010; van Dijke, de Cremer, Bos, & Schefferlie, 2009). Therefore, future research should consider the study of team members' strategies to regulate other team members' positive emotions and also analyse the motivation behind their use by team members. As mentioned, Niven's (2016) distinction between several motivations for using interpersonal emotion regulation at work can provide a good starting point.

9.3.2. Methodological limitations

9.3.2.1. Cross-sectional design

One methodological limitation is that the data of the three studies were cross-sectional in nature; therefore, it is not possible to infer causality between the variables. This research included multi-source data collected at two points in time for all three studies in order to minimise the effect of common method bias. This strategy was especially useful for controlling possible issues around common method variance of the predictor and mediator variables relative to the outcome variable of the model (Podsakoff et al., 2012). Thus, reverse causal relationships between the model variables are possible to theorise.

In this regard, high team performance could be associated with high levels of positive affect among the members and lower levels of team relationship conflict, because good performance is associated with the experience of positive emotions and a collective sense of achievement. Previous evidence has shown how a team event of outstanding performance can be characterised as a positive affective event that goes on to generate consequent affective reactions in employees (Cropanzano et al., 2017; Weiss & Cropanzano, 1996). Thus, this climate of positive affect among members could influence their behaviours related to sustaining positive emotions such as enthusiasm or joy among members, promoting the use of antecedent-focused IER strategies and avoiding the use of interpersonal suppression (Collins et al., 2016; Pirola-Merlo, Härtel, Mann, & Hirst, 2002).

In a similar vein, the conflict management literature may suggest an inverse association between team IER and relationship conflict, such that once a relationship conflict arises among members, they could interpersonally regulate their negative emotions in order to manage and decrease conflict levels (Ayoko & Hartel, 2008; Bell & Song, 2005; Humphrey, 2006). Nonetheless, theoretical arguments for expected relationships have been made to support the direction of the effects. For example, whereas interpersonal emotion regulation and conflict management can have certain points in common, IER is a wider phenomenon including diverse strategies to regulate both positive and negative emotions, independent of a situation of conflict. In contrast, conflict management is a specific set of behaviours that individuals engage in when a previous situation of conflict already exists (Kim & Leung, 2000; Wall Jr & Callister, 1995).

These reverse causality effects, however, are not incompatible, because according to team effectiveness models the relationships between team interpersonal processes and other processes or emergent states are reciprocal (Ilgen et al, 2005; Mathieu et al., 2019). Thus, team processes and emergent states may describe cycles of mutual influence and causation over time. Therefore, further work needs to be undertaken to establish whether there is a specific causal path between team IER and other team processes and emergent states such as conflict, or if these team phenomena are involved in a process of reciprocal influence. Experimental and longitudinal designs appear to be the most appropriate to respond to these questions related to the dynamics of causation involved in team processes and emergent states (Kozlowski, 2015). In the former, traditional pre-post designs could be utilised in order to establish if there is a change in the level of relationship conflict among members after an intervention in interpersonal emotion regulation strategies. In the latter, exploring cross-lagged effects over time could be useful to elucidate the potential pattern of reciprocal causal relationships among the variables.

9.3.2.2. Multilevel mediation models

Similar to the majority of field studies in teams, another limitation was that the sample size at cluster level did not make it possible to perform multilevel structural equation modelling using latent variables in some studies due to problems of model specification. Thus, the results of Studies 1 and 3 are based on aggregated scores of

the variables representing team-level values. While this practice is common in group-level research (Lebreton & Senter, 2008; Smith-Crowe, Burke, Cohen, & Doveh, 2014; Woehr et al., 2015), especially when ICC and IRA indicators are fulfilled, multilevel modelling contributes to a more accurate use of the data because it takes into account the extent of dependence shown by the data nested in a particular cluster (e.g. teams). This allows researchers to work simultaneously with the different sources of variance (both within and between the groups), so improving the prediction of the outcome. This avoids the possibility of incurring two fallacies around data interpretation, the ecological and atomistic, by making interpretations at the group level from inferences based on individual-level data (Maas & Hox, 2004; McNeish, 2017).

Thus, multilevel structural equation modelling was only performed for the whole mediation model in Study 2. Although the sample size in the three studies was valuable, and even exceeded the minimum recommended (Hox & Maas, 2001), the number of variables specified in the models increased the number of parameters, thereby restricting the possibility of further analysis. This is especially noticeable if the sample sizes at the team level of Study 1 (N = 99) and Study 3 (N =187) are compared with that of Study 2 (N = 697), in which the analysis could be performed. This is a major limitation for field research using quantitative survey designs in teams, because it constrains the potential complexity of the theoretical models studied in terms of the variables specified, the relationships estimated, and the required sample size. Future research in this area should be aware of this limitation from the moment of planning in order to try to ensure a large enough sample size at the team level. An alternative to this may be to develop long-lasting relationship with organisations in a mutual benefit relationship in which both parties obtain the benefits of applied research in the workplace.

9.3.2.3. Operationalisation of team IER construct

Directly related to the above, another potential issue not addressed in this study is that team interpersonal emotion regulation was measured from the perspective of what team members perceive as occurring within their teams, using a referent-shift and a dispersion model (Chan, 1998). This implies that the meaning of the team-level construct is composed by the respective agreement or variation among members

regarding team dynamics, which is beneficial if the focus of the research is assessing team-level phenomena. However, because of the interpersonal nature of the construct, involving dyadic- and team-level interactions, other alternatives might have been explored, especially considering that the mean team score may not be any individual's score in the team.

First, in terms of composition models (Chan, 1998), there also exists the alternative of using an additive model that reflects the average or summation of individual-level behaviours. In that regard, future research could explore the multilevel effect of interpersonal emotion regulation strategies reported by each member in relation to how they individually engage in actions to regulate other members' emotions, in order to elucidate the effect of team membership on the use of these interpersonal behaviours. A second and more comprehensive alternative may be using an assessment of interpersonal emotion regulation of each dyadic interaction among members within a team, and then operationalising this information to capture team level effects. Round-robin designs allow researchers to collect information from different sources and then combine it in a meaningful way in the analysis stage. Likewise, social network analysis (SNA) is able to map the strengths of relationships between interaction partners inserted in wider groups. Using these methodologies, future research could clearly distinguish the presence of subgroups in terms of the interpersonal regulation of emotions between interaction partners. For example, Pollack & Matous (2019) use SNA to map patterns of communication in project teams. Similarly, recent research in sports teams has highlighted the benefits of using SNA to understand individual and interpersonal behaviour simultaneously (Lusher, Robins, & Kremer, 2010). Thus, future research could take advantage of using such methodologies to understand both intrapersonal and interpersonal influences of team IER phenomenon in a more comprehensive way.

9.3.2.4. Diversity in team IER

Regarding diversity, this research is limited by the use of an objective operationalisation of team member perceptions of team IER behaviours. Whereas two different ways to conceptualise diversity were tested (i.e. one related to within-team IER variation and another conceptualising team member diversity as specific team IER configurations), previous literature suggests several additional alternatives

(Dawson, 2011; Harrison & Klein, 2007). There is a debate among diversity theorists as to whether individuals' diversity in a given attribute should be assessed using an 'objective' or 'subjective' measure. Traditionally, most of the research in the field has focused on objective diversity or actual differences in members' characteristics, and much less attention has been paid to perceived diversity (Shemla & Meyer, 2012).

Subjective diversity refers to members' self-reported perception of differences within their units (e.g. areas, groups, or teams). Thus, individuals can report their perceived self-to-team dissimilarity, whether their teams are split into two or more subgroups, and general perceived group heterogeneity. The traditional focus on objective diversity, such as that expressed in this research, has been challenged by several problems such as inconsistent effects, difficulties with their predictions, and difficulties in discerning the variety of meanings that people attribute to different compositions, for instance, those based on their beliefs or status (Shemla, Meyer, Greer, & Jehn, 2014). Therefore, further research should be undertaken to explore how team members perceive group heterogeneity or subgroup dynamics in terms of the frequency and type of strategies they use to regulate other members' emotions. Results of such an inquiry may provide valuable information to give a more comprehensive understanding of diversity in team IER.

9.3.2.5. Generalisability of results.

The generalisability of these results is subject to certain limitations. Whereas the analyses and results of this thesis are based on thousands of team members nested in hundreds of teams (N= 6,611 employees, 983 teams), all of the participant organisations are located in Latin America, and primarily in Chile. Therefore, the generalisation of the results may be limited by cultural differences. For example, there is research that suggests that certain cultural values such as collectivism or power distance have an effect on interpersonal behaviours (Moorman & Blakely, 1995). Thus, as IER comprises behaviours that regulate others' emotions, it can be influenced by these overarching values. In this sense, people may use certain strategies to regulate others' emotions when they work in collectivistic versus individualistic cultures.

This might be especially noticeable in relation to whether we take into account the arguments related to emotion display rules and the motives for regulating others' emotions (Matsumoto, Seung, Hirayama, & Petrova, 2005). Notwithstanding this

limitation, previous evidence in leader interpersonal emotion regulation in the workplace shows a very similar pattern regardless of the national cultural values of the sample (Little et al., 2016; Madrid et al., 2019; Niven et al., 2011). Perhaps the norms that guide the expression of emotion in the workplace are more general than the values that guide our behaviour in other domains (Burke, 2010; Matsumoto, 1990). Regardless, further research should be undertaken to explore how cultural values can influence the expression of emotion and its interpersonal regulation in work teams. For example, by establishing if individualist and collectivistic cultures differ in promoting the use of certain strategies on the part of employees to regulate others' emotions in the workplace. Also, cross-cultural investigations could add each individual's nation or culture as a possible control or moderator variable in their analysis.

9.4. Practical Implications

The findings of this thesis have a number of practical implications. Team member strategies to regulate colleagues' emotions represent behaviours that can be potentially modified by learning and training (Michie, Van Stralen, & West, 2011; Quoidbach & Gross, 2015). This thesis has shown how this interpersonal process can have an impact on team dynamics (e.g. team conflict, trust, and quality of relationships), team performance (e.g. in-role task performance and OCB), and team member well-being (e.g. team member emotional exhaustion). Thus, interventions to promote the use of strategies to regulate the antecedents of negative emotions in others and avoid a culture of interpersonal suppression may benefit not only team-level processes, but also employee well-being. Besides, if we consider the multilevel structure in which companies are arranged in terms of layers of organisation (e.g. individuals, groups and teams, areas, divisions, and the whole organisation), multilevel interventions should be considered (Martin et al., 2016). These findings suggest several courses of action for interventions directed to improving employee well-being focusing on interpersonal emotion regulation at different levels.

9.4.1. Individual level

Team members could be trained in IER behaviours. This training could involve sessions in which employees can learn about such behaviours and the benefits of using certain strategies in some contexts or the potential drawbacks of using interpersonal suppression in others (Bonanno & Burton, 2013; Kobylińska & Kusev, 2019). For example, team members could receive training in several ways by which they could help to manage negative emotions in their co-workers when they need it because such actions may have an impact on their well-being and their performance. Also, team members could be cautioned about the potential negative consequences of interpersonal suppression strategies.

This training could allow the behaviours that they probably already use become more conscious, in the sense that they could distinguish the strategies they have used and the effects that they have had in previous interactions with colleagues. Thus, team members can be more aware of situations where they use humour or help colleagues by putting their problems in perspective. For example, a typical example of individual level intervention directed to improving social relationships and well-being can be found in job crafting literature, in which employees receive training to improve their personal, social, and job resources and to decrease job demands (van den Heuvel, Demerouti, & Peeters, 2015; van Wingerden, Bakker, & Derks, 2017). Similarly, employees could receive training in behaviours to increase their use of antecedent-focused IER or avoiding using response-focused IER strategies. These interventions focused at the individual or employee level may increase the frequency with which employees use these behaviours, increasing their prevalence in daily interpersonal interactions among workers and, as a result, improving their social relationships and well-being.

9.4.2. Team level

Interventions can also be implemented at the team level. Traditionally, team level interventions can be achieved via training teams as a whole, or through training team leaders (Nielsen & González, 2010). Thus, team interventions focused on IER can follow the same pattern. First, team members can be trained in team activities or dynamics. This research's findings bring valuable information on team-level intervention by empirically showing the effect of such strategies on team dynamics

and performance. In this regard, almost from its conception, team effectiveness models have highlighted the potential benefits of training members in affect regulation (Marks et al., 2001). Likewise, previous literature in team building or group coaching has shown the benefits of engaging in team-level interventions when the objective is to increase team members' quality of relationships, cohesion, coordination, and trust (Hackman & Wageman, 2005; Klein et al., 2009; Salas, Rozell, Mullen, & Driskell, 1999).

For example, Huang, Wei, Watson, and Tan (2003), using a goal-setting structure, which encourages team members to align their individual goals to generate shared team goals, found that teams that received the training reported a significantly stronger extent of shared team goals than teams that did not use the goal-setting structure. Similarly, interventions in team IER could use an analogous setting, such as common activities that encourage team members to share the strategies that they use and their effects. In that regard, activities could involve the use of strategies to produce positive emotions in other members or others to suppress negative emotions in a controlled team environment. Then, facilitators could inform members about the several strategies that people use to regulate others' negative emotions and their effect on team processes and outcomes. Later, individuals could reflect on what the strategies that fit best with themselves are. As a result, such team-level interventions may increase the frequency and quality of the strategies used by members to regulate their colleagues' negative emotions and, as a consequence, facilitate team integration, cohesion, performance, and team member well-being.

Second, team-level interventions could be carried out through team leaders. Team leaders occupy a special role within organisations because they are the link between high and low organisational layers (Nielsen & González, 2010). Team leaders could receive training in assessing the prevalence of IER behaviours on the part of members within their teams and ways to encourage them. This is due to the fact that a prompt solution to team members' disagreements and their associated negative emotions might depend on leaders' intervention, which might avoid a future conflict situation or help to boost team morale (Hackman & Wageman, 2005).

As the findings of this thesis suggest, such actions can have a positive effect on not only team dynamics and performance, but also on team member well-being.

Another important practical implication is that promoting active leader engagement in facilitating IER behaviours may also have an impact on the leadership process itself, because a large amount of research has shown the role of leader IER in prompting team members' positive emotions, quality of relationships, and performance (Edelman & van Knippenberg, 2017; Little et al., 2016; Thiel et al., 2015; Vasquez et al., 2020). Therefore, training leaders in interpersonal emotion regulation in the workplace may be beneficial not only for team members, but also for leadership.

9.4.3. Organisational level

Targeted interventions in IER at the organisational level may be focused on the development of policies, cultural values, and communication (Nielsen & Abildgaard, 2013; Randall, Griffiths, & Cox, 2005). Such interventions could have an effect at multiple levels of organisations, expecting both direct and cross-level effects, for example in terms of individual, team, or organisational well-being indicators, such as team member satisfaction within the team or absence records (Charns et al., 2012; Martin et al., 2016). For organisations, a key policy priority may therefore be to plan for the long-term care of employee well-being within areas and teams (DeJoy, Wilson, Vandenberg, McGrath-Higgins, & Griffin-Blake, 2010). To do this, the present thesis's findings suggest an emphasis on the use of antecedent-focused interpersonal emotion regulation strategies on the part of team members. Thus, organisations could integrate these behaviours within their cultural values related to co-worker support (Beehr & Glazer, 2001).

Actions like these could increase employees' perceptions of the importance that the organisation attaches to the development of harmonious relationships and trust within teams and to their own well-being. An easy way in which organisations can implement such cultural values is by means of communication. Indeed, organisations could make particular efforts in communicating the importance of individuals' well-being, and one way to achieve this is by increasing social support for behaviours between workers such as those mentioned in this research. Managers could also communicate to their teams the importance of the active role performed by team members in the interpersonal processes within the team and their potential influence on team outcomes and team members' welfare.

All things considered, these practical implications highlight the importance of considering the multilevel structure of organisations in order to implement interventions to improve teamwork and employee well-being, for example, by training employees in personal behaviours, via activities that involve the active engagement of all members of a team, or through policies that affect the whole organisation. The findings of this thesis bring rich empirical data for the development of initiatives directed to the consideration of creating a better workplace, for example, via promoting the use of interpersonal emotion regulation strategies on the part of team members.

9.5. Conclusion

The main objective of this thesis was to understand the influence of interpersonal emotion regulation (IER) on team dynamics and performance. Particularly, Chapter 2 reviewed several ways to understand the phenomenon of interpersonal emotion regulation in the workplace. Chapter 3 examined the prior literature on IER in the team context, defining the main construct of this research, namely, team IER, at different levels of analysis. Chapter 4 reviewed the research on the IPSO model of team effectiveness, placing team IER within this model, and applied it as the organising framework. Chapter 5 presented the conceptual multilevel mediation model of this thesis and grounded the relationships between specific variables following the IPSO model, organising them in terms of inputs, processes, emergent states, and outputs. This model proposes that team IER can impact team dynamics such as team relationship conflict, TMX, and trust, which in turn influence team performance and team member well-being. Chapters 6 and 7 described the methodology and the results of the three studies designed to empirically test the expected relationships between the thesis's variables represented by specific hypotheses. Chapter 8 addressed team IER from the perspective of diversity. This chapter theoretically explored, tested, and showed the results of a moderated mediation model based on two forms of team IER diversity (i.e. within-team IER variation and team IER configurations). Lastly, Chapter 9 summarised and discussed the results of the three studies, addressed its main limitations, and described the thesis's contributions for theory and practice.

In terms of unique contributions, this thesis extends our knowledge of interpersonal emotion regulation by showing that these strategies are widespread in the team context and that teams can be compared in terms of how frequently their members regulate their colleagues' negative emotions. The findings of this investigation complement and extend those of earlier studies into IER and emotion-regulation-related processes, such as emotional intelligence or emotional labour, in the team context (Becker & Cropanzano, 2015; Curşeu et al., 2015; Jordan & Troth, 2004). Furthermore, the findings of this thesis extend previous studies of IER in the team context that mainly focused on the leaders' perspective (Little et al., 2016; Madrid et al., 2019; Thiel et al., 2015), by showing IER strategies from the team members' perspective. This research also advanced our theoretical and empirical understanding of models of team effectiveness, revealing that not all team members' affect management strategies are the same for enhancing team effectiveness.

Specifically, team antecedent-focused IER strategies have a positive indirect effect on team performance via their direct influence on team relationship conflict and team member quality of relationship. These strategies also have a negative indirect effect on team members' emotional exhaustion, via interpersonal conflict. In contrast, team response-focused IER strategies show a positive effect on team relationship conflict, as well as members' quality of relationship and trust, but they were not related to team performance and team members' emotional exhaustion. These results enhance our understanding of the interpersonal emotion regulation phenomenon, providing more evidence concerning its effects on teams. Concerning team-level effects, this thesis contributes to the team and diversity literature by showing the effects of different composition models and forms to conceptualise emergent diversity in a team process on team performance.

I hope that the theoretical and empirical contributions developed in this thesis will stimulate further research in the area. It is true that, so far, we have gained a fair amount of evidence about the role of interpersonal emotion regulation in our daily life (in and outside the work context), but it is also true that there is so much more to discover, in order to achieve a more comprehensive understanding of IER in teams. For instance, future inquires could unveil the dynamics between intra- and interpersonal emotion regulation, studying contextual factors (e.g. team members' motives, role of leaders) and alternative mechanisms (e.g. team cohesion, team

member self- esteem), developing a broader range of strategies directed to up- and down-regulate team members' positive and negative emotions. Forthcoming studies also need to use alternative methodologies, more suited to catch real-time variations and establish clear causal relations between the constructs. In practical terms, these findings bring valuable knowledge that can be applied via numerous courses of action that organisations can implement to improve the experience of employees and their sense of well-being in the workplace.

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Appendices

Appendix 1. Study 1 - Scales included in questionnaire – English version

Team member Survey

Team interpersonal emotion regulation scale

There are occasions when people try to make others feel better. For example, when a colleague is feeling worried about their current performance, you might try to cheer them up by remind them of previous successes.

The following two sections ask about the extent to which you and your team colleagues have used various strategies to try to improve the feelings of others at work **OVER THE LAST MONTH**.

It does not matter whether the strategies worked or not, just the extent to which team members used them. (1 = 'Never/ Almost Never'; 2 = 'Rarely'; 3 = 'Sometimes'; 4 = Frequently'; 5 = 'Very Frequently').

Situation Modification

1. Try to modify the characteristics of situation that is causing negative emotions in a colleague.
2. Take concrete actions to change the situation that generate those negative emotions.
3. Try to change the negative elements situation that produce negative emotions in a colleague.

Attentional Deployment

1. Say something nice to focus their colleagues' attention on something that make them feel good.
2. Distract their colleague's attention from the issue causing him/her negative emotions.
3. Focus colleagues' attention in a more positive topic (e.g. team achievements).

Cognitive change

1. Give colleagues' advice to try to make them feel better.
2. Try to help him/her by putting their problems in perspective.
3. Try to change the way in their colleagues think about the cause of their negative emotions.

Response modulation

1. Suggest to their colleagues that they do not express negative emotions.
2. Encourage him/her do not express them in that moment.
3. Communicate their colleagues that it is better not show negative emotions.

Team relationship conflict

This variable was measured with four items from the relationship conflict subscale from the Intragroup Conflict Scale developed by Jehn (1995).

Please indicate the most appropriate answer to the following questions about **YOUR TEAM IN THE PAST MONTH.** (1 = 'none; 5 = 'A lot').

1. How much friction is present in your work group?
2. To what extent are personality clashes present in your work group?
3. How much anger is present in your work group?
4. How much emotional conflict is there in your work group?

Team Leader Survey

Team performance

This construct was measured by team leaders' ratings with three items from the team productivity subscale developed by Williams, L. J., & Anderson, S. E. (1991).

Please indicate whether you agree or disagree with the following statements about the work performed by YOUR WORK TEAM IN THE PAST MONTH.

(1 = ‘Strongly Disagree’; 2 = ‘Disagree’; 3 = ‘Neither Agree nor Disagree’; 4 = ‘Agree’; 5 = ‘Strongly Agree’).

Team in role(task) performance

1. Adequately complete assigned duties
2. Fulfils responsibilities specified in job description
3. Perform tasks that are expected of him/her
4. Meets formal performance requirements of the job
5. Engages in activities that will directly affect his/her performance
6. Neglects aspects of the job he/she is obligated to perform
7. Fails to perform essential duties

Team Organisational citizenship Behaviour (OCB)

1. Helps others who have been absent
2. Helps others who have heavy work loads
3. Assist supervisor with his/her work (even not asked)
4. Takes time to listen to co-workers' problems and worries
5. Goes out of way to help new employees
6. Takes personal interest in other employees

Study 2 - Scales included in questionnaire – Spanish version

Escala de regulación emocional interpersonal del equipo

Hay ocasiones en las que cuando alguien no se siente muy bien, las personas tratan de hacerlos sentir mejor. A continuación, se presentarán una serie de acciones que la gente realiza para mejorar como otros se sienten en el trabajo:

CUANDO UN INTEGRANTE DE TU EQUIPO está experimentando emociones negativas (ej. Sintiéndose estresado, enojado, triste o decaído), **LOS INTEGRANTES DEL EQUIPO:** (1 = ‘Para nada’; 2 = ‘Un poco; 3 = ‘Moderadamente; 4 = Bastante; 5 = ‘Muchísimo’).

Modificación de la situación

1. tratan de modificar las características de la situación que produce esas emociones negativas
2. toman acciones concretas para cambiar la situación que le genera esas emociones negativas
3. tratan de cambiar los elementos de la situación que pueden estar afectando negativamente a ese compañero

Cambio en el foco atencional

1. le dicen algo agradable para focalizar su atención en algo que los hace sentir bien
2. lo distraen de los problemas que les causan emociones negativas
3. focalizan su atención en un asunto más positivo para ese compañero

Cambio cognitivo

1. le dan consejos para que evalúen la situación desde otro punto de vista
2. tratan de ayudarlo a ver de otra manera la situación que les genera emociones negativas
3. tratan de cambiar la forma en que su compañero piensa acerca de lo que causa sus emociones negativas (ej. un problema)

Modulación de la respuesta

1. le sugieren no expresarlas (ej. no mostrarse enojado)
2. los motivan a no mostrar sus emociones negativas en ese momento
3. les comunican que es mejor no mostrar sus emociones negativas en el trabajo

Conflicto en las relaciones del equipo

PIENSA EN TU EQUIPO DE TRABAJO y señala tu grado de acuerdo o desacuerdo con las siguientes afirmaciones: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

1. Existe mucha fricción entre los integrantes del equipo

2. Existen conflictos personales evidentes entre los integrantes de mi equipo de trabajo
3. Existe un clima emocional negativo en el equipo
4. Existe mucha tensión entre los integrantes de mi equipo

Desempeño del equipo

Señale su grado de acuerdo o desacuerdo con las siguientes afirmaciones acerca del trabajo desempeñado por su EQUIPO EN EL ULTIMO MES: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

Desempeño en la tarea del equipo

1. Los integrantes del equipo completan de forma adecuada las tareas asignadas
2. Los integrantes del equipo cumplen con las responsabilidades especificadas en sus descripciones de cargo
3. Los integrantes del equipo cumplen con lo que se espera de su trabajo
4. Los integrantes del equipo cumplen con los requerimientos formales de su trabajo
5. Los integrantes del equipo se involucran en las actividades que directamente afectan su desempeño
6. Los integrantes del equipo descuidan algunos aspectos obligatorios de su trabajo
7. Los integrantes del equipo fallan en cumplir con deberes esenciales de su trabajo

Conductas de ciudadanía organizacional del equipo

1. Los integrantes del equipo ayudan a sus compañeros cuando han estado ausentes
2. Los integrantes del equipo ayudan a sus compañeros cuando han tenido sobrecarga laboral
3. Los integrantes del equipo lo ayudan con su trabajo (incluso si no se los pide explícitamente)
4. Los integrantes del equipo se toman el tiempo de escuchar los problemas de sus compañeros

5. Los integrantes del equipo se preocupan por ayudar a nuevos empleados
6. Los integrantes del equipo muestran un interés personal en otros integrantes del equipo

Appendix 2. Study 2 - Scales included in questionnaire – English version

Team member Survey

Team interpersonal emotion regulation scale

There are occasions when people try to make others feel better. For example, when a colleague is feeling worried about their current performance, you might try to cheer them up by remind them of previous successes.

The following two sections ask about the extent to which you and your team colleagues have used various strategies to try to improve the feelings of others at work **OVER THE LAST MONTH**.

It does not matter whether the strategies worked or not, just the extent to which team members used them. (1 = 'Never/ Almost Never'; 2 = 'Rarely'; 3 = 'Sometimes'; 4 = Frequently'; 5 = 'Very Frequently').

Situation Modification

1. Try to modify the characteristics of situation that is causing negative emotions in a colleague.
2. Take concrete actions to change the situation that generate those negative emotions.
3. Try to change the negative elements situation that produce negative emotions in a colleague.

Attentional Deployment

1. Say something nice to focus their colleagues' attention on something that make them feel good.
2. Distract their colleague's attention from the issue causing him/her negative emotions.
3. Focus colleagues' attention in a more positive topic (e.g. team achievements).

Cognitive change

1. Give colleagues' advice to try to make them feel better.
2. Try to help him/her by putting their problems in perspective.
3. Try to change the way in their colleagues think about the cause of their negative emotions.

Response modulation

1. Suggest to their colleagues that they do not express negative emotions.
2. Encourage him/her do not express them in that moment.
3. Communicate their colleagues that it is better not show negative emotions.

Team relationship conflict

This variable was measured with four items from the relationship conflict subscale from the Intragroup Conflict Scale developed by Jehn (1995).

Please indicate the most appropriate answer to the following questions about **YOUR TEAM IN THE PAST MONTH.** (1 = 'none; 5 = 'A lot').

1. How much friction is present in your work group?
2. To what extent are personality clashes present in your work group?
3. How much anger is present in your work group?
4. How much emotional conflict is there in your work group?

Emotional exhaustion

This construct was measured with four items adapted from the Emotional Exhaustion subscale of the Maslach Burnout Inventory general scale (MBI-GS) developed by Maslach, Jackson & Leiter (1981).

Please indicate how often **YOU** have felt that way about your job **IN THE PAST MONTH.** (1 = 'Never/ Almost Never'; 2 = 'Rarely'; 3 = 'Sometimes'; 4 = Frequently'; 5 = 'Very Frequently').

1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel burned out from my work.
4. I feel like I'm at the end of my rope.

Team Leader Survey

Team performance

This construct was measured by team leaders' ratings with three items from the team productivity subscale developed by Kirkman & Rosen (1999).

Please indicate whether you agree or disagree with the following statements about the work performed by **YOUR WORK TEAM IN THE PAST MONTH.** (1 = 'Strongly Disagree'; 2 = 'Disagree'; 3 = 'Neither Agree nor Disagree'; 4 = 'Agree'; 5 = 'Strongly Agree').

1. The team completes its tasks on time.
2. The team responds quickly when problems come up.
3. The team successfully solves problems that slow down their work.

Study 2 - Scales included in questionnaire – Spanish version

Escala de regulación emocional interpersonal del equipo

Hay ocasiones en las que cuando alguien no se siente muy bien, las personas tratan de hacerlos sentir mejor. A continuación, se presentarán una serie de acciones que la gente realiza para mejorar como otros se sienten en el trabajo:

CUANDO UN INTEGRANTE DE TU EQUIPO está experimentando emociones negativas (ej. Sintiéndose estresado, enojado, triste o decaído), **LOS**

INTEGRANTES DEL EQUIPO: (1 = 'Para nada'; 2 = 'Un poco; 3 = 'Moderadamente; 4 = Bastante; 5 = 'Muchísimo').

Modificación de la situación

1. tratan de modificar las características de la situación que produce esas emociones negativas
2. toman acciones concretas para cambiar la situación que le genera esas emociones negativas
3. tratan de cambiar los elementos de la situación que pueden estar afectando negativamente a ese compañero

Cambio en el foco atencional

1. le dicen algo agradable para focalizar su atención en algo que los hace sentir bien
2. lo distraen de los problemas que les causan emociones negativas
3. focalizan su atención en un asunto más positivo para ese compañero

Cambio cognitivo

1. le dan consejos para que evalúen la situación desde otro punto de vista
2. tratan de ayudarlo a ver de otra manera la situación que les genera emociones negativas
3. tratan de cambiar la forma en que su compañero piensa acerca de lo que causa sus emociones negativas (ej. un problema)

Modulación de la respuesta

1. le sugieren no expresarlas (ej. no mostrarse enojado)
2. los motivan a no mostrar sus emociones negativas en ese momento
3. les comunican que es mejor no mostrar sus emociones negativas en el trabajo

Conflicto en las relaciones del equipo

PIENSA EN TU EQUIPO DE TRABAJO y señala tu grado de acuerdo o desacuerdo con las siguientes afirmaciones: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

1. Existe mucha fricción entre los integrantes del equipo
2. Existen conflictos personales evidentes entre los integrantes de mi equipo de trabajo
3. Existe un clima emocional negativo en el equipo
4. Existe mucha tensión entre los integrantes de mi equipo

Agotamiento emocional

DURANTE EL ÚLTIMO MES EN TU TRABAJO, cuán a menudo tú te has sentido: (1= 'Nunca'; 2 = 'Muy pocas veces'; 3 = 'A veces'; 4 = 'Muchas veces'; 5 = 'Casi siempre/ Siempre').

1. Te has sentido emocionalmente agotado durante tu trabajo.
2. Te has sentido agotado al final de la jornada laboral.
3. Te has sentido muy cansado antes de empezar tu día laboral.
4. Te has sentido que estás al límite de tus energías.

Desempeño del equipo

Señale su grado de acuerdo o desacuerdo con las siguientes afirmaciones acerca de su equipo. **LOS INTEGRANTES DE MI EQUIPO DIRECTO EN EL ÚLTIMO MES**: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

1. Cumplen con sus tareas a tiempo.
2. Resuelven de manera efectiva los problemas de trabajo que enfrentan.
3. Reaccionan rápido cuando se presentan problemas inesperados.

Appendix 3. Study 3 - Scales included in questionnaire – English version

Team member Survey

Team interpersonal emotion regulation scale

There are occasions when people try to make others feel better. For example, when a colleague is feeling worried about their current performance, you might try to cheer them up by remind them of previous successes.

The following two sections ask about the extent to which your TEAM has used various strategies to try to improve the feelings of others at work **OVER THE LAST MONTH**.

It does not matter whether the strategies worked or not, just the extent to which team members used them. (1 = 'Never/ Almost Never'; 2 = 'Rarely'; 3 = 'Sometimes'; 4 = Frequently'; 5 = 'Very Frequently').

Situation Modification

1. Try to modify the characteristics of situation that is causing negative emotions in a colleague.
2. Take concrete actions to change the situation that generate those negative emotions.
3. Try to change the negative elements situation that produce negative emotions in a colleague.

Attentional Deployment

1. Say something nice to focus their colleagues' attention on something that make them feel good.
2. Distract their colleague's attention from the issue causing him/her negative emotions.
3. Focus colleagues' attention in a more positive topic (e.g. team achievements).

Cognitive change

1. Give colleagues' advice to try to make them feel better.
2. Try to help him/her by putting their problems in perspective.
3. Try to change the way in their colleagues think about the cause of their negative emotions.

Response modulation

1. Suggest to their colleagues that they do not express negative emotions.
2. Encourage him/her do not express them in that moment.
3. Communicate their colleagues that it is better not show negative emotions.

Individual interpersonal emotion regulation scale

This variable was measured with twelve items from the relationship conflict subscale from the Intragroup Conflict Scale developed by Little et al. (2012). Development and validation of the Interpersonal Emotion Management Scale

There are occasions when people try to make others feel better. For example, when a colleague is feeling worried about their current performance, you might try to cheer them up by remind them of previous successes.

The following two sections ask about the extent to which you have used various strategies to try to improve the feelings of others at work **OVER THE LAST MONTH**.

It does not matter whether the strategies worked or not, just the extent to which team members used them. (1 = 'Never/ Almost Never'; 2 = 'Rarely'; 3 = 'Sometimes'; 4 = Frequently'; 5 = 'Very Frequently').

Situation Modification

1. I change the situation to alter its emotional impact
2. I remove the negative aspects of the situation that are negatively impacting others

3. I modify the elements of the situation that are having an undesired impact on others

Attentional Deployment

1. When I think a situation will cause an undesirable emotion in others, I distract them from focusing on the negative aspects of that situation
2. I distract others' attention from the aspect of the problem causing their undesired emotions
3. When a situation is disturbing others, I focus their attention away from the troubling aspect of the problem

Cognitive change

1. When I want others to feel more positive emotions (such as joy or amusement), I put their problems into perspective.
2. I try to influence the emotions of others by changing how they think about the situation they are in.
3. When I want others to feel less negative emotion (such as sadness or anger), I change the meaning they are attaching to a situation.

Response modulation

1. When others are experiencing undesirable emotions, I tell them not to express them.
2. I encourage others to keep their emotions to themselves.
3. I encourage others not to express their emotions.

Team relationship conflict

This variable was measured with four items from the relationship conflict subscale from the Intragroup Conflict Scale developed by Jehn (1995).

Please indicate the most appropriate answer to the following questions about **YOUR TEAM IN THE PAST MONTH.** (1 = 'none; 5 = 'A lot').

1. How much friction is present in your work group?
2. To what extent are personality clashes present in your work group?
3. How much anger is present in your work group?
4. How much emotional conflict is there in your work group?

TMX

This variable was measured with eight items from the relationship conflict subscale from the Intragroup Conflict Scale developed by Seers, A. (1989).

Please indicate the most appropriate answer to the following questions about **YOUR TEAM IN THE PAST MONTH.** (1 = 'none; 5 = 'A lot').

1. Team members make suggestions about better work methods to other team members
2. Team members know when they have done something that makes my job easier (or harder)
3. Team members of my team recognize my potential
4. Team members of my team understand my problems and needs
5. I am flexible about switching job responsibilities to make things easier for team members
6. Team members often ask other members to help out
7. I am willing to help finish work that had been assigned to others

Team trust

This variable was measured with four items from the relationship conflict subscale from the Intragroup Conflict Scale developed by McAllister, D. J. (1995).

Please indicate the most appropriate answer to the following questions about **YOUR TEAM IN THE PAST MONTH.** (1 = 'none; 5 = 'A lot').

1. We trust each other a lot in my team

2. I know I can count on the other team members in my team
3. The other team members know they can count on me in my team
4. I trust all of the other team members of my team

Emotional exhaustion

This construct was measured with four items adapted from the Emotional Exhaustion subscale of the Maslach Burnout Inventory general scale (MBI-GS) developed by Maslach, Jackson & Leiter (1981).

Please indicate how often **YOU** have felt that way about your job **IN THE PAST MONTH.** (1 = 'Never/ Almost Never'; 2 = 'Rarely'; 3 = 'Sometimes'; 4 = Frequently'; 5 = 'Very Frequently').

1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel burned out from my work.
4. I feel like I'm at the end of my rope.

Team Leader Survey

Team performance

This construct was measured by team leaders' ratings with three items from the team productivity subscale developed by Williams, L. J., & Anderson, S. E. (1991).

Please indicate whether you agree or disagree with the following statements about the work performed by <u>YOUR WORK TEAM IN THE PAST MONTH.</u> (1 = 'Strongly Disagree'; 2 = 'Disagree'; 3 = 'Neither Agree nor Disagree'; 4 = 'Agree'; 5 = 'Strongly Agree').

Team in role(task) performance

1. Adequately complete assigned duties
2. Fulfils responsibilities specified in job description
3. Perform tasks that are expected of him/her

4. Meets formal performance requirements of the job
5. Engages in activities that will directly affect his/her performance
6. Neglects aspects of the job he/she is obligated to perform
7. Fails to perform essential duties

Team Organisational citizenship Behaviour (OCB)

1. Helps others who have been absent
2. Helps others who have heavy work loads
3. Assist supervisor with his/her work (even not asked)
4. Takes time to listen to co-workers' problems and worries
5. Goes out of way to help new employees
6. Takes personal interest in other employees

Study 2 - Scales included in questionnaire – Spanish version

Escala de regulación emocional interpersonal del equipo

Hay ocasiones en las que cuando alguien no se siente muy bien, las personas tratan de hacerlos sentir mejor. A continuación, se presentarán una serie de acciones que la gente realiza para mejorar como otros se sienten en el trabajo:

CUANDO UN INTEGRANTE DE TU EQUIPO está experimentando emociones negativas (ej. Sintiéndose estresado, enojado, triste o decaído), **LOS INTEGRANTES DEL EQUIPO:** (1 = 'Para nada'; 2 = 'Un poco; 3 = 'Moderadamente; 4 = Bastante; 5 = 'Muchísimo').

Modificación de la situación

1. tratan de modificar las características de la situación que produce esas emociones negativas
2. toman acciones concretas para cambiar la situación que le genera esas emociones negativas

3. tratan de cambiar los elementos de la situación que pueden estar afectando negativamente a ese compañero

Cambio en el foco atencional

1. le dicen algo agradable para focalizar su atención en algo que los hace sentir bien
2. lo distraen de los problemas que les causan emociones negativas
3. focalizan su atención en un asunto más positivo para ese compañero

Cambio cognitivo

1. le dan consejos para que evalúen la situación desde otro punto de vista
2. tratan de ayudarlo a ver de otra manera la situación que les genera emociones negativas
3. tratan de cambiar la forma en que su compañero piensa acerca de lo que causa sus emociones negativas (ej. un problema)

Modulación de la respuesta

1. le sugieren no expresarlas (ej. no mostrarse enojado)
2. los motivan a no mostrar sus emociones negativas en ese momento
3. les comunican que es mejor no mostrar sus emociones negativas en el trabajo

Escala de regulación emocional interpersonal

Hay ocasiones en las que cuando alguien no se siente muy bien, las personas tratan de hacerlos sentir mejor. A continuación, se presentarán una serie de acciones que la gente realiza para mejorar como otros se sienten en el trabajo:

CUANDO UN INTEGRANTE DE TU EQUIPO está experimentando emociones negativas (ej. Sintiéndose estresado, enojado, triste o decaído), **USTED:** (1 = 'Para nada'; 2 = 'Un poco; 3 = 'Moderadamente; 4 = Bastante; 5 = 'Muchísimo').

Modificación de la situación

1. Trata de cambiar la situación que le está causando esa emoción a la otra persona
2. Trata de eliminar los elementos negativos de la situación que está afectando a la otra persona
3. Trata de modificar los elementos de la situación que afecta a la otra persona

Cambio en el foco atencional

1. Trata de distraer a la otra persona para que se desconecte de la situación que le causa esa emoción
2. Trata de distraer a la otra persona de los problemas le están causando esa emoción
3. Trata de distraer a la otra persona de los aspectos mas problemáticos de la situación

Cambio cognitivo

1. Trata de que la otra persona piense la situación que está enfrentando de forma diferente
2. Trata de que la otra persona vea la situación de forma diferente
3. Trata de que la otra persona cambie su perspectiva de la situación

Modulación de la respuesta

1. Trata de que la otra persona mantenga esas emociones para sí misma
2. Trata de que la otra persona no exprese esas emociones
3. Trata de que la otra persona haga como que no siente esas emociones

Conflicto en las relaciones del equipo

PIENSA EN TU EQUIPO DE TRABAJO y señala tu grado de acuerdo o desacuerdo con las siguientes afirmaciones: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

1. Existe mucha fricción entre los integrantes del equipo
2. Existen conflictos personales evidentes entre los integrantes de mi equipo de trabajo

3. Existe un clima emocional negativo en el equipo
4. Existe mucha tensión entre los integrantes de mi equipo

TMX

PIENSA EN TU EQUIPO DE TRABAJO y señala tu grado de acuerdo o desacuerdo con las siguientes afirmaciones: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

1. Nos damos sugerencias para mejorar el trabajo de cada uno de nosotros
2. Entregamos reconocimiento cuando un integrante del equipo hace un buen trabajo
3. Reconocemos el potencial de trabajo de cada uno de nosotros
4. Le prestamos atención a los problemas y necesidades de cada uno de nosotros
5. Si es necesario, hacemos cambios para facilitar el trabajo de cada uno de nosotros
6. En general, pedimos ayuda a otros integrantes del equipo cuando tenemos mucho trabajo
7. En general, ayudamos voluntariamente a otros integrantes del equipo cuando tenemos mucho trabajo

Confianza en el equipo

PIENSA EN TU EQUIPO DE TRABAJO y señala tu grado de acuerdo o desacuerdo con las siguientes afirmaciones: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

1. En el equipo tenemos confianza entre nosotros
2. Sé que puedo contar con los otros integrantes del equipo
3. Confío en las intenciones de los otros integrantes del equipo
4. Los integrantes de equipo tienen buenas intenciones

Agotamiento emocional

DURANTE EL ÚLTIMO MES EN TU TRABAJO, cuán a menudo tú te has sentido: (1= 'Nunca'; 2 = 'Muy pocas veces'; 3 = 'A veces'; 4 = 'Muchas veces'; 5 = 'Casi siempre/ Siempre').

1. Te has sentido emocionalmente agotado durante tu trabajo.
2. Te has sentido agotado al final de la jornada laboral.
3. Te has sentido muy cansado antes de empezar tu día laboral.
4. Te has sentido que estás al límite de tus energías.

Desempeño del equipo

Señale su grado de acuerdo o desacuerdo con las siguientes afirmaciones acerca del trabajo desempeñado por su EQUIPO EN EL ULTIMO MES: (1 = 'Muy en Desacuerdo'; 2 = 'En Desacuerdo'; 3 = 'Ni de Acuerdo ni en Desacuerdo'; 4 = 'De Acuerdo'; 5 = 'Muy de Acuerdo').

Desempeño en la tarea del equipo

1. Los integrantes del equipo completan de forma adecuada las tareas asignadas
2. Los integrantes del equipo cumplen con las responsabilidades especificadas en sus descripciones de cargo
3. Los integrantes del equipo cumplen con lo que se espera de su trabajo
4. Los integrantes del equipo cumplen con los requerimientos formales de su trabajo
5. Los integrantes del equipo se involucran en las actividades que directamente afectan su desempeño
6. Los integrantes del equipo descuidan algunos aspectos obligatorios de su trabajo
7. Los integrantes del equipo fallan en cumplir con deberes esenciales de su trabajo

Conductas de ciudadanía organizacional del equipo

1. Los integrantes del equipo ayudan a sus compañeros cuando han estado ausentes
2. Los integrantes del equipo ayudan a sus compañeros cuando han tenido sobrecarga laboral

3. Los integrantes del equipo lo ayudan con su trabajo (incluso si no se los pide explícitamente)
4. Los integrantes del equipo se toman el tiempo de escuchar los problemas de sus compañeros
5. Los integrantes del equipo se preocupan por ayudar a nuevos empleados
6. Los integrantes del equipo muestran un interés personal en otros integrantes del equipo