ADVANCING GROUP EMOTIONAL INTELLIGENCE THROUGH RESONANT LEADERSHIP AND EXPLORING THE EFFECT ON GROUP EFFECTIVENESS

by

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DECLARATION

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ABSTRACT

Global competitiveness has brought along many changes within organisations during the 21st century. Organisations are required to be adaptive to the rapidly changing world of work and its demands. One of the key factors that have shown to enhance an organisation's capacity to be adaptive, is effective group work (Kozlowski & Bell, 2013). This realisation has led to a structural transition from individual work to group work in organisations (Brad, 2015; Koman & Wolff, 2008). However, not all groups are necessarily effective. Given the vast amount of research suggesting that groups with high emotional intelligence display higher levels of performance than groups with low emotional intelligence (Jordan et al., 2002; Wong & Law, 2002), this study was directed at understanding the sources of emotional intelligence in groups; and particularly, the role of Resonant Leadership as a facilitator of group emotional intelligence.

The study made use of an *ex post facto* correlational design with a convenience sample of 321 individuals who responded to the questionnaires. Respondents had to rate their group leader on the four dimensions of Resonant Leadership (visionary, coaching, affiliative and democratic), using a new scale developed for the study, the Resonant Leadership Scale. To operationalise group emotional intelligence, they had to rate the presence of nine group norms using the Emotionally Competent Group Norms Scale. The overall effectiveness of the group was measured by the Collective Beliefs Scale representing the dimensions of trust, group identity and group efficacy. Finally, in order to control for the group members' own emotional intelligence, the participants had to indicate their aggregate perceptions of the emotional intelligence of the individuals comprising their group in the Group Member Emotional Intelligence Scale.

Structural equation modelling with partial least squares was used to analyse the fit of the measurement and structural model. All five of the hypothesised paths within the structural (inner) model were found to be statistically significant. The results revealed that in addition to the individual members' own emotional intelligence, the style of leadership in the group (i.e. Resonant Leadership) play's a significant role in the facilitation of group emotional intelligence, which was measured through nine Group Emotional Intelligence Norms (understand team members, address unacceptable behaviour, demonstrate caring, reviewing the team, support expressions, build optimism, proactive problem-solving, understand team context, and building external relationships). Furthermore, the results confirmed that Group Emotional Intelligence Norms have a positive impact on group performance, as denoted by the Collective Beliefs of trust, group identity and group efficacy. The results contributed to the development

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and validation of the Resonant Leadership Scale, and has also helped to formulate recommendations to organisations in the form of interventions aimed specifically at increasing group performance.

OPSOMMING

Wêreldwye mededingendheid het gedurende die 21ste eeu baie veranderings binne organisasies meegebring. Daar word van organisasies verwag om aan te pas by die vinnig veranderende wêreld van werk en die eise wat daarmee gepaard gaan. Een van die belangrikste faktore wat 'n organisasie se vermoë om aanpasbaar te wees verbeter, is effektiewe groepwerk (Kozlowski & Bell, 2013). Hierdie bewuswording het gelei tot 'n strukturele oorgang van individuele werk na groepswerk (Brad, 2015; Koman & Wolff, 2008). Nie alle groepe is egter noodwendig effektief nie. Gegewe die magdom navorsing wat daarop dui dat groepe met hoë emosionele intelligensie beter presteer as groepe met lae emosionele intelligensie (Jordan et al., 2002; Wong & Law, 2002), was hierdie studie gerig daarop om die bronne van emosionele intelligensie in groepe te identifiseer, en veral die rol van Resonante Leierskap as 'n fasiliteerder van groep emosionele intelligensie te ondersoek.

Die studie het gebruik gemaak van 'n *ex post facto* korrelasie-ontwerp met 'n gerieflikheidssteekproef van 321 individue wat die vraelyste beantwoord het. Respondente moes hul groepleier beoordeel op die vier dimensies van Resonante Leierskap (visionêr, afrigting, affiliatief en demokraties) deur gebruik te maak van 'n skaal wat vir die doelwitte van die studie ontwikkel was, die Resonante Leierskap Skaal. Om die emosionele intelligensie van die groep te laat operasionaliseer, moes die respondente die teenwoordigheid van nege groepnorme beoordeel in die Emosioneel Bevoegde Groepnorme Skaal. Die algehele effektiwiteit van die groep was gemeet deur die Kollektiewe Oortuigings Skaal wat verteenwoordig word deur die dimensies van vertroue, groep identiteit en groep doeltreffendheid. Laastens, om die groeplede se individuele emosionele intelligensie in ag te neem, moes die respondente hul persepsies van die kollektiewe emosionele intelligensie van die individue in die groep aandui in die Groepslid Emosionele Intelligensie Skaal.

Strukturele vergelykingsmodellering met parsiële kleinste kwadrate was gebruik om die passing van die metings en strukturele model te ontleed. Daar was bevind dat al vyf die hipotiseerde roetes binne die strukturele model statisties beduidend was. Die resultate het getoon dat benewens die individuele lede se eie emosionele intelligensie, die leierskap styl in die groep (d.w.s. Resonante Leierskap) 'n belangrike rol speel in die fasilitering van groep emosionele intelligensie, wat gemeet was deur nege Groep Emosionele Intelligensie Norme (spanlede verstaan, spreek onaanvaarbare gedrag aan, bewyse van omgee, hersiening van die span, ondersteun uitdrukking, bou optimisme, pro-aktiewe probleemoplossing, verstaan die groep konteks en eksterne verhoudings opbou). Verder het die resultate bevestig dat Groep Emosionele Intelligensie Norme 'n positiewe impak op groep prestasie het, soos

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aangedui deur die Kollektiewe Oortuigings; vertroue, groep identiteit en groep effektiwiteit. Die resultate het bygedra tot die ontwikkeling en validering van die Resonante Leierskap Skaal, en het ook gehelp om aanbevelings aan organisasies te formuleer in die vorm van intervensies wat spesifiek daarop gemik is om groep prestasie te verhoog.

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LIST OF ABBREVIATIONS

AGFI	adjusted goodness of fit index
AVE	average variance extracted
CB-SEM	covariance-based structural equation modelling
CFA	confirmatory factor analysis
CFI	comparative fit index
DWLS	diagonally weighted least square
ECGN	Emotionally Competent Group Norm
EFA	exploratory factor analysis
GEIN	Group Emotional Intelligence Norms
GFI	goodness of fit index
PLS	partial least squares
PLS-SEM	partial least squares structural equation modelling
RL	Resonant Leadership
RMSEA	root mean square error of approximation
SEM	structural equation modelling

CHAPTER 1: INTRODUCTION

1.1 Introduction

Organisational structures have encountered remarkable transitions on a global scale in the 21st century. Increasing global competition creates pressure, motivating economic, strategic and technological imperatives to drive transformational change. Global competitiveness leads to a demand for diverse skills, expertise, experience, flexibility, adaptive responses, creativity and innovation, to effectively manage rapid change (Bard, 2015; Koman & Wolff, 2008). The emergence of these demands makes it increasingly difficult for individuals to meet the innovative requirements (Koman & Wolff, 2008). One of the main transitions indicates the change from individual occupations to group-based work structures. Groups can be described as a collection of interdependent individuals working toward the completion of tasks and achievement of goals. Group members see themselves and others as a social entity apart from others (Koman & Wolff, 2008). The formation of groups generates the characteristics needed within organisations to reach common goals through the diverse input of various group members. Success on a group level therefore plays an increasingly important role in achieving organisational goals and success (Kozlowski & Bell, 2013).

Groups comprise a collection of diverse individuals, interacting socially, sharing a common group purpose and several challenging goals. Interpersonal relationships between group members and inter-group dynamics are important determining factors for successful and effective group functioning and performance (Koman & Wolff, 2008). Group performance can be described as a collective strategy presented by members, aiming to accomplish group tasks (Clegg & Bailey, 2008). High-performance groups can be identified by factors, such as the level of individuals' complementary talents and skills, commitment to a common purpose, consistently presenting high levels of collaboration, cooperation, innovation and producing high-calibre results. These results are reached through group members' unconditional commitment towards a goal, trust between group members, a feeling of belonging and ownership toward the group, perceived capability and supportive processes established to enable goal achievement (Bard, 2015; Druskatt & Wolff, 2001a).

When comparing group outcomes, a fundamental question arises, indicating: why do groups differ concerning their performance outcomes? To understand the reason for group performance difference, it is important to investigate performance outcome variances for organisations to identify conditions that need to be established, changed or developed to achieve organisational goals. Research from a variety of fields emphasises several internal group processes and psychosocial traits, affecting the functioning and success of groups. The

next section provides a general discussion on the conditions needed for working group success.

1.1.1 Conditions within work groups

Complex relationships between group members exist. Group culture plays an important role in group members' understanding of events and interactions with one another. Culture may influence conditions within groups such as trust, communication patterns as well as conflict management. The influence of culture on group interaction can be explained by Levy's perspective of the cognitive appraisal theory of emotions (Druskat & Wolff, 2001a).

Cognitive appraisal refers to the personalised interpretation of situations, the individual's interpretation subsequently defines how an individual perceives a situation as being stressful or not (Gomes, 2016). The cognitive appraisal theory of emotions described by Druskat and Wolff (2001a) indicates that the process begins with an emotional stimulus, or an emotion that elicits an event and which is followed by the awareness of this event. Thereafter, the individual interprets this event internally and generates an emotional feeling toward the event which enters into the conscious mind. The individual then needs to respond to the feeling, and he/she therefore selects a response and acts. It is therefore evident that many different interpretations and perceptions of the same situation can occur between members of the same group. According Druskat and Wolff (2001a), culture has the opportunity to intervene and influence the cognitive appraisal process at two points; firstly, during the interpretation phase, and secondly when selecting an appropriate response. Group culture can therefore assist groups in creating a shared meaning, thereby eliminating misunderstandings between members and increasing trust among group members.

A complex relationship that exists between group members can be strengthened through collective trust. Collective trust is viewed as a common belief that the individuals within a group will act in accordance to their negotiated commitments and not take advantage of other members (Sarker et al. , 2011). Trust within groups lead to collaboration between members, a willingness to express their opinions, and positive expectations of other group members' intentions and behaviours. This expectation supports open communication between members and the willingness to investigate the varied opinions, perspectives, feelings and beliefs of other members because they feel psychologically safe enough to express their views freely (Cameli et al., 2011). Openness to new opinions supports an enduring learning process, leading to better informed decision-making. Mickan and Rodger (2000) confirmed the

discussion, claiming that when a culture of collective trust exists within groups, an increased capacity for individual learning is present.

Trust between group members increases members' willingness to expose themselves to a broader range of experiences and grant themselves access to more diverse inputs, which motivates an increased capacity for learning. At group level, the variation of exposures may enhance group cognition and group learning (O'Leary et al., 2011). Collecting diverse information, decision-making, creative problem-solving, finding solutions, as well as internal and external awareness, all lead to group effectiveness and the prediction of group performance (Sarker et al., 2011; Thompson, 2011).

As previously mentioned, trust within groups supports open communication between group members. Open communication, and a genuine interest in other perspectives and feelings signifies a fundamental characteristic of trust. Communication can also be observed as a condition for group success and effectiveness (Sarker et al., 2011; Campion et al, 1993). Mickan and Rodger (2000, p. 205) defined communication as "… an observable interchange of information and subtle interactions of power, attitudes and values". The interchange of information can assist groups during discussions and decision-making to cope with opportunities and challenges arising, as it broadens the options. This interchange can only benefit groups when individuals display emotionally intelligent behaviour through listening to one another and collaborating in order to develop mutual knowledge (Mickan & Rodger; 2000).

Ayoko (2007) argued that open communication – linked to the presence of trust within the group – is a forerunner to individuals' reactions towards conflict. This reaction could impact the group's task and social outcomes. Conflict may differ concerning its outcome, based on management strategies during the conflict situation. Positive outcomes derived from conflict situations provide the group with a variety of perspectives to conceptualise a better understanding of the situation, leading to creative problem-solving, benefitting organisational outcomes (Ayoko, 2007). Conflict, constructive criticism and feedback may however have a detrimental impact on group performance if employees lack the emotional intelligence to effectively deal with and solve intra-personal and inter-group conflict situations.

In support of the arguments made above, research suggests that group effectiveness, cooperation, cohesiveness and trust, conflict management, and communication efficiency have a significant impact on the emotional control and emotional stability of a group (Kozlowski & Bell, 2013). The conditions for successful group behaviour and effectiveness resonate with the presence of emotional intelligence within groups.

1.1.2 Emotional intelligence

Various definitions and opinions concerning emotional intelligence and what it entails exist. One of the first formal definitions of emotional intelligence was introduced by Mayer et al. (1990) who described it as the ability to deal with own and others' emotions, using the information collected to assist an individual during problem-solving and decision-making. Through investigating the above-mentioned definition, it is evident that emotional intelligence may result in the individual and group's ability to use emotions to better adapt to and capitalise environmental demands through decision-making and solving problems within the environment (Caruso, 2004).

Mayer et al.'s (1990) definition expanded to include the following: verbal and nonverbal appraisal and expression of emotions; emotional regulation within and others; emotional knowledge promoting intellectual and emotional growth; and lastly the ability to utilise emotions assisting in problem-solving (Jordan et al., 2002). These factors link with the previously discussed conditions, in particular communication, trust and conflict management, within a group context. It can be inferred that emotiona l intelligence plays an important role in the group performance outcome.

The importance of emotions and the role they play in determining work group success is substantiated by neurological findings indicating that emotions make a critical contribution to an individual's ability to effectively solve problems and make decisions, process emotions and behave in a socially desirable manner (Tranel et al., 2002). Research furthermore indicates that problems which may occur when individuals could not make use of emotions during decision-making may include: inability to maintain employment; individual requires constant supervision; social conduct problems; inability to manage finances; bad judgement calls; inability to plan for the future; and finally the inability to show worry, guilt, remorse, empathy, or fear. This is especially evident when the individual is faced with complex tasks, high pressure, ambiguity and uncertainty (George, 2000; Tranel et al., 2002). A study by Wong and Law (2002) furthermore indicates a positive correlation between emotional intelligence and organisational commitment and a negative correlation with emotional intelligence and turnover intention. It is therefore important to investigate how to maximise emotional intelligence and consequently maximise job performance and organisational commitment and to minimise turnover intention.

It is evident from the above that emotions play an integral part in employee decision-making, employee satisfaction and organisational success. For this reason, it is desired that the individual making decisions based on their personal judgement and reasoning of a particular

situation, makes decisions in an emotionally intelligent way which leads to the best organisational outcomes. To achieve this, a culture must be created that develops and maintains emotional intelligence of working groups.

Jordan et al. (2002) developed the Workgroup Emotional Intelligence Profile (WEIP-3) to measure the emotional intelligence levels of individuals in corporate groups. Jordan et al. (2002) performed a nine-week study revealing that groups with members who scored high on emotional intelligence displayed higher levels of performance than groups where members scored lower on emotional intelligence. These results were also supported by research done by Wong and Law (2002) indicating that groups who score low on emotional intelligence initially had relatively low performance ratings which gradually increased over time. Jordan *et al.* (2002) proposed several reasons for this increase in performance within the lower scoring emotionally intelligence groups. These factors include training, familiarity with group members, or the emergence of a dominant group members whose individual skills improved the performance of the group (Jordan et al., 2002).

The difference in performance between the above-mentioned two groups impacts the level of performance within the organisation. It will therefore be more beneficial to employ groups scoring higher on emotional intelligence than groups scoring lower on emotional intelligence. It will furthermore be important to identify the different sources of emotional intelligence within groups and to identify how emotional intelligence can be developed in order to cultivate and maintain group emotional intelligence.

As mentioned above, the behaviour and skills of a dominant group member can improve group performance*.* Therefore, the researcher of this study investigated how these dominant group members or leaders should behave and what skills they should display in order to assist in increasing their group's emotional intelligence and ultimately, enhancing their group's performance. The aim of this study was therefore to identify specific leadership and group factors that cause variation in a group's emotional intelligence levels, thus improving the rating of the group's emotional intelligence.

1.1.3   The role of leaders on group emotional intelligence

Wong and Law (2002) indicated that effective leadership depends on the leader's ability to deal with social challenges within an organisational context, which are often characterised by emotional conflict. Emotional intelligence supports leaders to deal with these social challenges by means of self-awareness, self-management, social awareness and relationship management (Caruso, 2004). On the other hand, Day (2000) emphasised the importance of

effective leadership in group performance, through a discussion on the types of intra-personal competencies associated with leader development initiatives. These initiatives include self-awareness (emotional awareness, self-confidence), self-regulation (self-control, trustworthiness, adaptability) and self-motivation (commitment, initiative, optimism). An individual cannot become a leader without interacting with others, and therefore it is important for leaders to have sufficient personal and social skills to effectively manage these social relations.

Day (2000) raised the importance of intra-personal leadership competencies, explaining that the above-mentioned competencies can be linked to the group conditions previously discussed (communication, trust and conflict management). The competency, self-awareness, can be linked to the emotional intelligence group concept. Self-awareness and emotional intelligence both emphasise the importance of connecting and understanding one's own emotions to display effective behaviour within a group.

The self-regulation competency, comprising trustworthiness, can stimulate mutual trust within an organisation, resonating with trust as a prerequisite condition for group success. Leaders can create certain conditions and cultures within groups that will lead to effective group performance, through the leader's competencies. It is therefore evident that leaders' actions and interactions with others have a fundamental impact on group behaviour, leading to group success or diminishment (Goleman et al.; 2002a).

Several significant issues were addressed, indicating that conditions within groups are important for the outcomes of group performance. Trust, communication and conflict management as preceding conditions can all be linked to emotional intelligence, predicting the level of group performance, effectiveness and success. It is therefore evident that leaders will need to be equipped with emotional intelligence to manage themselves when interacting with their followers, but also have the ability to manage others in order to effectively lead groups.

Leaders displaying high levels of emotional intelligence has been described by Goleman et al. (2002a) as a leadership style named 'Resonant Leadership'. Resonant leaders are individuals who can be emotionally compatible with the people around them. These leaders understand others' emotions and manage them through empathy. They use empathy to inspire people to commit to their goals. They hold good communication skills enabling them to work harmoniously with others and to freely express their ideas and feelings. They strive at building and maintaining positive, strong and trusting relationships with others, continuously improving their emotional intelligence. More specifically, they intuitively endeavour to improve and

develop their self-awareness, self-management, social awareness and relationship management, which are dimensions of emotional intelligence (Taner & Aysen, 2013; McKee & Massimilian, 2006).

Goleman et al. (2002a) discussed many positive outcomes associated with Resonant Leadership in the workplace. They indicated that followers of such leaders tend to feel comfortable enough to share ideas, to be open to learn from one another, and to collaboratively make decisions and achieve goals when they are under guidance of an emotionally intelligent leader. Other researchers and their findings regarding Resonant Leadership are discussed below.

A study conducted by Cummings at al. (2005) explored whether Resonant Leadership, through the four Resonant Leadership dimensions, mitigates the impact of hospital restructuring for nurses, by making use of a survey which aimed to assess seven different leadership styles. Squires et al. (2010) later tried to improve on the above-mentioned survey which became one of the first Resonant Leadership scales to demonstrate acceptable reliability and validity. Squires et. al.'s study results indicated that a statistically significant relationship exists between Resonant Leadership and leader-nurse relationship (0.79), safety climate (0.57) and a positive work environment (0.42).

Cummings et al.'s study indicates that nurses who worked in environments where leaders demonstrate the four styles of Resonant Leadership (visionary, coaching, affiliative, and democratic) experience fewer negative effects than nurses who worked with leaders showing dissonant leadership styles (pace-setting and commanding). More specifically, Resonant Leadership styles were showed to have a positive impact on workgroup collaboration during, before and after restructuring, therefore supporting the current study's notion that leadership does impact on work groups (Cummings et al., 2005; Squires et al., 2010).

Cummings et al. (2005) indicated that working with resonant leaders will increase both job satisfaction and emotional resilience in the workplace. The researchers furthermore indicated that resonant leaders "used their emotional skills to understand what individual employees or groups were feeling during difficult times, thereby building trust through listening, empathy, and responding to staff concerns" (Cummings et al., 2005, pg. 9). In contrast, this study indicated that dissonant leaders do not display the ability to tune into their followers' emotional needs, or to build supportive and positive relationships with them during difficult times.

More recently, researchers have started to investigate the link between Resonant Leadership and workplace safety. In addition to Cummings et al.'s study, Smith et al. (2009) conducted a study that showed a connection between Resonant Leadership and safety which according to

their study was linked through the ability to manage emotions effectively, as well as through the leader's ability to listen and be willing to learn from their followers. Smit et al.'s (2009) study found statistically significant relationships between Resonant Leadership and emotional exhaustion, job satisfaction and innovative ideas.

Multiple researchers have also indicated that Resonant Leadership leads to a structurally empowering environment which is characterised by employees having access to opportunity, resources, information and support which empowers them to effectively complete their tasks and increase their performance (Bawafaa, 2014; Wagner et al., 2013; Cummings et al., 2010).

Based on all the above studies' results, it can be argued that there is enough empirical evidence supporting the relevance of Resonant Leadership in an organisational and group setting. Resonant Leadership is a growing body of knowledge which has already provided sufficient evidence supporting the role of a relationship focused leadership style in creating positive work environments. As Squires et. al. (2010) reported – Resonant Leadership does not only indicate emotional maturity in the leader itself, but this relationally focused leadership style also promotes emotional maturity within their followers.

Based on the above, it is evident that Resonant Leadership positively influences group as well as organisational performance. Resonant Leadership is a leaderships style that originates out of emotional intelligence literature, focusing on inter and intrapersonal relationships. Therefore, the current study investigated the extent to which Resonant Leadership as a leadership style may affect group emotional intelligence.

1.2 Research Objectives

The research initiating question underpinning this study is: What are the sources of emotional intelligence in groups, and through which mechanisms can it be developed? In response to the research question, the study set out to examine the influence of Resonant Leadership on group emotional intelligence. To accomplish this overarching objective, the objectives of the study were as follows:

- To explicate the concept of group emotional intelligence and the norms it represents.
- To investigate how Group Emotional Intelligence Norms are developed and maintained over time – considering Group Member Emotional Intelligence as well as other environmental factors.

- To investigate the process and competencies by which leaders can advance emotional intelligence norms within groups.

- To develop a measurement instrument to measure Resonant Leadership competencies.

CHAPTER 2: LITERATURE STUDY

2.1 Introduction

The literature review provides a logical coherent reasoned argument in support of the proposed structural model. This chapter therefore discusses the importance of group emotional intelligence, and subsequently examines the question of how group emotional intelligence can be created, implemented and maintained within a group context. The chapter hypothesises that leadership, more specifically an emotionally intelligent leader, known as a resonant leader, can develop, influence and maintain group emotional intelligence. It is acknowledged that the individual group members' emotional intelligence levels also influence the occurrence and members' willingness to confirm to these norms. The purpose of this study was therefore to explore how Group Emotional Intelligence Norms are created, thus creating emotionally intelligent groups that support group effectiveness.

2.2 Organisational and Group Culture

Culture is a complex phenomenon as it is something that is within the individuals, but also something that is constantly evolving and changing as individuals interact with one another and with new environments (Schein, 2004). Culture can therefore be changed by individuals and individuals can also be changed by a culture. This statement relates to the current study, stating that leaders and group members can bring about change in the culture of the organisation and it's working groups, while the culture concurrently changes the members of the organisation and its groups, resulting in maintenance of the desired culture.

Recently, organisations have started to use the term culture to describe their climate and practices developed to manage their employees. This view of culture assumes that there can be cultures that are better or worse than others, and that culture can influence the success of effectiveness of an organisation. However, Schein suggested that the effectiveness or how "good" or "bad" a culture is does not depend solely on the culture itself, but also on the environment in which it exists (Schein, 2004). It is therefore the goal of the leader as well as organisational members to create a positive environment in which the desirable culture can be developed and expanded in order to achieve group and organisational success.

In order to identify the specific type of culture needed for group and organisational success, it is first necessary to define organisational culture. Hofstede et al. (2010) defined culture as a "collective programming of the human mind that distinguishes the members of one human group from those of another" (p.3). Culture can therefore be seen as the values of an

organisation, as well as a set of acceptable behaviours within the organisation; additionally, Schein (2004) defined organisational culture as:

> *A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems* (p. 17).

Schein (2004, as cited in Quick & Nelson, 2013) suggested that to fully understand an organisation's culture, one should dig below the surface of observable artefacts so that the underlying basic assumptions, beliefs, values and norms, the core of the organisation's culture, can be uncovered. These assumptions, beliefs, values and norms should then be taught to new and existing employees as the correct way to perceive, think, feel and behave so that they can continue the culture.

The current study argues that the type of culture desired for group success, and thus what needs to be taught to employees, is one where employees and leaders display emotionally intelligent behaviour within themselves, in their interactions with one another and in their interaction with external groups and the larger environment. It is hypothesised that when leaders and individual members are emotionally intelligent, they behave in ways that create emotionally intelligent groups governed by a set of emotionally intelligent cultural norms. These norms will influence group members to act in accordance with these norms, therefore creating emotionally intelligent groups within the organisation. Culture therefore guides group member behaviour, and behaviour in turn reinforces the culture defined by Group Emotional Intelligence Norms.

The reinforcement of culture can be supported by Levy's perspective of the cognitive appraisal theory of emotions (Druskat & Wolff, 2001a). Based on this perspective, one would want to create a culture that equips individuals to interpret situations, events and emotions, and respond to them in a positive and emotionally intelligent way so that the positive culture and norms can be maintained. Cultural norms can influence an individual's interpretation of an event/emotional stimulus, as well as their choice of how to react toward the stimulus.

Research has indicated that there are certain cultural norms that are related to groups who score high on emotional intelligence (Druskat & Wolff, 2001a). As indicated, one of the categories used to describe culture is group norms, which is defined as "the implicit standards and values that evolve in working groups" (Schein, 2004, p. 12). Leaders and employees who want to help develop and expand emotional intelligence in their organisation and within its working groups should therefore implement and model these norms within the organisations.

These norms will cultivate and define a new organisational culture which may subsequently change working groups within the organisation to become more emotionally intelligent.

2.3 Group Emotional Intelligence Norms

Emotions develop from interaction with others, thus making emotions an unavoidable and inescapable influence in groups. Emotional behaviour has implications for groups as emotions lead to behaviour indicating change in individual and environmental relationships. Change leads to a consequential emotion, which thereupon changes the group dynamic and interaction within groups again (Druskat & Wolff, 2001b). This cycle can result in both positive and negative outcomes. The aim is to obtain positive outcomes in order to perform optimally – which entails group members achieving a state of cooperation and collaboration.

Participation, cooperation and collaboration are fundamental to the creation of positive group member interactions as well as group effectiveness (Ancona & Caldwell, 1992; Campion, Medsker et al., 1993; Druskat & Wolff, 2001a; Druksat & Wolff, 2001b; Tjosvold & Tjosvold, 1994; Yukl, 2013). To understand how groups can achieve cooperation and collaboration, it is important to investigate the presence of emotional intelligence within groups. The emotional intelligence perspective to group effectiveness is chosen as emotions are born out of social interaction, and emotions are fundamental to how individuals within a group interact with one another. It is therefore argued that if group members display intelligence of their and others' emotions, and if they have the ability to manage these emotions, they can ultimately determine how they interact with one another within the group in order to achieve cooperation and collaboration (Druskat & Wolff, 2001a).

Druskat and Wolff (2001a, p. 133) defined group emotional intelligence as a group's "ability to develop a set of norms that manages the emotional processes so as to cultivate trust, group identity and group efficacy". The three beliefs (trust, group identity and group efficacy) facilitate the development of group member cooperation and collaboration on three levels: individual level, the group level, and external/cross-boundary level which is discussed in Section 2.3.2. Druskat and Wolff (2001a) argued that a group scoring high on emotional intelligence, creates a positive cycle through developing norms that influence and guide the emotional process. Creating a set of group norms will guide the interpretation of and response to emotional stimuli and guide members' behaviour to create positive outcomes for the group. Trust, group identity and group efficacy are the outcomes of acting in accordance to the Group Emotional Intelligence Norms. The presence of these Collective Beliefs leads to group effectiveness and

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success through increased productivity, better decision-making and more creative solutions (Druskat & Wolff, 2001a; Druksat & Wolff, 2001b).

2.3.1 Collective Beliefs as outcomes of Group Emotional Intelligence Norms

Shared mental models, which according to Yukl (2013) can be described as conscious beliefs and implicit assumptions, are central to the group. The presence of shared mental models or conscious group beliefs and assumptions within groups are found to increase group performance (Edwards et al., 2006; Lim & Klein, 2006; Mohammed et al., 2010; Yulk, 2013).

Druskat and Wolff (2001a) argued that a group's effectiveness and success lie in members' ability to engage in all group activities wholeheartedly. They identified three essential conditions for group effectiveness, namely trust amongst members, a sense of group identity and group efficacy. These three elements support members' willingness to fully engage with the group and its tasks. To support member behaviour that is in line with these elements, emotionally intelligent norms should be developed, because emotions are at the heart of these elements. Druskat and Wolff's (2001b) model of group effectiveness shows that Group Emotional Intelligence Norms are the foundation to trust, identity and efficacy which lead to participation, cooperation and collaboration and ultimately better decisions being made, more creative solutions and higher productivity of members which leads to group effectiveness.

Figure 2.1

The effect of group emotional intelligence
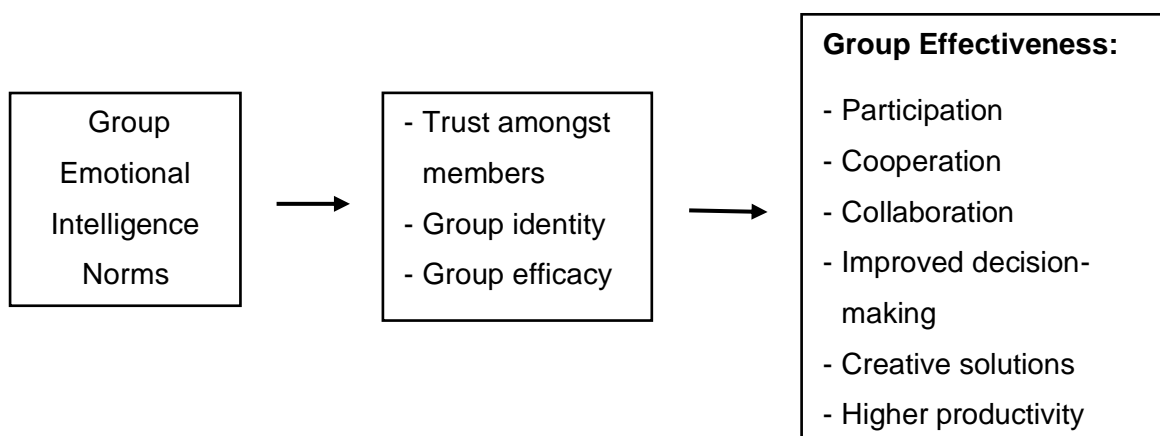
Note: From "Building the Emotional Intelligence of Groups." By V. U. Druskat & S. B. Wolff, 2001b, *Harvard Business Review*, p.85.

Before inspecting Group Emotional Intelligence Norms, a discussion of these beliefs is presented below in order to fully understand their importance in the group context, and their link with cooperation and collaboration (Durskat & Wolff, 2001a). This is followed by an explanation of Group Emotional Intelligence Norms facilitating these beliefs.

2.3.1.1 Trust

There are multiple definitions of trust which include a state developed out of affection, friendship, calculated cognition, vulnerability, expectation, obligation and reciprocity (Druskat & Wolff, 2001a; Kiffin-Petersen and Cordery, 2003). For the purpose of this study, trust has been defined according to Mayer et al. (1995):

> *The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party* (p. 715).

As such, an individual who displays vulnerability and lets go of controlling the actions of others may experience a positive impact on their relationships with their group members due to a feeling of mutual respect in one another's ability, knowledge and their actions of following through on what they promised. Kiffin-Petersen and Cordery (2003) indicated that trust can be seen as one of the single most important variables that influence interpersonal and group behaviour. Trust within teams is a crucial ingredient in establishing and expanding group cooperation, creating functional social relationships, and increasing group performance, especially in groups where members' roles are interdependent (Coppola et al., 2004; Druskatt & Wolff, 2001a; Kiffin-Petersen & Cordery, 2003; Yukl, 2013).

The social environment also plays an important role in the creation of trust. Trustworthy social and group environments support the notion that an 'obligation will be fulfilled' and an 'expectation will be met'. If these obligations and expectations manifest, trust can become an effective resource that groups can use to develop cooperation and collaboration, leading to group effectiveness (Druskatt & Wolff, 2001a).

2.3.1.2 Group identity

According to Van Leeuwen et al. (2003), the attitudes and behaviour of group members are only influenced in groups where their group membership is seen as salient, noticeable and perceived as important. Therefore, group identity is seen as another important collective belief which facilitates the development of effective group interaction processes.

Group identity can be described as the collective belief that the group is a unique, important and attractive entity (Druskatt & Wolff, 2001a). When group members possess a feeling of inclusiveness and attachment to their group, group identity creates a "boundary" which clearly distinguishes one group from another and which generates 'security' for those who form part of the group. Kahn (1998) argued that security within groups is especially important to maintain task engagement and cooperation in times of organisational change and ambiguity.

Group identity can furthermore be related to members' willingness to exert effort on behalf of the group, and it establishes the belief that their goals and futures are positively linked. Group identity also leads to individuals internalising group norms and attitudes (Van Leeuwen et al., 2003; Druskatt & Wolff, 2001a). This consequently increases members' commitment toward the group, one another, and their goals, and subsequently facilitates cooperation and collaboration required for group success (Druskatt & Wolff, 2001a).

2.3.1.3 Group efficacy

Group efficacy is the third collective belief which is imperative for building effective interaction processes within groups. Group efficacy can be described as a group's collective belief that they can be effective, and that their group-related problems can be overcome through a collective effort (Druskatt & Wolff, 2001a; Van Zomeren et al., 2004). Group-efficacy can therefore be seen as the confidence in their ability to successfully accomplish set out goals, it includes an optimistic belief in the group's competence to accomplish a task and produce a desired outcome. Group-efficacy therefore has a component of hope ingrained in it, which when hope is high acts as a motivating factor for group actions (Cohen-Chen & Van Zomeren, 2018).

Furthermore, due to the belief in their group's ability to succeed, efficacy leads to individuals within the group exerting more effort and displaying higher levels of resilience when working towards a collective goal (Gazica & Spector, 2014). The ability of a group to persevere, and their belief that they can be more effective as a group than individual entities facilitates and motivates group members to cooperate and work in collaboration with one another (Druskat & Wolff, 2001a; Gazica & Spector, 2014).

Trust, group identity and group efficacy can, based on the above arguments, act as powerful group resources which promote group actions, and motivate individuals to behave in ways which increase group effectiveness through cooperation and collaboration. Druskat and Wolff (2001a) further argued that the way emotions are treated within the group may furthermore influence the emergence of trust, group identity and group efficacy. Additionally, Group

Emotional Intelligence Norms promote the development of the three Collective Beliefs, which subsequently facilitate group cooperation and their willingness to collaborate in their attempt to complete tasks and reach their goals.

As discussed above, effective groups, according to Druskatt and Wolff (2001a, 2001b), can be described as groups where trust, group identity and group efficacy are prevalent. Trust contributes to group effectiveness as it impacts on the interpersonal relationships between group members. It creates positive inter-group relationships between group members, enabling them to rely on one another when completing interconnected tasks. Trusting that the others will complete tasks according to the prescribed standards within an agreed upon timeline may decrease an individual's workload. It also enables team members to utilise one another's strengths when completing tasks which may decrease time spent on tasks.

When group members identify with their group it creates security, engagement and attachment. This leads to increased member commitment making members willing to go the extra mile and doing more than is expected from them in order to achieve goals and objectives. Group efficacy contributes to group effectiveness through increasing resilience as well as the amount of time and effort dedicated to completing tasks and achieving goals. When group members believe they can achieve their goals together as a group, they are more willing to buy into the process in order to make it happen. As such they will be more willing to exert extra effort and possibly work over-time to make their group goals realise as they have higher levels of resilience (Druskatt & Wolff, 2001a; Druskatt & Wolff, 2001b).

Identifying and committing to the group goals, trusting group members to deliver results and believing that the group can accomplish its goals and objectives, flows into group members' willingness to work together, cooperate with one another and collaborate with one another to achieve desired results. Groups that cooperate, collaborate and work together may increase group performance and group effectiveness because desired results, goals and objectives are met.

2.3.2   Group emotional intelligence dimensions and corresponding norms

As mentioned in Section 2.3.1, the presence of certain group norms may influence individuals' interpretation of emotional stimuli, as well as individuals' behaviour as a reaction to the stimuli. An integral part of group emotional intelligence is creating self-sustaining norms that guide group members' interpretation of emotional stimuli, consequently guiding them to behave in emotionally intelligent ways. Emotionally intelligent groups have the ability to create and maintain group norms that are constructive and have a positive influence on group

effectiveness. Druskat and Wolff (2001a; 2001b) used Group Emotional Intelligence Norms (GEIN) as indicators to measure a group's level of emotional intelligence.

Druskat and Wolff furthermore (2001a; 2001b) indicated, in their group emotional intelligence model, that the presence of emotionally intelligent norms indicates high group emotional intelligence. The Group Emotional Intelligence Norms can be grouped into three levels: an individual level, a group level, and an external/cross-boundary level. There are various Group Emotional Intelligence Norms which support various different dimensions of group emotional intelligence on an individual, group and cross-boundary level. The occurrence of these norms accordingly leads to the collective group beliefs, namely trust, group identity and group efficacy. The dimensions of group emotional intelligence and their corresponding norms are discussed in more detail below, and their linkages can be seen in Figure 2.2.

Figure 2.2

Group Emotional Intelligence Norms, dimensions of group emotional intelligence and Collective Beliefs
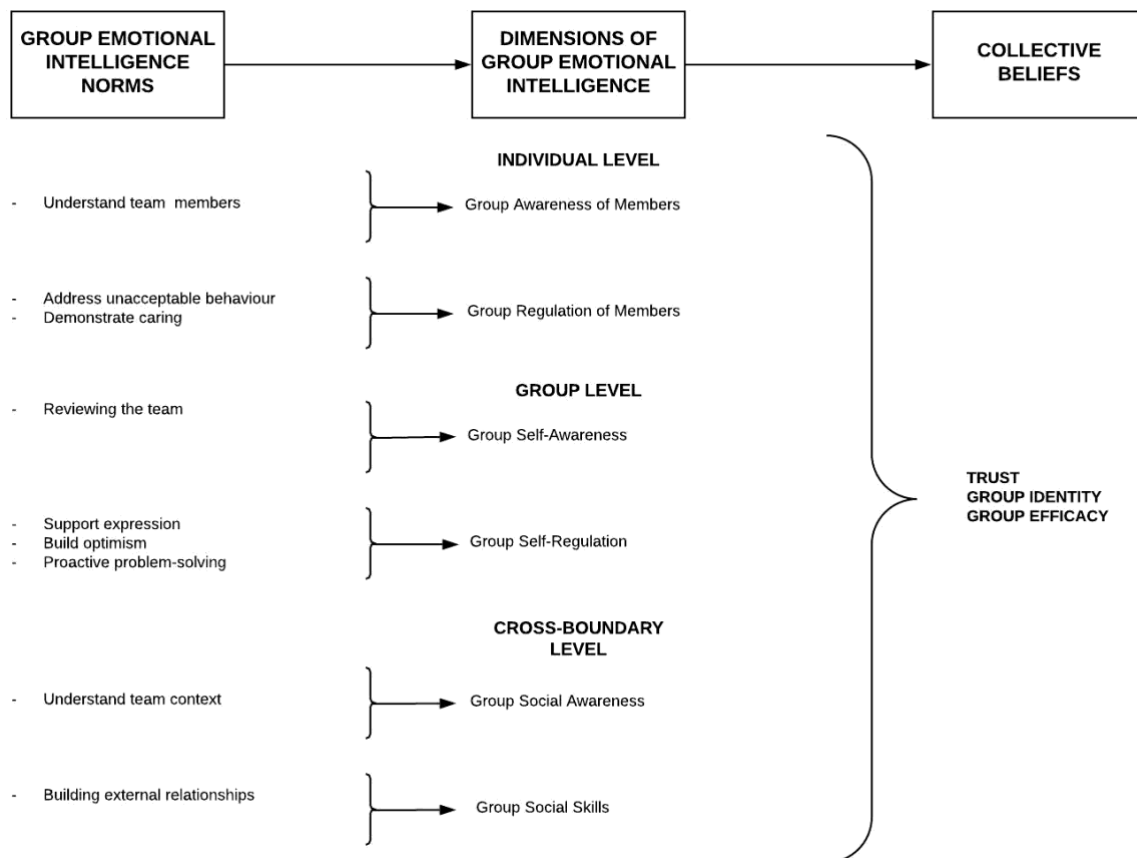
Note. From "Group Emotional Intelligence and its Influence on Group Effectiveness." by Druskat, V. U. & Wolff, S. B., 2011, *The Emotionally Intelligent Workplace,* 141. Jossey-Bass.

As indicated in Figure 2.2, there are three levels of group emotional intelligence leading to trust, group identity and group efficacy. These levels include an individual level which consists of members' inter-group relationships with one another, a group level which entails understanding and managing the group as a unit or single entity, and lastly, the external/cross boundary level in which the group interacts with stakeholders outside of the group within the bigger organisation or community. Each one of these levels has two dimensions of group emotional intelligence. These dimensions each have corresponding norms which support the group emotional intelligence dimensions. The dimensions and corresponding norms are discussed in more detail below.

Group emotional intelligence on an individual level indicates group members' awareness of and regulation of the relationships between individual members within the group. This level and its corresponding norms therefore operate between the different individual members of the group. The Group Emotional Intelligence Norm associated with *group awareness of members*, a group emotional intelligence dimension on the individual level, is *understand team members*. Furthermore, norms related to the group emotional intelligence dimension *group regulation of members* include *address unacceptable behaviour* and a *caring orientation* (Druskatt & Wolff, 2001a; Druskatt & Wolff, 2001b).

2.3.2.1 Individual level: Group awareness of members

Group awareness of member emotions includes being aware of each individual member's feelings, needs, preferences, resources and concerns. Druskat and Wolff (2001a) suggested that the Group Emotional Intelligence Norm that will aid an individual's awareness of their group members' feelings, needs, preferences, perspectives, resources and concerns is *understand team members*.

Understanding team members entails the "accurate understanding of the spoken and unspoken feelings, interests, concerns, strengths and weaknesses of group members that allow members to predict and understand one another's day-to-day behaviour" (Druskat & Wolff, 2001a: 141; Stubbs, 2005: 15). Being able to understand your group members on a deeper level enables one to predict and cope with others' general behaviour and actions. It also enables one to have compassion for an individual's limitations and motivates other team members to step in and utilise their personal strengths to compensate for another's development areas. *Understanding team members* therefore spontaneously creates a workflow which is aligned with the group members' individual needs due to the fact that groups take the time to get to know one another outside of their current role within the group and

organisation. Working towards accurately hearing and trying to understand your group members' feelings and concerns is very likely to improve member morale and the group members' willingness to cooperate as an integrated team (Druskat & Wolff, 2001a; Hamme, 2003; Stubbs, 2005).

Perspective talking facilitates groups in reaching a state of understanding one another. Perspective talking takes place within conversation and is presented through the willingness to consider matters from other group members' points of view. Perspective talking can be broken up into two elements, the first includes initiating conversations with other individuals in order to understand their points of view, and the second includes implementing successful problem-solving which compels members to coordinate and harmonise their differing perspectives (Druskat & Wolff, 2001a).

Talking about and exploring different perspectives can lead to creativity and innovation, because new information and ideas are brought forward which can be taken into account during problem-solving and decision-making within a work group (Druskat & Wolff, 2001b). Having varying opinions and perspectives which are managed in an emotionally intelligent way by successfully assimilating important information, can therefore increase group effectiveness (Hamme, 2003). Differing perspectives can also increase group emotional intelligence if members feel like their unique perspectives are respected by their group members. Respect within the group may increase group trust as well as facilitate members' identification with the group and its decisions. Furthermore, perspective talking can also be linked to group efficacy, due to the fact that openly discussing perspectives before decision-making may enable members to feel confident in the group's ability to conquer a challenge or task because they explored the perspectives, thoughts and opinions from all members and chose the most effective plan of action.

Druskat and Wolff (2001b, p. 87) identified certain actions that groups can perform to establish norms which support group emotional intelligence, creating a collective belief of trust, group identity and group efficacy which leads to group effectiveness. In order to create Group Emotional Intelligence Norms that enable group awareness of members through *understanding team members,* which includes perspective talking, groups can attempt the following:

- Get to know one another outside the boundaries of work and group tasks.
- Create a habit of checking in on the emotional well-being of members at the beginning of group meetings.

- Try to find the reason for undesirable behaviour by asking questions and listening to one another.
- Share with one another their thoughts and feelings.
- Enquire if all members agree with a decision made.
- Directly ask quiet members to voice their opinions and feelings.
- Query decisions that were made hastily.
- Appoint a devil's advocate.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *understanding team members* as:

> *The degree to which a team attempts to understand the needs, perspectives, skills, and emotions of its members. The strength of this norm relates to the degree to which members build bonds among themselves and the degree to which members identify with the team* (p. 2).

2.3.2.2   Individual level: Group regulation of members

Individuals within groups have personalised needs, assumptions, perspectives, expectations and beliefs, therefore it is inevitable that differences within groups will occur. For this reason, it is important for groups to discern, surface and manage possible apprehension that may arise from dissimilarity in groups and personal needs in order to effectively regulate group members (Druskat & Wolff, 2001a). Group regulation of members refers to the group's ability to control and adjust how group members react to and express themselves after being exposed to emotional stimuli in order to have a positive impact on the group and its members. Druksat and Wolff (2001a; 2001b) furthermore indicated that it is important for groups to find a balance between ensuring predictability in member behaviours and granting group members a feeling of being in control and having the freedom to express their individuality.

Hofstede (1980) supported the above argument, by explaining the importance of emotional independence of individuals within a group and the importance of regarding individual decision-making, especially within individualistic cultures. Trust within a group can therefore be developed when members have the freedom to express themselves, but also accept their interdependence within the group (Druskat & Wolff, 2001a; Hofstede, 1980). Druksat and Wolff (2001a; 2001b) suggested two norms (*address unacceptable behaviour* and *demonstrate caring*) which are required in groups to find this balance between regulating member behaviour and allowing individual control.

Creating a norm within groups where individuals are called out for deviating from norms and where ***unacceptable behaviour is addressed***, is important because this helps the group to set certain standards and it creates guidelines of acceptable behaviour (Druskat & Wolf, 2001a; Stubbs, 20005). When these standards and behavioural guidelines are set, and members accept them, predictability in member behaviour is produced. Consequently, when members deviate from these norms, and they get called out in a caring manner within the group, these norms are reinforced, which deepens group identity. In addition to creating predictability in group member actions, confrontation is also an important aspect of group effectiveness because if deviation from the norms is left unattended to, it may seem like their behaviour is accepted, and this may create a new norm which does not support group effectiveness (Druskat & Wolff, 2001b).

Research has revealed that members more frequently confront their team members within high-performing self-managing teams than within relatively low-performing teams (Druskat,1996; Stubbs,2005). Druskat's research explained that the reason low-performing teams do not confront one another is due to a fear of aggravating the problem or damaging intergroup relationships. However, when confrontation is done right, it can be viewed in a positive light as "without confrontation, disruptive behaviour can fester and erode a sense of trust in a team" (Druskat & Wolff, 2001b, p. 84).

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *address unacceptable behaviour* as:

> *The degree to which a team addresses member behavior that goes against agreed upon norms or is harmful to team effectiveness. This norm requires skills of empathy, self- control, and persuasion to carry it out effectively. It must also be coupled with the norm of demonstrating care. This norm contributes to a sense of efficacy in the team. When team members know that disruptive behavior will be confronted, they feel more confident in the team to accomplish its task* (p. 2).

Druskat and Wolff (2001b, p. 87) identified certain actions groups can perform to establish norms that build group emotional intelligence. To create Group Emotional Intelligence Norms enabling group regulation of members through *addressing unacceptable behaviour*, groups can do the following:

- Implement ground rules that can be used to indicate deviating behaviour.
- Confront and call members out who act in ways opposing group norms and rules.
- Create and reinforce playful ways of indicating when members deviate.

In addition to addressing unacceptable behaviour, **demonstrate caring** is also needed for groups to balance predictability and individualisation, which is core to group regulation of members. A caring orientation can be described as communicating positive regard toward the group and its individual members, it affirms to each group member that they are a valued member in the group, that their contribution is appreciated and respected (Druskat & Wolff, 2001a; Druskat & Wolff, 2001b; Hamme, 2003; Stubbs, 2005). This can be done through eliciting behaviour that portrays support, validation and compassion toward group members which increases group trust. Caring also creates a safe space for members to voice their feelings and concerns, knowing that the group will respect their current emotional state (Druskat & Wolff, 2001b; Stubbs, 2005).

A study conducted by Wolff (1998, as cited in Druskat & Wolff, 2001a, p. 142) found that adopting a caring orientation toward group members is related to group effectiveness as it expands group members' 'sense of safety, cohesion and satisfaction' which consequently facilitates and supports task engagement. Having a foundation of security within the group can facilitate individual learning and development due to the knowledge that their group is there to support them and mentor them when they take calculated risks.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *demonstrate caring* as:

> *The degree to which a team treats its members with respect, supports them, seeks their perspective, and validates their efforts. It does not imply that team members must like each other or socialize with each other. The strength of this norm affects the degree to which members build bonds and identify with the team. It also contributes to a sense of safety in the team* (p. 2).

To create Group Emotional Intelligence Norms enabling group regulation of members through *demonstrating caring*, groups can ensure the following:

- Support members by helping them, being flexible and providing emotional support.
- Validate and endorse member contributions and ensure that members know that they are valued.
- Protect members form internal and external attacks.
- Ensure that members never act in a derogatory or demeaning way towards one another.

Understanding team members and addressing unacceptable behaviour aims to regulate group members – to do this it is desired that individual members' needs and group needs coincide. This, however, is not always attainable; when individual members do not share the desire to

act in accordance to existing group norms, cognitive dissonance may occur. Addressing unacceptable behaviour in a caring way therefore attempts to build consensus between members and the group and aims to align shared behaviours and interpretations (Druksat & Wolff, 2001a). Additionally, the norm *understanding team members* works together with *addressing unacceptable behaviour* and *demonstrate caring* to create a sense of acceptance and support. These three norms can work together to help balance group and individual needs which supports advancement of group effectiveness, leading to trust, group identity and group efficacy, and moreover impacts group cooperation and collaboration.

On a group level, the norms associated with the group emotional intelligence dimension *group self-awareness* includes *reviewing the team* which also comprises an element of seeking feedback. Norms related to the *group self-regulation* group emotional intelligence dimension comprise *support expression*, *building optimism* and *proactive problem-solving*. The group level and its corresponding norms operate on a larger scale than the relationships of individual group members as this level rather includes an awareness of the group as a whole, and the regulation of the group as a larger entity.

2.3.2.3 Group level: Group self-awareness

Druskat and Wolff's (2001b) investigation of group effectiveness revealed that group self-awareness of the emotional states, strengths and weaknesses, modes of interaction, and task processes, play an integral part in emotional intelligence of groups and also promote group-efficacy

Self-awareness is a crucial emotional competency, described as the knowledge of an individual's internal state, preferences, resources and intuitions. Based on this definition, group self-awareness can be defined as "a member's awareness of group emotional states, preferences and resources" (Druskat & Wolff, 2001a, p. 145). This awareness enables group members to think intelligently about the group and it's needs. Druskat and Wolff (2001a) argued that the norm *reviewing the team*, which includes an element of seeking feedback, aids the process of acquiring group self-awareness.

The norm **reviewing the team** can be defined as the group members' ability to "evaluate itself (the group as a unit), including its emotional states and the strengths and weaknesses in its modes of interaction and operation as a group" (Druskat & Wolff, 2001a:146). Groups frequently apply *reviewing the team* through social comparison of their group with external groups. Social comparison is conducted by obtaining information regarding attitudes and work habits of their own and other groups through observation and discussion (ongoing or at a

formal meeting) (Druskat & Wolff, 2001a; Druskat & Wolff, 2001b; Stubbs, 2005). These two sets of data are then compared in order to identify strengths and weaknesses of their group. In addition, *reviewing the team* can also be implemented by obtaining feedback and constructive criticism.

Seeking feedback, an essential component of self-evaluating, can be defined as the search for feedback from external sources. The ongoing search for feedback and constructive criticism can create an environment that strives for continuous improvement and advancement (Druskat & Wolff, 2001a). The group can use this information, receiving feedback to focus the group's attention on possible shortcoming or additional important issues, enforcing positive change within the group. Conversely, positive feedback can lead to the growth of group pride, cohesion and individuals being proud to be part of the group, increasing members' engagement.

Receiving positive feedback and or acting on feedback which generates positive change within the group and organisation can have a positive influence on the group's morale. When a group receives positive feedback for tasks they have completed, it may draw attention to and increase the attractiveness of the group, not just to its current members but also to external groups and stakeholders. Positive feedback can foster a feeling of group pride, improve involvement, esteem and enhance group identity and group efficacy which leads to group effectiveness.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *reviewing the team* as:

> *The degree to which a team is aware of how it is performing, its collective moods, and seeks information to help it evaluate how well it is working. This norm has emotional consequences in that it can create emotional threats…One key to an effective team is to have a good sense of reality and not shy away from it when it gets emotionally threatening* (p. 2).

Druskat and Wolff (2001b, p. 87) identified certain actions groups can perform to establish norms building group emotional intelligence, creating a collective belief of trust, group identity and group efficacy which leads to group effectiveness. To create Group Emotional Intelligence Norms enabling group self-awareness through *reviewing the team* which includes seeking feedback, groups can do the following:

- Schedule time to examine group effectiveness.
- Create measurable task and process objectives and then measure them.
- Acknowledge and discuss group moods.

- Communicate a sense of what is transpiring in the group.
- Allow members to call a 'process check'.
- Enquiry on the customers' well-being.
- Post a completed project and invite comments.
- Benchmark a process.

Group self-awareness may focus the group towards a specific emotional state, but mere knowledge does not change behaviour or ensure a group will address the issue; *group self-regulation* is discussed as the second dimension of group emotional intelligence on a group level.

2.3.2.4 *Group level: Group self-regulation*

Druskat and Wolff (2001, p. 146) defined group self-regulation as "the group's ability to regulate itself as to promote emotional well-being and development". Self-regulation should function in partnership with self-awareness; individuals should be aware of and understand an emotion to be able to regulate it. Group self-regulation points to a group's ability to manage their emotional states and challenges, creating desirable responses. The norm, group self-regulation, connects to the group's ability to develop emotional capacity and assemble effective responses to possible emotional challenges.

Group self-regulation's first norm indicates: ***support expression***. This norm suggests that effective regulation of emotional stimuli and challenges depend on the group's ability to promote the effective interpretation, providing resources that encourage identifying group emotions. The norm includes promoting an environment where these emotional stimuli can be discussed (Druskat & Wolff, 2001; Stubbs, 2005). The aim of this norm is to minimise suppressing of emotions, as it leads to dysfunctional outcomes. Openly discussing and respecting one another's emotions may increase the level of trust within groups.

Groups scoring high on emotional intelligence recognise that a wide variety of emotions are an undeniable part of a group's existence; therefore, they are more willing to openly discuss and debate these emotional issues (Druskat & Wolff, 2001a). The possibility of debate will enable individual members to deal with their emotions and predicaments, indirectly influencing the productivity of the group. Groups may also create a vocabulary to facilitate these discussions (Druskat & Wolff, 2001b). A mutual vocabulary minimises the chances of miscommunication and misunderstandings amongst group members, enhancing optimism, supporting an affirmative environment, where group members support, accept and acknowledge each other and build optimism within the group. Success in creating and

implementing the resource in working with emotions, may indicate increased group cohesion, self-efficacy and confidence, thereby creating effective group work.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *creating support expression* as "the degree to which a team provides resources for the team to address emotions, e.g., time and a language for talking about emotions" (p. 2).

To create Group Emotional Intelligence Norms supporting group self-regulation through *support expression*, groups can provide for the following:

- Make time to discuss problematic issues and address the emotions surrounding them.
- Find creative, shorthand ways to acknowledge and express emotions in the group.
- Create fun ways to acknowledge and relieve stress and tension.
- Express acceptance of members' emotions.

The second group self-regulation norm indicates: ***build optimism***. Through an affirmative environment with high levels of optimism, the group aims at creating a positive image, signifying their performance. Emotions are tangible and therefore it is important to create a positive environment that will inspire and motivate members, an environment that will assist them in experiencing emotions in a positive manner. Preserving a positive group image enables group members to observe emotional and other challenges as merely a challenge that they can and will overcome and not a difficulty that will cause setbacks. Positive group image therefore has a positive correlation to the group's level of self-efficacy and optimism for the future and their willingness to identify with the group (Druskat & Wolff, 2001; Stubbs, 2005).

By building optimism and maintaining a positive image within the group, the self-fulfilling prophesy may be relevant to group outcomes. The self-fulfilling prophecy argues that individuals' expectations and beliefs construct reality, therefore a false belief about another person or group may realise (Darity, 2008). A positive image within a group can therefore create an upward spiral of success and encouragement, increasing group self-efficacy; a negative image will conversely create a downward spiral of discouraging interaction and failure (Druskat & Wolff, 2001a).

Certain events trigger emotions; expressing these emotions within a group context will open up more than one interpretation. Situations lacking norms that guide interpretations of emotional stimuli can cause members to draw from their individual cultural norm. They should be guided in understanding their group members' emotions. Groups may include a wide variety of cultures, possibly leading to misinterpretation of an emotional stimulus. It is essential to create a norm, guiding the interpretation and labelling of group emotions. A positive group

image combined with this norm (building optimism) may result in a positive outcome of the self-fulfilling prophecy in a group and increase trust between group members.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *building optimism* as:

> *The degree to which a team stays positive and optimistic in the face of challenges. This norm has emotional consequences because the degree to which members of the team remain optimistic will affect their sense of efficacy and will minimize the sense of threat caused by the challenge* (p. 2).

To create Group Emotional Intelligence Norms supporting group self-regulation through *building optimism*, groups can do the following:

- Reinforce the group to meet a challenge.
- Be optimistic about challenges.
- Focus on what can be controlled.
- Remind members of the group's important and positive mission.
- Remind the group how it solved a similar problem.
- Focus on problem-solving, not blaming.

Group self-regulation's last norm indicates that ***proactive problem-solving*** entailing groups actively taking initiative with the aim of resolving concerns, prevents the group from accomplishing their tasks and objectives. Proactive problem-solving empowers groups to control challenging situations. When groups notice a change in their outcomes regarding proactive problem-solving, it may lead to increased group efficacy and performance. Proactive problem-solving may also increase group trust based on the members' trust that their group members will identify and try to address problems before they occur, resulting in a trust that their group will be able to accomplish their goals. When combined with the self-fulfilling prophecy, it may reduce the group's perception of emotional challenges and create an upward spiral to success (Druskat & Wolff, 2001; Stubbs, 2005).

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *proactive problem-solving* as:

> *The degree to which a team anticipates problems and takes action to prevent them as well as taking responsibility and working hard to address challenges. This norm has emotional consequences similar to that of building optimism. The greater the degree to which a team takes control of solving its problems the greater will be its*

sense of efficacy and the less threatening challenges will feel to team members (p. 3).

To create Group Emotional Intelligence Norms supporting group self-regulation through *solving problems proactively*, groups can aim for the following:

- Anticipate challenges and address them before they occur.
- Take the initiative to understand and acquire what is needed to be effective.
- Do it in person if others do not respond; do not rely on others.

The Group Emotional Intelligence Norms related to the group emotional intelligence dimension *group social awareness*, part of the cross-boundary focused level, constitute *understanding team context*. Additionally, norms associated with the *group social skills* group emotional intelligence dimension include *building external relationships*.

Groups do not function in isolation, they are inherently part of a bigger network of relationships which include external individuals, groups or larger entities outside the boundaries of the group itself. Thus, this level entails an understanding and awareness of how the group fits into the larger environment, and how it relates to other groups. This level also includes the group as a whole being equipped with social skills in order to build relationships with stakeholders outside the boundaries of the working group.

Cross-functional and cross-boundary communication is no longer the sole responsibility of management by following strict hierarchies but has become part of the requirements for effective work group functioning (Druskat & Wolff, 2001a). For effective communication to occur across boundaries, groups have to be aware of the needs, feelings, perspectives, beliefs and concerns of external stakeholders. In addition to awareness, groups also require the ability to act in way that elicits the desired responses and emotions within the external stakeholders, as groups need to build relationships and gain the confidence of these individuals. The group emotional intelligence dimensions, *group social awareness* and *group social skills*, are therefore proposed by Druskat and Wolff (2001a).

2.3.2.5 Cross-boundary level: Group social awareness

Effective groups disperse roles and activities within the group as well as to the outside of the group in order to gain external influence and make use of resources outside the boundaries of the group. To acquire positive external influence, groups need to be cognisant of the needs, perceptions, concerns and expectations of the broader organisation as well as that of the particular external individuals and groups they are in contact and work together with. To do

this, Druskat and Wolff (2001a) identified the Group Emotional Intelligence Norm, *understanding team context*.

Understanding team context can be described as a group's ability to understand and be cognisant of the social and political organisational system they form part of (Druskat & Wolff, 2001a; Stubbs, 2005). *Understanding team context* therefore includes the group's ability to be conscious of the organisational system as a whole, including its role players, hierarchies and influencing structures, available resources and its potential. To utilise these sources, the group needs to understand the individuals and groups they interact with in the context of the broader organisational system. The distinction between the individual's group and external groups can increase group identity due to clear boundaries which are understood and seen by the individual, distinguishing their group from others within the broader organisation.

Druskat and Wolff (2001a; 2001b) explained that cross-boundary perspectives are especially important where group functioning significantly impacts external stakeholders. When external stakeholders are understood and the connections within the organisation are understood, groups can harmoniously work with external individuals and groups. Groups can collaborate with others and share in one another's successes, rather than allowing the group success to negatively impact others. This may increase group efficacy, as the group members are aware that they have external support that may assist them in achieving the goals and objectives.

When groups are aware of the beliefs and know what is important to external stakeholders, they are able to reframe their personal requests and desires in a way that resonates with external stakeholders, thereby increasing their opportunity to acquire their desired outcome. Furthermore, this awareness can guide groups to reframe their accomplishments in a way that fosters support from the wider organisation, thereby improving and building new relationships that can benefit the team in the long run (Druskat & Wolff, 2001b).

Furthermore, it includes a group's ability to recognise external groups' expectations, feelings and needs. Being aware of this, groups can adjust themselves to create intergroup agreements and congruency between internal and external group norms. When group norms are in alignment, intergroup cooperation and collaboration may manifest, leading to an increase in performance and effectiveness for both teams. *Understanding team context* is especially important when groups are dependent on other groups to complete their tasks, for example in a production line. When groups are aware of the other groups' work progress, needs and concerns, a collective understanding operates, which may lead to groups assisting one another, increasing both groups' productivity.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *understanding team context* as:

> *The degree to which a team seeks to understand the needs and concerns of those outside the team as well as the impact of its work and how it contributes to the organization's goals. This norm has emotional consequences related to the relationship of the team to decision makers and other teams. To build ties with others outside the team it is first necessary to understand them* (p. 3).

Druskat and Wolff (2001b) identified certain actions that groups can perform establishing norms building group emotional intelligence, creating a collective belief of trust, group identity and group efficacy which leads to group effectiveness. To create Group Emotional Intelligence Norms supporting group social awareness through *understanding team context*, groups can consider the following:

- Determine possible needs and concerns of other individuals within the organisation.
- Consider alternative individuals who may influence the group's ability to achieve its goals.
- Inquire whether the team's proposed actions coincide with the organisations culture and political climate.

2.3.2.6 Cross-boundary level: Group social skills

Emotionally intelligent groups are not only aware of, but also influence external stakeholders (Druskat & Wolff, 2001a). The group's ability to regulate emotions on a cross-boundary level requires social skill. Social skills enable groups to develop and ***build external relationships*** by acting in a way that elicits confidence towards the individual's group within the organisation or external groups (Druskat & Wolff, 2001a; Stubbs, 2005).

As previously mentioned, groups do not work in isolation and therefore external relationship are important (Druskat & Wolff, 2001a). Knowing how to build strong relationships with stakeholders can impact a group's ability to perform effectively, because at one time or another groups will be interdependent in order to complete a task or reach a goal. When strong relationships are already formed, it is more likely that external groups will exert effort to assist the individual's respective group. As mentioned above, having the support of external stakeholders may foster a feeling of efficacy within the group. Group members may more strongly believe that they can accomplish their goals and objectives because they have

external resources, knowledge and support at their disposal to assist them, which may lead to an increase in group efficacy levels.

Strategies that can help to create strong external relationships include *ambassadorial activities* which involve making the effort to frequently communicate with individuals in a higher hierarchy as well as with peer groups (Druskat & Wolff, 2001a; Druskat & Wolff, 2001b). Building strong relationships with management can help the group gain favour and can be persuasive when the group needs support. This also creates an opportunity for management to be informed about the group's activities and their successes. Furthermore, building strong relationships with peer groups may also benefit the groups, as it creates an opportunity for the groups to increase their network and contacts, and may even lead to assistance when need be.

The Group Emotional Intelligence Survey, developed by Druskat and Wolff (Wolff, 2017), defines *building external relationships* as:

> *The degree to which a team actively and strategically builds relationships with other people and teams who can affect their performance and provide resources. This norm has emotional consequences in that it builds bonds with others outside the team as well as evokes cooperation and attracts resources that help the team accomplish its goals* (p. 3).

To create Group Emotional Intelligence Norms supporting group social skills through *building external relationships*, groups can do the following:

- Initiate networking opportunities.
- Inquire about other groups' needs.
- Provide support for other work groups.
- Invite any and all stakeholders to join group meetings.

Hypothesis 2: Group Emotional Intelligence Norms positively affect Collective Beliefs.

2.3.3   Developing Group Emotional Intelligence Norms

Druskat and Wolff (2001a) identified that the challenge in emotional intelligence is that it is primarily focused on emotional intelligence as an individual concept, whilst organisations are progressing towards group and group-based activities. Managers and leaders require their groups to produce the best outcomes and therefore these researchers investigated how groups can develop greater emotional intelligence.

An atmosphere/environment is needed where norms build emotional capacity and influence emotions in constructive ways, creating emotionally intelligent groups. Because of the multiple levels (individual, group and cross-boundary) where group members operate, building group emotional intelligence is much more complex than building individual emotional intelligence (Druskat & Wolff, 2001a). It is important to create an awareness of the emotions of others, but equally important to regulate those emotions on all three levels.

Druskat and Wolff (2001a) proposed that symbolic interactionism may influence group norm creation. Symbolic interactionism entails the symbolic or descriptive meanings individuals associate with certain behaviours, due to their group culture and group members' modelling these behaviours. These modelled behaviours translate into expectations from members within the group's thinking and behaviour, thereby motivating the continued actions based upon shared group norms and thus maintaining Group Emotional Intelligence Norms within the group context. Symbolic interactionism can furthermore through repetition of member behaviour create group norms, influencing individual member's thoughts and behaviours, which may also influence their individual emotional intelligence levels (Clegg & Bailey, 2008; Druskat & Wolff, 2001a).

Druskat and Wolff (2001a) discussed four theorised phases of decision-making, whereby individual group members consciously create emotionally intelligent group norms. These phases may occur formally and informally within the group context. The first phase entails individuals presenting emotional intelligence competencies and beliefs, to be discussed and challenged. The desired outcome of this phase is members being in agreement with these emotionally intelligent norms. The second phase commences when members start interacting, attempting to apply the agreed to norms. During interaction, members are provided the chance to observe how the norm is performed, reflecting on the consequences of the norm. Members may request feedback from each other on the correctness of their actions, leading to social comparison. Social comparison links with reviewing the team, providing them the opportunity to adapt their behaviour to obtain desired outcomes. Risk-taking and experimentation, followed by reflection may also occur during the second phase (Druskat & Wolff, 2001a). When individuals show approval towards their group members' behaviour, support is provided. These individuals become conditioned to act in a certain way.

During the third phase, the emerging norms are questioned, and alternatives are voiced based on members' personal experience and observations of the enactment of the norm and its consequences. It is important to review the decisions, in selecting the most appropriate course of action. It is furthermore important for members to agree on the chosen norm. Norms are

only established when most members in a group agree, realise the importance of the norm and act accordingly (Druskat & Wolff, 2001a).

During the fourth and final phase of developing group norms, members accept and behave according to the group norms identified, challenged and chosen during Phase 1 to 3 (Druskat & Wolff, 2001a). When the majority of group members submit to the group norms, these norms become more permanent and group members unconsciously act and think according to the guidelines of the emotionally intelligent group norms. When new members join the group, they will automatically observe the group norms and through the manifestation of symbolic interactionism, they will start acting and thinking according to the group's norms, thereby maintaining and upholding group norms. It is therefore evident that individual group members play an important role in the development and maintenance of Group Emotional Intelligence Norms. It can however be argued that individuals need to be emotionally intelligent themselves in order to effectively follow the four phases of decision-making and create emotionally intelligent group norms. Emotional intelligence of the individual group members is therefore discussed in the following section.

In addition to the influence group members have on Group Emotional Intelligence Norms, Druskat and Wolff (2001a) identified five kinds of influences that could leverage and influence the majority of the group's choice of emotionally intelligent behaviour, namely a formal group leader, an informal group leader, courageous followers, training and organisational culture. Based on these influences, it is evident that leaders, whether signifying individuals in leadership positions or peer members who show leadership abilities, play an important role in developing group norms in conjunction with emotional intelligence.

Formal group leaders, informal group leaders and courageous followers, believing in Group Emotional Intelligence Norms, may implement interventions, championing the cause for emotionally intelligent thinking. Formal group leaders have the authority to influence their group's early norm-building process and encourage group members' acceptance of the emotional intelligence norms. Leaders can also coach and teach emotional intelligence competencies to individual group members (Druskat & Wolff, 2001a). Through the coaching process, leaders can directly influence their group members' individual level of emotional intelligence and indirectly influence the group's emotional intelligence levels by developing the emotional intelligence of individual members, leading to an immense acceptance of emotionally intelligent norms within the group.

Informal leaders can influence the acceptance of Group Emotional Intelligence Norms, as group members are likely to confide with them and lean on them for advice and guidance

(Druskat & Wolff, 2001a). This creates an opportunity for the leader to champion emotionally intelligent behaviour that the group members will be willing to accept and follow. Courageous followers might not influence group members based on their status, but they will have the personality to oppose and convince other members that emotionally intelligent behaviour is more appropriate leading to greater success than non-emotional intelligent behaviour. Based on the above argument, the influence of leadership on Group Emotional Intelligence Norms is discussed in Section 2.5.

2.4   Individual Emotional Intelligence

As mentioned in the above section, individuals can influence the development and maintenance of Group Emotional Intelligence Norms. It was however indicated that for members to develop and maintain norms that create emotional intelligence in groups, the individual self should display elements of personal emotional intelligence. It will therefore be important to fully understand what individual emotional intelligence entails in order to understand how it links to Group Emotional Intelligence Norms. To acknowledge the effect individual emotional intelligence levels have on the development and maintenance of Group Emotional Intelligence Norms, individual emotional intelligence is included in this study as a controlling variable.

Various definitions and opinions concerning emotional intelligence and its entailment exist. It is therefore necessary to introduce the definition of emotional intelligence as a construct used in this study. Salovey, DiPaolo and Mayer (1990, as cited in Caruso, 2004) introduced one of the first formal definitions of emotional intelligence, describing it as the ability to deal with own, and other people's emotions, using the information collected to assist an individual during problem-solving and decision-making. Building on the above-mentioned definition, emotional intelligence results in the ability to use emotions to better adapt to and capitalise on environmental demands (Caruso, 2004).

Salovey, DiPaolo and Mayers' definition was later expanded to include: verbal and nonverbal appraisal and expression of emotions; emotional regulation within yourself and others; emotional knowledge, promoting intellectual and emotional growth; and the ability to utilise emotions to assist in problem-solving (Jordan et al., 2002). Emotional intelligence benefits from individuals' ability to use emotions to inform their cognitive capabilities and the extent to which emotions can be managed cognitively (George, 2000).

Individuals who show emotional intelligence therefore improve on issues such as self-awareness (realising their own emotions and self-confidence, knowing their strengths,

weaknesses and limitations), self-management (being able to control emotions, flexibility and adaptability), social awareness (empathy, organisational interests and responsibility) and relationship management (the ability to understand and manage other people's emotions and have strong dependable relationships with them) (Day, 2004). George (2000) also identified the 'use of emotions to enhance cognitive processes and decision-making' as a major aspect of emotional intelligence. This includes an individual's ability to use specific emotions to enhance numerous kinds of cognitive processes, alternating between emotions promoting flexibility and broadening perspectives on challenges to generate necessary outcomes.

Based on the above definitions, the current study defines emotional intelligence as an individual's ability to portray self-awareness, self-management, social awareness and relationship management (Boyatziz et al, 2013; Boyatzis & McKee, 2005). Consequently, these characteristics will enhance the individual's cognitive processes during problem-solving and decision-making. It will empower them to broaden their perspectives and frames of reference, acting in a flexible manner to adapt to an array of environments or situations with the aim of reaching a desired outcome and therefore increasing the effectiveness in which they operate (Boyatziz et al, 2013; Boyatzis & McKee, 2005).

As indicated in the above discussion on Day's (2004) definition, individual emotional intelligence comprises four dimensions compelling a sequential pattern. This sequential pattern involves four basic steps: firstly, self-awareness, then self-management, refocusing on social awareness and finally, relationship management. These dimensions are discussed in more detail below.

2.4.1   Self-awareness

Self-awareness indicates recognising and understanding feelings when an emotional reaction is triggered. Self-awareness entails having a realistic opinion of personal abilities, strengths, weaknesses and level of performance. It is an individual's ability to understand spoken and unspoken feelings, interests and concerns and also having a well-grounded sense of self-confidence which indicates a sense of self-worth and skill (Koman & Wolff, 2008; Stubbs, 2005; Watkin, 2000). Self-awareness is indicative of an individual's ability to understand their thought patterns and the outcomes of these thoughts; conversely, how thoughts translate into action. The awareness of personal thought patterns empowers the individual to identify underlying meanings and beliefs as the foundation to their belief system, consequently creating the lens through which they see the world.

The awareness of personal feelings empowers individuals to make mindful decisions, based on their emotional state. Conversely, individuals' inability to understand their inner world leads to the inability to manipulate or manage their actions, stemming from thought patterns. Bearing this in mind, self-awareness as a dimension of emotional intelligence is necessary for an individual to progress to the next dimension, which entails effectively regulating of personal emotions. Self-awareness can therefore indicate the foundation for managing and regulating individual emotions (Koman & Wolff, 2008; Stubbs, 2005 & Watkin, 2000).

Self-awareness as indicated above is the individual's ability to recognise and understand their own internal feelings, emotions and perspectives. Individuals must firstly be conscious of their emotions before they can move over to expressing these feelings, emotions and perspectives. Self-awareness can therefore be seen as a prerequisite for individuals to engage in perspective talking, an element of the Group Emotional Intelligence Norm understanding team members, which requires group members to share their emotions, feelings and perspectives with the larger group. This supports hypothesis 3 (see later) stating that Group Member Emotional Intelligence levels affect Group Emotional Intelligence Norms.

On the other hand, when group members create a supportive environment in which individuals feel comfortable to explore their emotions, feelings and perceptions, the individual may acquire self-knowledge/understanding. Through participation in group discussions about differing perspectives and opinions, group members may uncover and bring forward unconscious beliefs, perspectives and emotions within themselves.

Goleman's research identified 27 competencies of emotional intelligence, which were later reduced to 18 competencies within the four emotional intelligence dimensions (Goleman et al., 2002a). The competencies linked to self-awareness include emotional self-awareness, accurate self-awareness and self-confidence.

Emotional self-awareness entails being aware of your guiding values and emotional states, as well as how these emotional states affect those around you and affect your performance. *Accurate self-assessment* involves knowing your own strengths and limitations, these individuals invite constructive criticism and have a desire to improve themselves. Lastly, *self-confidence* relates not only to knowing your strengths, but also being able to effectively use them. Self-confidence equips the individual with a sense of self-efficacy, and self-assurance (Goleman at al., 2002a).

2.4.2 Self-management

Self-management indicates an individual's ability to manage, control, monitor and regulate their emotions and emotional impulses to such a level that they do not act in a way that will interfere or cause disruption, but rather facilitate desired outcomes. Self-management comprises the ability to monitor and evaluate own emotions, consciously choosing not to act upon emotions from which the individuals will not benefit, but rather change or alter affective reactions to accomplish desired outcomes. Flexibility and adaptability are important competencies to obtain when the individual aims to implement alternative behaviour with the goal of achieving desired outcomes (Koman & Wolff, 2008; Stubbs, 2005; Watkin, 2000).

Self-management includes the ability to take initiative and activate necessary tasks prior to being requested. This might accomplish a delayed gratification to pursue goals and a persistent and optimistic attitude when pursuing these goals despite possible obstacles (Koman & Wolff, 2008).

The six emotional intelligence competencies linked to the self-management dimension are: self-control, transparency, adaptability, achievement, initiative, and optimism. *Self-control* enables an individual to manage unwanted emotional stimuli and channel them in a positive direction. These individuals can also stay calm during stressful times. *Transparency* entails living according to your inner values, it includes being authentic and living with integrity. These individuals can openly admit their mistakes and confront unethical behaviour in others. *Adaptability* enables an individual to be flexible within a changing environment and allows the individual to effectively focus on multiple demands without losing focus and drive. Adaptable individuals are comfortable with ambiguity and comfortably adapt to challenges (Goleman et al., 2002a).

Individuals who are high on the competency *achievement* set high personal standards and measurable but challenging goals. These individuals have a drive to continuously improve, which includes improvement in themself as well as those they lead. *Initiative* includes the ability to seize opportunities as they arise or take matters into their own hands to create them. They have a desire to create a better future and feel like they are in control of their own destiny. Finally, *optimistic* individuals are those who see problems as opportunities rather than seeing them as threats. They see other individuals in a positive light and will always expect the best from them (Goleman at al., 2002a).

In Section 2.3.2.2 is was indicated that group members should address unacceptable behaviour of group members and manage conflict in a caring manner. When other individuals display unacceptable behaviour, especially in a group context where members' behaviour

influences one another's goal attainment, these behaviours going against group norms may elicit an emotional response within oneself. It is therefore important for an individual, when confronting others by addressing unacceptable behaviour, to demonstrate the individual emotional intelligence dimension self-regulation so that confrontation can happen in a caring manner. Making use of self-regulation enables the individual to display self-control and not allow their personal emotions and feelings to drive or dictate the confrontation in a negative manner. The confronter must be able to regulate their emotions in order to reach a desired outcome of re-aligning group members' behaviours in line with group norms. From this discussion it is evident that self-management on a personal level will enable group members to act in accordance with the Group Emotional Intelligence Norms *addressing unacceptable behaviour* and *demonstrate caring*.

2.4.3   Social awareness

Social awareness is associated with a level of external awareness. The individual's ability to understand and experience other people's feelings and emotions is linked to the accurate appraisal and expression of emotion through social awareness. Empathy adds to an individual's level of emotional intelligence and their ability to be socially aware. Empathy is an important skill, empowering an individual to provide social support and maintain interpersonal relationships. By evaluating an opportunity or challenge in a variety of moods, a diverse range of options emerge for the individual to choose from, assisting in the decision-making process (George, 2000).

Social awareness empowers an individual to utilise their personal perspectives to build rapport with a wide variety of people. Organisational awareness can be linked to social awareness, describing the individual's ability to read working teams' emotional progressions and power relationships, acting appropriately. Social awareness can also be linked to an individual's ability to understand other people's feelings and emotions, simultaneously understanding their needs. This enable them to provide appropriate services to meet these needs (Koman & Wolff, 2008; Stubbs, 2005; Watkin, 2000).

Through the knowledge and understanding of these determinants and consequences of others' emotional states, it empowers an individual to use this information in functional ways. George (2000) provided an example of how a leader, indicating a bad mood, consequently postpones a meeting with employees where the agenda is to discuss upcoming changes. This leader realises that his ability to convey the information in an enthusiastic way to collect

employee support is influenced by his emotional state. He considered the consequences of his emotions when making decisions.

The emotional intelligence competencies associated with social awareness include: empathy, organisational awareness and service. *Empathic* individuals are able to be attuned to the unspoken and expressed emotions of others. They are able to attentively listen to others and truly understand their perspectives. These individuals possess the ability to accept and work well with people from diverse backgrounds and cultures. *Organisation awareness* enables individuals to understand the political and social climate of the organisation; they are able to detect important social networks and read key power relationships. These individuals are aware of the inherent guiding values, the unspoken rules and expectations that operate within the organisation and between its employees. Individuals high in the *service* competency create a climate where the people they are in contact with feel like their needs are attended to. They are especially good at monitoring customer and client satisfaction, and they are readily available when needed (Goleman et al., 2002a).

Group members who display social awareness on an individual emotional intelligence level may by default show understanding of their team members' feelings, interests, concerns, strengths and development areas, therefore linking individual social awareness to the Group Emotional Intelligence Norm *understanding team members*. Demonstrating social awareness on an individual level may furthermore enable an individual to become aware of how their group as a unit is performing, and what the emotional state of their group is, therefore linking it to the Group Emotional Intelligence Norm *reviewing the team*.

Furthermore, social awareness may empower individuals to identify emotional, social and operational ques indicating possible problem areas. This allows individuals to actively take the initiative to solve problems proactively. Lastly, having social awareness may also enable the individual to not only understand other individuals, but may also allow them to understand the social and political context in which other individuals and teams operate, which indicates the Group Emotional Intelligence Norm *understand team context*. From the above, it is evident that the individual Group Member Emotional Intelligence dimension, social awareness, is positively related to Group Emotional Intelligence Norms, therefore supporting hypothesis 3.

2.4.4 Relationship management

Relationship management captures the management aspect of individuals' social interactions and application of social skills. Applying social skills includes the effective management of emotions within interpersonal relationships (Stubbs, 2005). Watkin (2000, p.90) described

social skills as "accurately reading social situations, interacting smoothly and using skills to persuade, lead and negotiate".

Relationship management includes developing individuals through identifying and strengthening their developmental needs. Along with development comes the individual's ability to inspire and guide others, with the aim of allowing them to follow the leader, without using force but rather applying effective persuasion tactics. Relationship management includes respecting others and effectively collaborating with team members in a cooperative and sharing manner to reach team objectives. To manage relationships, an individual must be able to manage conflict in a successful manner, utilising negotiation skills and resolving disagreements (Koman & Wolff, 2008).

According to Goleman et al. (2002a), there are six relationship management competencies, which include: inspiration, influence, developing others, change catalyst, conflict management and teamwork and collaboration. Individuals who *inspire* others create resonance and motivate people toward a compelling vision and shared mission. These individuals offer a sense of purpose to others and go beyond what is expected to create excitement toward work tasks. *Influence* entails the ability to create buy-in from others and to develop a network that supports your initiatives. These individuals are persuasive and actively engage with their audience. Individuals who place great value on cultivating others' abilities and skills are high in the competency *developing others*. These individuals have a genuine interest in the strengths, untapped potential, limitations, and goals of others, and they spend time to help grow others through constructive feedback and acting as a coach or mentor (Goleman et al., 2002a).

Individuals who act as *change catalysts* are able to identify when change is needed, they challenge the status quo and generate new initiatives. These individuals do not back down, even in the face of opposition, they rather improve on their arguments. Individuals who are good at *conflict management* are good at understanding multiple and differing perspectives, feelings and views. They then negotiate with the relevant individuals in order to find a common idea that everyone approves of, and thereafter redirect the energy toward achieving a shared objective. Furthermore, individuals who are able team players, and who form an environment where collaboration and cooperation are valued, possess the competency *teamwork and collaboration*. These individuals also model respect, helpfulness and collaboration. They motivate others to enthusiastically commit toward a shared goal and continuously build spirit and increase group identity by placing importance on building relationships above mere work obligations (Goleman et al., 2002a).

An individual's ability to manage social interactions requires social awareness as well as the application of social skills when interacting with external individuals, in other words relationship management (Goleman et al., 2002a). Individual group member relationship management is needed in order to effectively create an environment in which group members can address unacceptable behaviour, demonstrate caring toward one another, and where members are comfortable enough to express their emotions. Relationship management also enables an individual to influence group members in a way that builds optimism, by enhancing group successes, and focusing on what can be done instead of portraying challenges as threats (Koman & Wolff, 2008; Stubbs, 2005; Watkin, 2000). Most importantly, relationship management and the application of social skills empowers individuals to build positive relationships with members outside of their group, and of varying hierarchical levels. It is therefore evident that relationship management affects the following Group Emotional Intelligence Norms: *addressing unacceptable behaviour, demonstrate caring, support expression, build optimism and building external relationships*, which consequently supports hypothesis 3.

Hypothesis 3: Group Member Emotional Intelligence positively affects Group Emotional Intelligence Norms.

As indicated in Section 2.3.1, Group Emotional Intelligence Norms form the foundation for Collective Beliefs which include trust, group identity and group efficacy. Collective beliefs can enable an individual to more effectively understand themself, understand the group and its members, as well as manage themself and the relationships with members within and outside of the group more effectively.

Trust between group members may implicate that individuals will be able to manage their urges to check-up on their group members' progress, and rather display vulnerability to the actions of their group members. Trust therefore influences the self-managing and relationship managing dimensions of emotional intelligence. When members in a group identify and associate with the identity set out by the group it may influence their personal actions, values and norms. Due to this association, an understanding of the group identity will give the individual insight into themselves, thus increasing their self-awareness. A strong group identity defined by strong boundaries furthermore gives the individual insight into the actions and beliefs of other members of their group, thereby linking group identity to the emotional intelligence dimension social awareness (Koman & Wolff, 2008; Stubbs, 2005; Watkin, 2000).

Having confidence in your group's ability and believing that the group can overcome obstacles influences the group's social awareness by focusing the attention on group members' abilities

and competencies. Focusing on positive aspects of the group as a whole and the individual members increases the individual's self as well as social awareness in an optimistic and positive way. Consequently, having confidence in the members in the group's ability to succeed, will decrease behaviour caused by stress like constantly checking up on the progress and work quality of others. Group efficacy will also increase members' willingness to be optimistic, take initiative, inspire others, develop others and collaborate and work together as a team in the group, thereby linking group efficacy to relationship management and self-management through the emotional intelligence competencies (Koman & Wolff, 2008; Stubbs, 2005; Watkin, 2000). Based on the above arguments, Collective Beliefs influence individual Group Member Emotional Intelligence levels.

Hypothesis 4: Collective beliefs positively affect Group Member Emotional Intelligence.

The importance of emotional intelligence within individuals and within groups is evident. This study therefore aimed to investigate how emotional intelligence can be displayed within groups through the establishment of emotionally intelligent group norms. As discussed above, individual group members play a significant role in the development and maintenance of Group Emotional Intelligence Norms. In addition, leaders play a prominent role in directing organisations and employees. They also play an important role in creating an organisational culture, climate and developing norms (Yukl, 2013). It is therefore hypothesised that the role a leader plays within an organisation, and how they interact with their subordinates and peers can impact the development of Group Emotional Intelligence Norms. The next section therefore explores leadership, and the type of leadership style that is required to foster and enhance Group Emotional Intelligence Norms (GEIN) within organisations, thereby creating emotionally intelligent groups.

2.5   Leadership in Organisations

Extensive research exists on leadership and the role it plays in organisational success. Research encompasses a wide variety of leadership approaches and models, such as servant leadership, transactional leadership, transformational leadership, charismatic leadership and ethical leadership, amongst others (George, 2000; Yukl, 2013). Leadership is a term which is part of our everyday vocabulary, a concept most individuals are familiar with. Because the term leadership is so widely used, many different definitions of leadership have emerged. Years ago, Bennis (1959, p.259) already made an observation about leadership, stating that "we have invented an endless proliferation of terms to deal with it … and still the concept is not sufficiently defined". For research purposes, researchers often define leadership according

to their research topic, and place focus on the dimensions of leadership which support their research phenomena, and what interests them most (Yulk, 2013).

Yulk (2013, p.18) indicated that leadership has been defined according to various different "traits, behaviours, influence, interaction patterns, role relationships, and occupation of administrative position". In Yukl's (2013, p. 18) research endeavours he came across a common ground that appears in most research, and this is that "it involves a process whereby intentional influence is exerted over other people to guide, structure, and facilitate activities and relationships in groups or organisations". Based on this observation, Yulk (2013) defined leadership as:

> *Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives* (p. 23).

Throughout history, knowledge has been obtained on leadership approaches and models, leaders' qualities (what leaders are like), their functions (what they do), methods they use to make effective decisions, their interaction with employees and their approaches to reach organisational goals. Despite these diverse attempts, George (2000) indicated that a deficit of research still remains on the role emotions play in the leadership process. This deficit originates from extensive emphasis from organisational literature on a cognitive orientation. Cognitive orientations often observe emotions and feelings as isolated for rationality and effective decision-making. Leadership theories and research therefore did not consider the effect of leaders' feelings and emotions on their ability to make effective decisions (George, 2000). In opposition to the purely cognitive view of leadership, researchers like Goleman et al. (2002a) believe that the leader's primary task involves the relational and emotional components. Accordingly, Miller (2007) identified that studies on organisational communication moved their focus to include feelings and interaction rather than just focusing on the rational and systematic side of the organisation. Accordingly, changes in the organisational context from individual focus to group focus and new leadership approaches emerged, placing more emphasis on emotions, interactions and the importance of the emotional intelligence concept (Taner & Aysen, 2013).

It is evident from research that an individual needs special skills in order to be an effective leader in the midst of change, challenges and high leadership expectations (Boyatzis & McKee, 2005; Bawafaa, 2014). Due to these demands, and the fact that a core component of leadership is the ability to influence, lead and manage subordinates and peers, relational leadership skills are needed, and more specifically, skills encompassing high levels of

emotional intelligence (Boyatziz et al, 2013; Cummings et al., 2005; Evans & Allen, 2002; Squires et al., 2010). These skills may include a leader's ability to manage their own emotions, build positive interpersonal relationships, to engage followers in working towards organisational goals and objectives, managing perceptions and expectations, giving group support, creating a desired organisational culture and corresponding norms, as well as coaching and mentoring employees.

The above-mentioned skills are inherently dependent on the leader's ability to effectively utilise empathy, an important characteristic of emotional intelligence. Empathy is the ability to understand others' feelings and emotions, and includes the ability to share in these feelings (Bawafaa, 2014; Boyatziz & McKee, 2005; Squires et al., 2010). Taking into consideration the definition of empathy, it is clear that leadership requires a high level of empathy in order to effectively manage relationships. This attribute is also used by leaders to enhance interpersonal relationships and job satisfaction by showing support and compassion towards their subordinates and peers (Bawafaa, 2014).

More specifically, this type of leadership known by its high level of empathy and ability to inspire others to pursue positive organisational goals and comply with the organisational norms and its corresponding norms, is known as Resonant Leadership (Bawafaa, 2014). Resonant leaders are individuals who have high levels of emotional intelligence which enables them to firstly manage their own emotions and then manage and direct the emotions of their subordinates and peers. The effect of emotions and emotional intelligence on leaders and followers will subsequently be discussed.

2.5.1   The influence of leadership on organisational culture

As indicated above, there may be sufficient evidence to support the hypothesis that leadership, and for the purpose of the current study, Resonant Leadership, may influence group emotional intelligence. The question still remains "why is there variance in group emotional intelligence?", but before this question is answered, the leader's role in creating a desired organisational culture is examined.

Leaders play a pivotal role in establishing and influencing organisational culture. Organisational culture is developed and defined by the actions of the founding leaders and is later strengthened as new leaders enter leadership roles. In line with this, Schein (2004) suggested that leadership is interlaced with culture formation, evolution, transformation and destruction.

Schein (2004) introduced a paradox for leaders trying to transfer knowledge of culture to employees: in order to transfer cultural knowledge, the leader must not only be able to lead, they must also be able to listen. The paradox is thus the misconception that cultural knowledge can only be transferred by leading, and not listening. Through listening, the leader enables employees to develop their own insights and understanding of the cultural dilemmas faced. Listening also engages employees in their pursuit of learning more about the culture, possible changes that are required, and how these should be undertaken.

Baker-Thompson (2006) indicated that leadership and culture cannot be understood in isolation, they must be looked at collectively. Leaders should be aware of culture, if they aren't, the culture will end up leading them instead of them taking the leading role. Leaders create cultures and norms used to define and describe culture when they create groups, it is therefore important for the leader to choose wisely when forming groups as these, in turn, will strengthen and expand the culture.

It is evident that leaders have the ability to influence the organisational culture and norms. In the following section the researcher discusses the importance of emotional intelligence in the creation of culture, and the role resonant leaders play in creating group emotionally intelligent norms. This involves the role resonant leaders play in creating emotionally intelligent groups through the creation of group culture.

2.5.2 Leadership and emotional intelligence

Leadership plays an important role in organisations with a new emphasis on the emotions of leaders and the role emotions play in their guiding methods. It will therefore be important to investigate the diversity of emotions and the impact on leadership behaviour. Leaders, like other individuals, experience a diverse range of both positive and negative emotions. Emotions influence behaviour and therefore they will impact a leader's effectiveness (George, 2000). Leaders often experience negative emotions like anger, and when acting upon it, may lead to a struggle in building positive relationships with their employees and subordinates. Negative emotions can also facilitate attention to detail, assist to detect errors and problems leading to careful processing of emotions (George, 2000). Leaders who often experience positive emotions may have difficulty to identify obvious performance shortfalls, but conversely may be more inclined to use inductive reasoning, integrative thinking and be more creative. Both positive and negative emotions can lead to dysfunction. Conversely, it can also improve the effectiveness of leadership behaviour (George, 2000).

Goleman et al. (2002a) argued that the first step in leading others starts with oneself. Knowing and managing oneself, being aware of your inner values, motives and beliefs is key to leadership. Only when the leader is aligned within himself, he can effectively connect with and lead others. Individuals can enforce and develop techniques to manage and regulate their own and others' feelings and emotions, making certain individuals are more or less capable of managing their own and others' emotions. These capabilities used to manage and regulate emotions were investigated by making use of emotional intelligence theories and research. To address this, the role emotional intelligence plays on individuals' behaviour was investigated in Section 2.4. However, the impact of emotional intelligence on leaders, their interactions with groups and in forming group culture and norms is discussed next.

Wong and Law (2002) investigated the relationship between leaders' level of emotional intelligence and its effect on their followers' job outcomes. Within their study, there was no support found for the relationship between in-role behaviour (follower job performance) and the emotional intelligence of the leader. Significant support was however found for the relationship between leaders' emotional intelligence and followers' job satisfaction with extra-role behaviour such as organisational citizenship behaviour. Although their leaders' level of emotional intelligence did not influence the followers' job performance, it was found that their job performance relates to their own level of emotional intelligence (Wong & Law, 2002). Therefore, individual Group Member Emotional Intelligence levels were included in this study's model as a controlling variable. It is however also important for leaders to have high emotional intelligence levels, as followers' job satisfaction depends on their emotional intelligence levels (Wong & Law, 2002). This information is relevant because eventually, the job satisfaction of an employee will influence job performance and their motivation to accomplish organisational goals, thereby indicating effectiveness of employees and working groups.

It is evident that emotional intelligence plays a substantial role enhancing the functioning of individuals positively. The current study proposes that a leader's emotional intelligence level has a considerable influence on group members' functioning. The study investigated the leaders' influence in creating and developing emotional intelligence norms within groups, thereby creating highly emotional intelligence groups. To investigate the implication of emotional intelligence on leadership, it was firstly necessary to identify which leadership characteristics contribute to leadership effectiveness. This study focused on Resonant Leadership as a basis to identify effective leadership characteristics.

2.5.3   Resonant Leadership

As indicated, there are many types of leadership styles, and Resonant Leadership can be categorised as a relationally focused leadership style (Bawafaa, 2014; Boyatzis & McKee, 2005). According to Uhl-Bien (2006), relational leadership styles are associated with work environments which support and motivate the engagement of employees and results in higher productivity and job satisfaction. Research supports the notion of relational leadership style and its positive relationship to effective work outcomes (Cummings, 2004; Cummings et al., 2010; Wong et al., 2013).

The term Resonant Leadership is a relatively new and developing concept, and was developed by Daniel Goleman, Richard Boyatzis and Annie McKee. What differentiates Resonant Leadership from other relational leadership styles is that it is rooted within the foundation of emotional intelligence (Bawafaa, 2014; Boyatzis & McKee, 2005; Goleman et al., 2002; Laschinger et al., 2014).

Leaders high in emotional intelligence have demonstrated that they are more likely to remain efficient and effective during challenging times by making use of Resonant Leadership attributes known as mindfulness, hope and compassion. These types of leaders demonstrate the ability to motivate their followers to draw on positive and uplifting emotions in the pursuit of organisational goal and objectives and aspiring to greater goals, and by doing this, leaders are said to draw on resonance (Bawafaa, 2014; Goleman et.al., 2002a; Squires et. al., 2010). Resonance among groups can be described as a "synchronisation of thoughts and emotions" between group members and within the organisation (Laschinger et al., 2014).

Cummings et. al. (2010) described resonance as an individual's strong sense of empathy which allows them to connect with others and allows them to build meaningful interpersonal relationships. Additionally, Goleman (1998a, 1998b) described Resonant Leadership as the leader's ability to persuade individuals towards achieving a bigger, common organisational goal. It is therefore evident that relationships and the management of these relationships in an effective way, leading to desired and positive outcomes, are core to Resonant Leadership.

Goleman et al. (2002a) identified and described six types of leadership dimensions which can be broken down into four resonant and two dissonant leadership dimensions. As mentioned before, both positive and negative emotional states can have desired and undesired outcomes. Accordingly, both resonant and dissonant leadership dimensions can be utilised effectively depending on what the situation requires. Laschinger et al. (2014) indicated that the dissonant leadership dimension should be used with caution as it is often misapplied which may lead to undesired outcomes.

Resonant Leadership consists of four leadership dimensions: visionary (the ability to enable others to see the bigger picture and influence them to move towards a shared dream or goal), coaching (being focused on the personal development of others), affiliative (to build strong relationships and collaborations with followers through empathy) and democratic (draw on knowledge and skill of entire group to give input and collaborate during decision-making) leadership. Whereas the two dissonant leadership dimensions are: pace setting (to focus on goals, objectives and deadlines, and the increase of efficiency and performance) and commanding (operating with a highly authoritative style) (Bawafaa, 2014; Cummings, 2004; Cummings et al., 2005; Goleman 2002a; Goleman et al., 2013).

The last two leadership dimensions are categorised as dissonant leadership dimensions because they do not support emotional intelligence. These dimensions neglect the emotional foundation which motivates and supports follower success (Goleman et al., 2002a; Cummings et al., 2005). Although both resonant and dissonant leadership dimensions can have positive outcomes, Goleman (2002a) followed a positive psychology approach which accentuates the importance for leaders to rather focus on developing positive resonant dimensions (rather than dissonant dimensions) in order to cultivate resonance among group members. As such, the current study will focus on the resonant dimensions.

Resonance is important because without it, leaders may find it challenging to maintain and sustain their proactiveness, resonance and effectiveness. With the help of resonance grounded in emotional intelligence, a leader has the ability, in spite of their external environment, to consciously renew themselves which will enable them to deal more effectively with organisational needs, manage conflict and enable growth and development (Bawafaa, 2014; Boyatzis & McKee, 2005). Cummings also investigated the effect of Resonant Leadership on their followers, and found that resonance makes the followers feel valued, recognised, appreciated, connected and supported by their leader (Cummings, 2004)

In contrast, an inability to create and maintain resonance, in other words *dissonance*, is linked to negative organisational outcomes such as organisational unrest, employee unhappiness, volatile emotions, internal disquiet, crises and distress within the organisation (Bawafaa, 2014; Boyatzis & McKee, 2005). It is therefore clear that for organisations and organisational groups to function most effectively in building a positive, effective and efficient work environment, Resonant Leadership will benefit them and contribute to an increase of employee job satisfaction and reduce employee stress (Bawafaa, 2014; Cummings et. al., 2010). The last mentioned is substantiated by a study done by Bawafaa (2014) which revealed that Resonant Leadership is an important tool for managers to create structurally empowering and healthy work environments. A resonant leader will therefore make use of their personal emotional

intelligence to direct the emotions and the feelings of their followers towards meeting the organisational objectives (Goleman, 2016).

2.5.4 Resonant Leadership dimensions

As mentioned in Section 2.5.3, there are six types of leadership dimensions – four resonant dimensions and two dissonant dimensions. The dimensions can be understood as certain leadership functions or behaviours a leader can tap into when necessary (Goleman et al., 2002a).

The leadership dimensions are explained in Figure 2.3. For the purpose of this study, Goleman's (2002a) approach was followed by focusing on the four leadership dimensions which create resonance. These four Resonant Leadership dimensions (visionary, coaching, affiliative and democratic) are discussed in more depth below. These dimensions do not function in isolation, but rather all four of these dimensions should be present to indicate Resonant Leadership.

50

Figure 2.3

The six dimensions of leadership

VISIONARY

How it builds resonance: Moves people towards shared dreams
Impact on climate: Most strongly positive
When Appropriate: When change require a new vision, or when a clear direction is needed

COACHING

How it builds resonance: Connects what a person wants with the organisations goals
Impact on climate: Highly positive
When Appropriate: To help an employee improve performance by building long-term capablities

AFFILIATIVE

How it builds resonance: Creates harmony by connecting people to each other
Impact on climate: Positive
When Appropriate: To heal rifts in a team, motivate during stressful times, or strengthen connections

DEMOCRATIC

How it builds resonance: Values peoples input and gets commitment through participation
Impact on climate: Positive
When Appropriate: To build buy-in or consensus, or to get valuable input from employees

PACESETTING

How it builds resonance: Meets challenges and exciting goals
Impact on climate: Because too frequent poorly executed, often highly negative
When Appropriate: To get high-quality results from a motivates and competent team

COMMANDING

How it builds resonance: Soothes fears by giving clear direction in an emergency
Impact on climate: Because too often misused, highly negative
When Appropriate: In crisis, to kick-starts a turnaround, or with problem employees

Resonant Dimensions

Dissonant Dimensions

6 Leadership Dimensions

Note. From "Primal leadership: Learning to lead with emotional intelligence." by D. Goleman, R. Boyatzis, & A. McKee, 2002a, p. 53. *Harvard Business School Press.*

The above-mentioned leadership dimensions (visionary, coaching, affiliative and democratic) are rooted within emotional intelligence (Goleman et al., 2002a). Goleman et al. (2002a) described emotional intelligence in terms of four domains: self-awareness, self-management, social awareness and relationship management. The first two domains (self-awareness and self-management) focus on personal competence, how well the leader is aware of, understands and is able to manage his own emotions. The last two domains (social awareness and relationship management) indicate how well the leader can identify and understand the emotions of followers and how well they are able to manage these emotions.

2.5.4.1 Visionary

The visionary dimension of leadership builds resonance by moving individuals towards a shared dream. Visionary leaders have a clear picture of their future goals, and have the ability to share their dreams and perspectives with their followers in an inspiring way that motivates them to buy in and collaboratively work towards reaching the same future goal. These leaders will articulate the shared end goal and bigger picture with the group and will share all the necessary information but they do not prescribe and tell the group what to do or how to get there (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

Through discussion and sharing information this leader ensures that their followers grasp the bigger picture in terms of where they fit in, how their work contributes to the goal, why the goal matters and exactly what is expected of them. A visionary's movement towards honesty and openness creates a feeling of inclusiveness and enables individuals within the organisation to make good decisions due to the transparency of information needed during decision-making. This leadership dimension is particularly important when a new organisational vision is required or when clear direction is needed (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

The enthusiastic and inspirational way in which the leader, strong in the visionary dimension of Resonant Leadership, articulates their vision and organisational goals to the group creates and builds positive attitudes, a positive image and optimistic outlook toward this vision (GEIN dimension: building optimism). The leader creates a feeling of group efficacy when sharing their vision, goals and objectives which increases group members' optimism and motivation toward achieving these goals. The group members therefore fully buy into what the leader has planned for the organisation. Not prescribing to group members what to do and how to implement the vision and goals, the leader creates an opportunity for team members to take initiative, to evaluate itself and the group as a unit in order to determine their skillsets, strengths

and weaknesses (GEIN dimension: reviewing the team) which may support them in attaining the newly desired vision set out by the leader. This information is used by group members to plan how they are going to execute the vision and what the roles of each individual team member will be. By identifying their weaknesses, they may identify possible future problems in the execution of their plan (GEIN dimension: proactive problem-solving) which may assist them in figuring out how to work around the problem before it occurs. It can therefore be inferred that the Resonant Leadership dimension visionary can help to develop and maintain Group Emotional Intelligence Norms.

2.5.4.2 Coaching

The coaching leadership dimension of Resonant Leadership builds resonance through connecting individual needs with organisational goals. Coaching as a leadership dimension can often be seen during one-on-one interactions between the leader and another individual. This interaction is characterised by the leader showing genuine interest in the individual while building trust and rapport. The topic of the interaction generally involves personal development, and identifying individual strengths and weaknesses, personal goals, career hopes and aspirations. This information can then be focused in a way to benefit the individual as well as organisation (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

Coaching leaders can also delegate employees by giving them challenging assignments which are designed to stretch them, not only to get the job done. During these challenging assignments, the leader will ensure that the individual has all the necessary information and resources to successfully complete the assignment. At the end of the day, this leadership dimension motivates employees and leads to better results because it does not only increase employee capabilities but also their self-confidence (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

When leaders display a preference for coaching as a Resonant Leadership dimension, characterised by developing others, empathy and showing genuine interest, their behaviour can be interpreted as a standard or guideline as to how group members should interact with one another. As already mentioned, leaders displaying coaching as a Resonant Leadership dimension take time to understand their group members, their strengths, weaknesses, goals, hopes and aspirations (GEIN dimension: understand team members). They do this by creating a safe space for their followers to voice their feelings, concerns and knowledge and by asking questions, exploring and motivating expression of emotions (GEIN dimension: demonstrating caring & support expression). When leaders display these behaviours, they start creating a

culture, a standard of behaving and interaction, within the group which the group members will catch on and follow. Coaching as a Resonant Leadership dimension therefore helps to create a norm where group members understand team members and demonstrate caring within the group.

By challenging their group members and motivating employees to increase performance and build on their capabilities, resonant leaders strong in the coaching dimension may also address behaviours in their followers that do not support the organisational goals (GEIN dimension: address unacceptable behaviour). This is done to realign all group member and employee behaviours, actions and attitudes to support the group and organisational goals, objectives and vision. When leaders model these behaviours, group members will follow this behaviour if they see that addressing unacceptable behaviour within the group has positive outcomes, therefore creating a group culture where members confront one another in a caring manner. Coaching as a Resonant Leadership dimension therefore helps to create a norm where group members address unacceptable behaviours among themselves.

2.5.4.3 Affiliative

The affiliative dimension of leadership builds resonance through the creation of harmony by connecting individuals to one another. When displaying the affiliative dimension, the leader focuses on building relationships with their followers and peers and working collaboratively together. Relationships are built through making use of empathy as it enables the leader to understand and value the feelings and perspectives of others. Leaders displaying the affiliative dimension work toward creating and maintaining peace and harmony within groups, motivating their subordinates during stressful times, and strengthening connections between individuals and groups. Affiliative leadership increases performance and productivity in the long term by strengthening collaborative relationships within the organisation (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

The affiliative dimension of Resonant Leadership starts with the leader showing interest in their own group members, asking questions, and caring for the well-being, dreams and goals of the individual members. The affiliative dimension makes use of empathy in its interactions with other members, therefore creating an environment in which group members feel like they are listened to, valued and understood (GEIN dimension: understand team members). This in return creates a platform for the development of positive intergroup relationships. Positive relationships are also formed by creating resources within the group to discuss emotionally charged topics in a constructive manner (GEIN dimension: support expression).

The affiliative Resonant Leadership dimension, as discussed above, connects individuals with one another and motivates teamwork and collaboration. The leader following this dimension will connect their group with individuals in the wider organisation and environment (GEIN dimension: building external relationships). The leader can act as an ambassador, promoting their group to other leaders. This leader may also motivate their group members to personally connect with individuals in higher hierarchies and organise meetings between other leaders and groups, thus creating a group culture where members frequently interact with individuals outside their group in different hierarchy levels. When the group leader models and motivates this type of behaviour, they elicit confidence in their group members to follow their example of connecting with external stakeholders, leaders, and co-workers (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

2.5.4.4 Democratic

The democratic leadership dimension builds resonance through making individuals feel like their inputs and opinions are valued – these leaders also receive commitment through allowing others to participate in decision-making. Democratic leaders value the knowledge of the group, draw upon their knowledge and ask for their input when decisions need to be made. Democratic leaders ensure commitment from their followers by encouraging participation and this also builds trust and respect towards their leader (Dearborn, 2002; Goleman, 2016; Goleman et al., 2002a).

Leaders demonstrating the democratic Resonant Leadership dimension will draw on the knowledge of the group, seek feedback from their group members and be open to constructive criticism from the group members using this information to make decisions. These group members compare their group and group performance to external groups and to their previous performance (GEIN dimension: reviewing the team). Cross-boundary understanding of the group's social and political standing may also come forth when group members are prompted to discuss their group within the wider organisational and environmental context (GEIN dimension: understand team context) in order to make decisions.

The democratic Resonant Leadership dimension places value on the knowledge and skills of the entire group especially during decision-making, therefore following a participative decision-making approach. The group leader motivates group member participation by asking questions and prompting responses. This leader also shows respect and appreciation for group members who share their opinions, experience and knowledge, thereby motivating individuals to continue sharing their opinions in future. Due to the fact that leaders encourage

participation and sharing of ideas and opinions, problem areas may be identified and addressed at an earlier stage, thus giving time to solve these problems proactively (GEIN dimension: proactive problem-solving).

Hypothesis 5: Resonant Leadership positively affects Group Emotional Intelligence Norms.

2.6 Structural Model

Based on the hypotheses discussed throughout the literature study, the structural model will display paths between the constructs. The symbols ξ_1 indicates the Resonant Leadership construct and η_1 indicates the Group Emotional Intelligence Norms leading to Collective Beliefs, indicated by η_2. The symbol η_3 indicates Group Member Emotional Intelligence level which is influenced by the Collective Beliefs, and influences the Group Emotional Intelligence Norms. The structural model therefore concludes that Resonant Leadership directly influences the Group Emotional Intelligence Norms. Figure 2.4 illustrates the conceptual model, indicating all theory discussed within this chapter, while Figure 2.5 illustrates the structural model that was tested for the purpose of this study. The conceptual model gives a broader context of the research as indicated in the literature study and will not be tested. The structural model indicates the paths between constructs that will be tested in the current study.

Structural model Ksi's (Exogenous/independent latent variable)

ξ_1: Resonant Leadership

Structural model Eta's (endogenous/dependent latent variable)

η_1: Group Emotional Intelligence Norms

η_2: Collective beliefs

η_3: Group Member Emotional Intelligence level

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Figure 2.4

Conceptual model

57
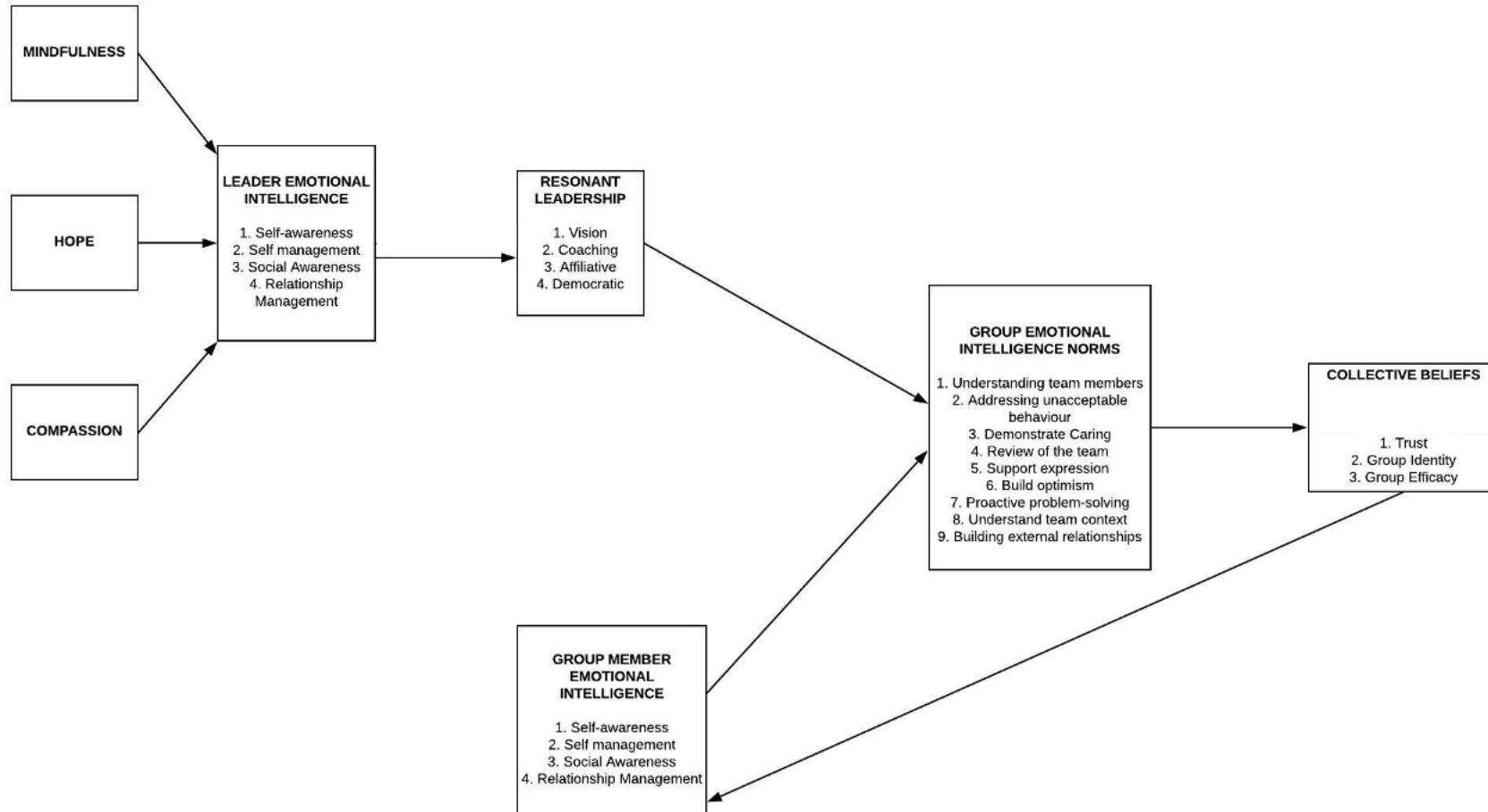
Figure 2.5

Structural model indicating the influence of Resonant Leadership and Group Member Emotional Intelligence on Group Emotional Intelligence Norms
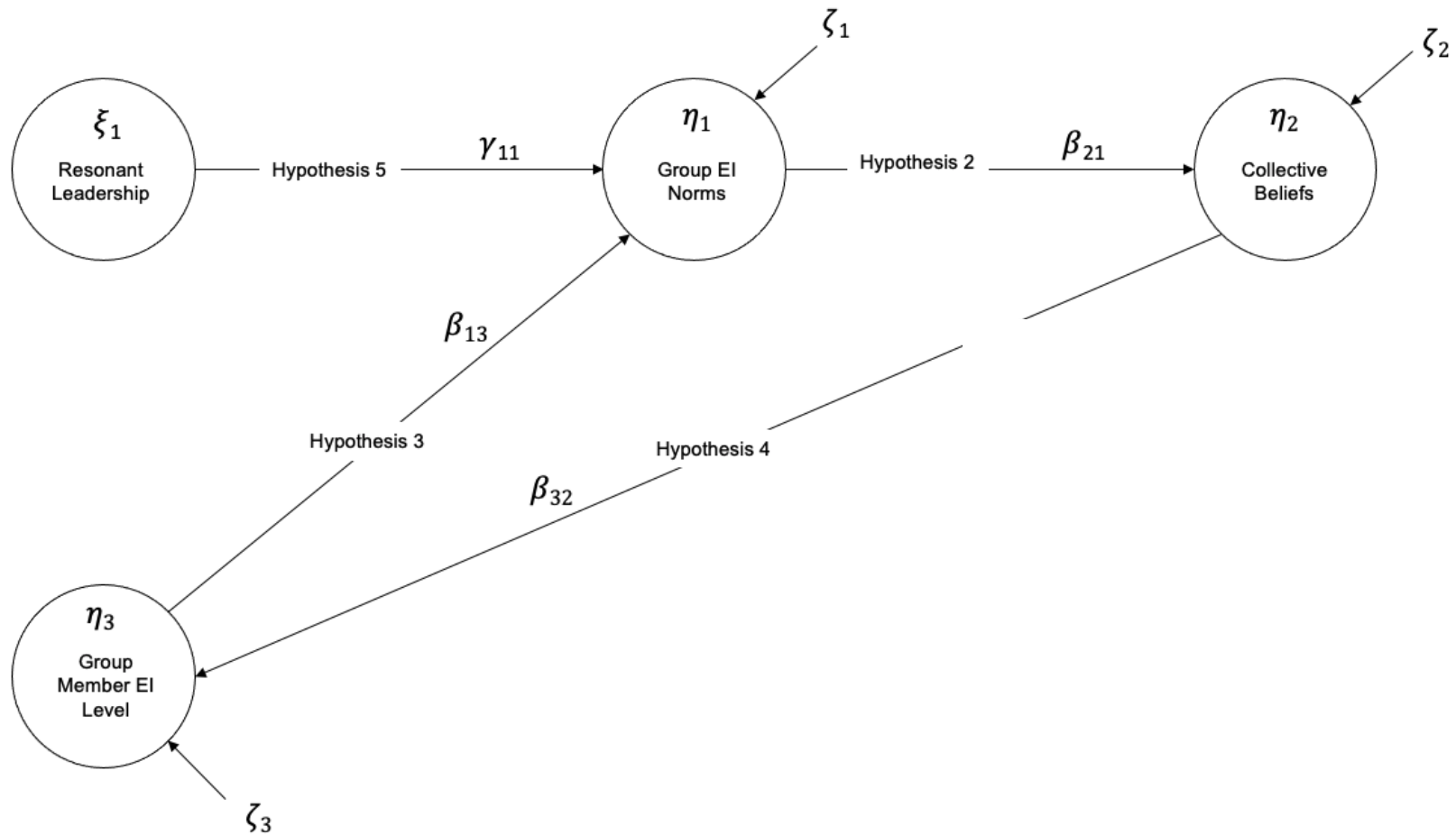
2.7   Conclusion

Emotions are an important part of every human being's life. It is inevitable that emotions influence behaviour and therefore emotions should not be considered lightly in the organisational context as they will influence the outcomes of employees' actions and as a result determine organisational outcomes. Organisations want to ensure the most effective outcomes and successfully achieve organisational, group and individual goals. Research has rendered a change to include the regulation of emotions, this study has therefore included emotional intelligence as the central point of the study.

Organisations had to adapt to the competing corporate world due to of the influence of globalisation. They therefore changed from individual to group-based work. Group members interact closely with each other, comprising intricate relationships. Like individual emotional intelligence importance, group emotional intelligence is also an important factor in determining the outcomes of group tasks. To create emotional intelligence group behaviour, emotional intelligence group norms should be created and followed by members. To do this, it was hypothesised that individual group members' emotional intelligence levels influence the development and maintenance of Group Emotional Intelligence Norms. Furthermore, it was shown that individuals in leadership roles greatly impact the development of the emotional intelligence norm, and the type of leadership style that notably impacts creating and developing Group Emotional Intelligence Norms is Resonant Leadership. The structural model depicts the influence of Group Member Emotional Intelligence levels and Resonant Leadership on Group Emotional Intelligence Norms, which leads to group effectiveness.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The study was guided by the research initiating question "What are the sources of emotional intelligence in groups, and through which mechanisms can it be developed?" To provide an answer to this question, a literature review was conducted that culminated in a structural model postulating that group emotional intelligence is a function of the emotional intelligence of the individual members (i.e. Group Member Emotional Intelligence), as well as the style of leadership (i.e. Resonant Leadership). Chapter 2 highlighted the specific nature of Resonant Leadership, and how this type of leadership is particularly effective in facilitating the development of group emotional intelligence through the development of certain norms (i.e. Group Emotional Intelligence Norms). The proposed structural model will however only add value if it provides a valid account of the true psychological processes underlying the level of emotional intelligence in groups. In order to empirically test the proposed model, a specific and appropriate methodological approach was required.

This chapter presents the research methodology followed in this study. The research objectives and research hypotheses are presented followed by a discussion of the research design and procedures. This is followed by a discussion of the various measurement instruments that were used, the sampling procedures, the ethical considerations, and finally, the data analysis techniques that were used to assess the research hypotheses.

3.2 Substantive Research Hypothesis and Path-specific Hypotheses

The objective of the research was to determine the impact of Group Member Emotional Intelligence levels and Resonant Leadership on Group Emotional Intelligence Norms. The structural model (Figure 2.5) in Chapter 2 indicates the hypothesised paths through which Resonant Leadership and Group Member Emotional Intelligence influence Group Emotional Intelligence Norms which lead to Collective Beliefs related to group effectiveness. The overall model represents the overarching substantive hypothesis of this study (hypothesis 1). This hypothesis states that the structural model provides a permissible description of the psychological process regulating the level of the Group Emotional Intelligence Norms and the Collective Beliefs of groups.

In accordance with the literature review and structural model depicted in Chapter 2, the overarching substantive research hypothesis was subsequently dissected into a series of

path-specific research hypotheses indicating whether the constructs have a positive or a negative relationship with each other.

Path-specific research hypotheses

Hypothesis 2:   Group Emotional Intelligence Norms positively affect Collective Beliefs.

Hypothesis 3:   Group Member Emotional Intelligence positively affects Group Emotional Intelligence Norms.

Hypothesis 4:   Collective beliefs positively affect Group Member Emotional Intelligence.

Hypothesis 5:   Resonant Leadership positively affects Group Emotional Intelligence Norms.

3.3   Research Design and Procedure

The aim of the research design is to show the plan, structure and strategy of the research; therefore, to indicate how the research was executed in order to answer the research question (Babbie & Mouton, 2001). One of the main functions of the research design is to control variance to obtain empirical findings which can be interpreted unambiguously for or against the substantive hypothesis (Hair et al., 2012; Loehlin & Beaujean, 2017). Therefore, an appropriate research design to test the hypotheses is essential for formulating a credible answer to the research initiating question.

An *ex post facto* correlational research design was chosen for the study, as direct control over the latent variables depicted in the structural model could not be obtained. *Ex post facto* correlational designs use neither random assignment, nor experimental manipulation of the independent variables. The construct manifestations, which had already occurred, were observed across individuals, and the degree to which they co-vary was established (Beyers, 2006). Multi-indicator measures per latent variables were used to evaluate the success with which the latent variables were operationalised (i.e. testing the measurement model) before testing the structural model.

Although the *ex post facto* correlation design does not allow experimental manipulation, indicating a limitation, this research design is still highly valued in the social sciences as several personal characteristics cannot be experimentally manipulated. The findings are interpreted with caution, in keeping the limitation of this design in mind, especially with regard to causality.

3.4 Statistical Hypotheses

The substantive research hypothesis (presented earlier) are expressed below as statistical hypotheses, describing the statistical parameters for evaluating the merits of each hypothesis. The statistical hypotheses are formulated in line with the chosen research design and the type of analysis appropriate for testing the research questions empirically (Hair et al., 2012).

The null hypothesis of the exact model fit can be expressed in terms of the root mean square error of approximation (RMSEA):

$$H_{01}: \text{RMSEA} = 0$$
$$H_{a1}: \text{RMSEA} > 0$$

The above hypothesis corresponds to the position that the structural model provides an exact description of the psychological mechanism that regulates the level of the focal η_j. This is however unrealistic and idealistic and therefore a more convincing hypothesis signifies that the proposed model reproduces the observed covariance matrix closely:

$$H_{02}: \text{RMSEA} < .05$$
$$H_{a2}: \text{RMSEA} > .05$$

The above hypothesis corresponds to the position that the structural model provides an approximate description of the psychological mechanism that regulates the levels of the focal η_j.

In addition to the overall fit hypotheses, the effects between the latent variables in the model can be tested if the model fits the data reasonably well. The overarching substantive research hypothesis was dissected into four more detailed, specific path-specific research hypotheses. These four hypotheses translate into the path specific statistical hypotheses that follow:

Hypothesis 2: Group Emotional Intelligence Norms positively affect Collective Beliefs.

$$H_{03}: \beta_{21} = 0$$
$$H_{a3}: \beta_{21} > 0$$

Hypothesis 3: Group Member Emotional Intelligence positively affects Group Emotional Intelligence Norms.

$$H_{04}: \beta_{13} = 0$$
$$H_{a4}: \beta_{13} > 0$$

Hypothesis 4: Collective beliefs positively affect Group Member Emotional Intelligence.

$$H_{05}: \beta_{32} = 0$$
$$H_{a5}: \beta_{32} > 0$$

Hypothesis 5: Resonant Leadership positively affects Group Emotional Intelligence Norms.

$$H_{06}: \gamma_{11} = 0$$
$$H_{a6}: \gamma_{11} > 0$$

3.5   Measuring Instruments

The test battery comprised four scales: the Resonant Leadership Scale, Group Member Emotional Intelligence Scale, Emotionally Competent Group Norm Scale, and the Collective Beliefs Scale (See Appendix 2). A brief overview of each scale is provided below. Since all four of the scales were either adapted or developed by the researcher, each scale was psychometrically analysed as part of this study. Individual items were used as indicators to perform confirmatory factor analysis (CFA) on the separate scales, while parcels, representing scale sub-dimensions were created to test the conceptual measurement and structural models. The psychometric results are reported and discussed in Chapter 4.

3.5.1   Resonant Leadership Scale

Cummings et al. (2010) developed a 12 item Resonant Leadership Scale which was adapted by Bawafaa (2014). These Resonant Leadership scales however only gave an overall Resonant Leadership score. For the purpose of this study, a new Resonant Leadership Scale' was developed in order to measure the four dimensions of Resonant Leadership which include vision (6 items), coaching (4 items), affiliative (6 items), and democratic (5 items). The items were developed based on the theoretical foundation and definitions of these dimensions. The Resonant Leadership Scale consists of 21 items marked on a 5-point Likert scale assessing a leader's standing on the four Resonant Leadership dimensions as rated by an observer. For the purpose of this study, the observer was an individual who has worked with the leader in a group setting.

Sample items for the vision dimension include: "my leader communicates his/her vision to the group" and "my leader helps me understand how I contribute to achieving the groups' shared vision". Sample items for the affiliative dimension includes "my leader acknowledges the feelings and views of all group members", and "my leader strengthens connections between individuals and groups".

3.5.2 Group Member Emotional Intelligence Scale

To measure the group members' own emotional intelligence levels, a Group Member Emotional Intelligence Scale was created for this study. The theoretical foundation of the Group Member Emotional Intelligence Scale is rooted in Goleman's emotional intelligence research indicating that individual emotional intelligence comprises four dimensions; self-awareness (4 items), self-management (5 items), social awareness (6 items) and relationship management (6 items). The Group Member Emotional Intelligence Scale is a self-reported measure, aiming to measure emotional intelligence of individuals in groups. This Group Member Emotional Intelligence Scale is marked on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The items were developed based on the theoretical foundation and definitions of Goleman's four dimensions.

Sample items for the self-awareness dimension includes: "our group members are aware of their own feelings", and "our group members are aware of how their actions affects others". Sample items for the social awareness dimension includes: "our group members understand other people's feelings, emotions and needs" and "our group members show empathy toward others".

3.5.3 Emotionally Competent Group Norm Scale

The Emotionally Competent Group Norm (ECGN) Scale used in Stubbs' study (2005) was adapted to be used within this study. The scale was adapted by deleting repeated items (measuring the same sub-dimension), by eliminating negatively loaded items and reframing them to load positively on the ECGN Scale, and by shortening the items i.e. from "Members of our group strive to be aware of the cares and concerns of other members" to "We try to understand each other's cares and concerns.".

The ECGN Scale was originally developed and tested by Druskat, Wolff, Koman and Messer (2003, as cited in Hamme, 2003) and thereafter refined and validated by Hamme (2003). In Stubbs' (2005) study, confirmatory factor analysis was performed to validate the scales used to assess the emotional intelligent group norms as refined and validated by Hamme (2003). Within the Stubbs (2005) study, team members self-rated their team's behaviour according to nine ECGN's. According to their theoretical framework (see Figure 2.2 in Chapter 2), each of the nine group norms (referred to by Stubbs as competencies) is linked to a specific higher order cluster (referred to by Stubbs as the individual level norms; group level norms; and cross-boundary level norms). Evaluation of the scale factor structure (as implied by the theoretical framework) indicated reasonable results for each cluster. All three of the

levels/clusters showed good fit; NFI and RFI indices close to 1.0 and RMSEA below .10. Cronbach's alpha internal consistency reliabilities for all scales mostly showed acceptable reliabilities of alphas close to or above 0.70 (Stubbs, 2005).

Similar to the ECGN Scale, the current study also made use of team member participants to self-rate their team's behaviour according to the nine Group Emotional Intelligence Norms as discussed in Chapter 2. The ECGN Scale generates a measure of the group's standing on the nine group norms: understand team members, address unacceptable behaviour, demonstrate caring, review the team, support expressions, build optimism, proactive problem-solving, understand team context, and build external relationships. These norms were not clustered together as in Stubbs' study. Overall, the scale consisted of 42 items representing the nine group norms, which are marked on a 5-point Likert scale.

Sample items for the caring orientation dimension includes: "every member in this group is treated with respect", and "we express appreciation for group member effort". Sample items for the proactive problem-solving dimension includes "we try to anticipate potential difficulties before they occur, and "we act proactively to prevent problems from occurring".

3.5.4 Collective Beliefs Scale

Lastly, the Collective Beliefs Scale was developed based on the theoretical foundation and definitions of the three Collective Belief's dimensions, as discussed in Chapter 2. The Collective Beliefs Scale consists of 13 items measuring the three Collective Beliefs as identified by Druskat and Wolff (2001): trust (3 items), group efficacy (4 items) and group identity (6 items). These three Collective Beliefs were measured by a member of the group on a 5-point Likert scale.

A sample item for the trust dimension include "we fulfil our obligations"; for the group identity dimension " we feel included and attached to the group"; and for the group efficacy dimension includes" we can be effective as a group".

3.6 Sampling

Sampling is aimed at selecting a small sub-group from the target population that is considered to represent the target population (Durrheim, 2011). The target population refers to the entire group of individuals or objects of interest, in generalising the conclusion of the research initiating question. The methodological ideal is to include the whole target population into the study. It is, however, often not feasible to obtain measurements from every subject in the target population; therefore, the target population needs to be operationalised into a sampling

population. The sampling population refers to the group of individuals or object of interest, sharing similar characteristics to the target population, and from which inferences can be drawn about the target population. A sampling gap refers to the difference between the target population and the sampling population. The size of the sampling gap, together with the procedure used to draw the sample from the sampling population (see next section), determines the representativeness of the sample, and as such, the generalisability of the sample statistics (Hair et al., 2012).

The target population for the current study was all working groups (unit of analysis) within South Africa, comprising a group leader and two or more group members (up until a maximum of 20); whereas the sampling population included all groups that were *accessible* to the researcher via her personal networks from various social media platforms. Because the whole target population could not be included into the study, a sampling gap may have occurred. Moreover, as explained in more detail in the next section, the researcher used a non-probability sampling procedure, which together with the sampling gap has implications for the representativeness of the sample.

A unique challenge in this study concerned the level of analysis. Since this study comprised an enquiry about group-level emotional intelligence, the ideal would have been to obtain group-level scores of emotional intelligence based on the aggregate of the individual members' ratings (unit of observation) that comprise each team (unit of analysis). This implies that the researcher would have had to sample at least 250 or more groups and obtained responses from two or more members of each group. However, given practical constraints, and accessibility of participants, this approach was not possible. It was consequently decided that each individual answering the survey would be seen as a representative of their total group. The current study therefore made use of individuals who measured their own level of emotional intelligence, their group leader's leadership dimensions as well as their group's norms and Collective Beliefs. This is acknowledged as a limitation in the study since it is questionable whether a single individual member is able to provide an accurate, objective and unbiased account of their team's norms, the leader's behaviour, as well as their own emotional intelligence.

3.6.1   Sampling method

Two types of sampling procedures are indicated: *probability* (i.e. random, stratified, cluster and systematic sampling) and *non-probability sampling* (quota, judgement, snowball, and convenience sampling) procedures. During probability sampling, each element in the sampling

population has a known, but not necessarily equal, probability of being selected into the sample (Babbie & Mouton, 2001). Inferential statistics can also only be utilised when using probability sampling. On the other hand, the probability for each element of the sampling population to be selected is unknown during non-probability sampling.

The sampling procedure that was implemented within this study, is non-probability sampling. Non-probability sampling procedures are used when probability sampling is inappropriate or impossible, and when the probability of selection of participants is unknown (Hair et al, 2012). It is possible to distinguish between four different types of non-probability sampling: convenience (or accidental) sample, snowball sampling, judgement (or purposive) sample, as well as quota sample.

The non-probability sampling procedure used for this study was convenience sampling. This refers to a sampling procedure that makes use of and includes population elements that happen to be available or in proximity of the researcher (Babbie & Mouton, 2001). This procedure, however, does not come without its drawbacks; due to the fact that the sample is not chosen randomly, factors unknown to the researcher may predispose the sample to sampling bias. The limitation of this procedure was therefore acknowledged when making inferences during the analysis and interpretation of the research results.

An online survey was developed on *Checkbox,* Stellenbosch University's *SunSurvey* online system. This survey was disseminated on the social medial online platforms LinkedIn, Facebook and Instagram. These platforms allowed a variety of individuals from a variety of organisations and industries to select themselves to be part of the sample.

A possible limitation to this procedure may be the occurrence of self-selection bias. This may occur as social media users have freedom of choice whether they want to participate in the study. This bias must therefore be considered when making inferences and generalising conclusions to the target population.

3.6.2 Size and characteristics

Diamantopoulos and Siguaw (2000) emphasised the crucial importance of a sufficient sample size. Although there is no common agreement regarding the general guidelines to calculate the sample size, there is agreement over the fact that it is important to ensure that the sample is sufficiently large to ensure adequate statistical power. Due to lack of statistical power, small samples could potentially mask the effects of specification errors, leading to acceptance of poor models. On the other hand, extremely large samples with excessively high statistical

power can become so sensitive that they magnify the effects of small specification errors, making it practically impossible to obtain close model fit.

Table 3.1 summarises four suggested sample sizes appropriate to the current study based on the statistical power (.8), alpha value (0.05), degrees of freedom (166), number of constructs (4) and free parameters (44) in the model.

Table 3.1

The four suggested sample sizes

Scholar or Approach	Proposed sample size
Preacher and Coffman	95 - 126
Bentler an Chow	220 - 440

Based on the above table's suggested sample sizes, the study aimed to gain a sample size between 200 and 400 in order to obtain the best results with adequate credibility for the study. A sample size of 321 individuals was obtained; however, only 314 responses were suitable for use in the study due to their answers on the informed consent form. No demographic information was asked due to a high level of sensitivity towards gender and race-based variables at the time of the research. The composition of the sample group can therefore not be described which limits the possibility of making valid assumptions about the representativeness of the group.

3.6.3   Research ethics

It is of utmost importance to ensure the dignity, rights, safety and well-being of all research participants are maintained throughout the study (Babbie & Mouton, 2001). Accordingly, Stellenbosch University's Research Ethics Committee states the following (Horn et.al., 2015):

> *At SU all research involving interaction with or observation of human subjects, or*
> *information linked to human subjects, or research involving groups of individuals,*
> *or organisations must go through a process of ethical screening and clearance.*
> *Investigators are responsible for ensuring that they obtain ethics approval for their*
> *research where applicable (p. 22).*

The research project was required to go through an ethical screening process as the focus of the current study included individuals and groups. Ethical clearance was therefore obtained

from the Research Ethics Committee (Humanities) and Department Ethics Screening Committee prior to data collection (see Appendix 1 for the Research Ethics Clearance letter).

Respondents were directed toward an informed consent form as they clicked on the survey link provided. The informed consent form assured the respondents that their identities would remain anonymous and that strict confidentiality would be applied toward the safekeeping of the research data. It explicitly asked the respondents if they were willing to participate in the study, and it also explained the purpose of the study, time constraints, potential benefits (including details about a lucky draw), and their rights as participants. This information enabled the participants to make an informed decision of whether they wanted to participate in the study or not.

3.7   Statistical Analysis

The following section describes the data analysis techniques that were used to assess the research hypotheses. First the missing values were investigated in order to identify an appropriate method to remedy the missing values. After the remedy had been implemented, item analysis was conducted in order to identify problematic items and to evaluate the overall reliability of the instruments. Thereafter, confirmatory factor analysis was conducted on each of the multidimensional scales in order to evaluate the hypothesised factor structure, and where needed, exploratory factor analysis was employed to evaluate alternative measurement models. Finally, the psychological mechanism conceptualised in this study to explain team emotional intelligence was evaluated with structural equation modelling. Both covariance and partial least squares structural equation modelling was used.

3.7.1   Missing values

Respondents may accidentally or purposefully choose to leave out an item/s in the questionnaire, or the respondent may choose to withdraw from the study thus leading to missing data. Dong and Peng (2013) indicated that missing data can be seen more as a rule than an exception. Where missing data exists, it is important to consider the magnitude and the specific nature of the missing data. Investigation of the missing data can convey important information about the representativeness of the samples and response patterns of participants. Ignoring and not dealing appropriately with the missing data can influence the quality of statistical inferences (Dong & Peng, 2013). Schafer (1999, as cited in Dong & Peng, 2013) indicated that where there is 5% or less missing data, the effect of the missing data is

inconsequential; with Bennett (2001, as cited in Dong & Peng, 2013) stating that where missing data exceeds 10% the statistical analysis is likely to be biased.

There are various different methods that can be utilised to remedy missing data, including the following: listwise/casewise deletion, pairwise deletion, indicator variable adjustment, mean substitution and imputation by matching, (Acock, 2005). The method choice depends on the number of missing values in the data set, the nature of missing values, as well as whether the data reflects a multivariate normal distribution.

This study used a combination between casewise deletion and missing data imputation matching to account for the missing data. With casewise deletion, the researcher removed cases with large amounts of missing data or clear signs of careless or inconsistent response patterns (Meade & Craig, 2012). During the use of the imputation by matching, missing values are replaced with values from other response cases that follow a similar trend. Missing values were imputed by specifying items that had no missing values, as matching variables within the dataset. More information about the specifics of the missing data within the sample size can be seen in Section 4.1.2.

3.7.2 Item analysis of individual scales

Item analysis attempts to identify items to which the response is not predominantly determined by the latent variable in question. It aims to detect unreliable, invalid and biased items, otherwise known a 'poor items' (Hair et al., 2014). Item analysis also aims to remedy poor items or eliminate them if they cannot be remedied. A poor item can be defined as an item that is insensitive; thus, people who differ on the latent variable do not respond differently to them when completing the instrument. The item therefore fails to differentiate between individuals with various positions on the latent variable, eta (η). Secondly, a poor item does not act in unison with items measuring the same latent variable. An individual responding to items measuring the same construct should get similar results most of the time; therefore, if their results on items measuring the same construct are not in sync, the item is said to be poor (Hair et al., 2012).

In addition to identifying problematic items, item analysis allows the researcher to examine the overall quality of an instrument in terms of its internal consistency (reliability). An instrument or scale is said to be internally consistent when the inter-item correlations are high, indicating that the items are measuring the same underlying construct (assuming the scale is unidimensional).

Item analyses were performed on each scale separately. Statistica was used to measure the internal consistency of the participants' responses to measurement items. During the reliability analysis, the *inter-item correlations* as well as the *alpha if item is deleted* were used to determine whether the items should be flagged as potentially poor items or not. Babbie and Mouton (2001) indicated that a Cronbach's alpha (internal consistency) value of above 0.70 indicates acceptable reliability. All the scales made up of sets of items indicated Cronbach's alpha values between 0.74-0.93, and inter-item correlation scores ranged from 0.46 - 0.83, showing acceptable reliability; therefore, no items were removed. These results are further discussed in Section 4.2.

3.7.3   Factor analysis

In addition to item analysis, factor analysis was performed. Factor analysis can be defined as a data analytic technique that is used to identify a smaller number of latent variables that are thought to explain the covariance (correlation) of a larger number of manifest variables (Loehlin & Beaujean, 2017). Factor analysis reveals the latent dimensions underlying the bigger set of manifest variables; it reduces a large set of manifest variables to a smaller set of latent variables called factors; and it also shows what observed variables have in common (Loehlin & Beaujean, 2017; Williams, et.al, 2012). The two main types of factor analysis are confirmatory factor analysis (CFA) and exploratory factor analysis (EFA).

All the scales were theoretically defined as multi-dimensional, and therefore CFA was used to test the specified factor structure (dimensionality) of the various scales. The instances where CFA results proved to be disconcerting, EFA was performed with the purpose of bringing clarity to the factor structures of the instruments.

3.7.3.1 *Confirmatory factor analysis*

Confirmatory factor analysis was conducted on all the measurement instruments used in the study to supplement the item analysis results. CFA is a form of structural equation modelling (SEM) that specifically deals with the confirmation and rejection of the measurement model by looking at the relationship between the observed measures/indicators and the latent variables/factors. More specifically, CFA assesses whether the indicator variables successfully measure and operationalise the latent construct that it set out to represent (Loehlin & Beaujean, 2017). In other words, CFA tests the construct validity of the measurement instruments. In addition, the factor loadings produced by CFA can be used in

conjunction with the item analysis statistics to inform decisions about the appropriateness of specific items.

Maximum likelihood estimation is seen as the most accurate method when using continuous and normally distributed data; however, when the key assumptions of maximum likelihood (continuous data, large sample sizes and normal distribution) are not met (which is often the case in organisation research), the interpretation of the fit indices may become difficult (Moore, 2012; Nye & Drasgow, 2010). One of the most frequently violated assumptions include non-normally distributed responses.

In organisational research questionnaires, Likert scales are often used. When completing Likert-scale questionnaires few individuals choose the highest responses which results in items being significantly positively skewed (Mindrila, 2010; Nye & Drasgow, 2010). In a comparative study between maximum likelihood and diagonally weighted least square (which is discussed below), Mindrila's (2010, pg. 63) research indicates "Maximum likelihood artificially inflates model fit, where diagonally weighted least square (DWLS) computes robust Chi-square and subsequent indices, by correcting for non-normality". Mindrila's (2010) research furthermore indicates that the DWLS method gives more accurate parameter estimates and a more robust model fit to variable type and non-normality.

As an alternative to maximum likelihood estimation, DWLS estimation procedures can be used when analysing ordered categorical and non-normal data (Nye & Drasgow, 2010). It is however important to take into account that DWLS methods are heavily influenced by their sample size. These models require a large sample size (above 250), otherwise they are likely to reject the true population models (Nye & Drasgow, 2010). The current research study, having a large sample size (N=314) and using Likert-scales, made use of DWLS.

R Lavaan package was used to conduct the CFA. The covariance matrix was analysed in order to assess the fit of the measurement model for each of the measurement instruments. Goodness-of-fit statistics address the extent to which the model-implied relationships are equivalent to the relationships observed in the sample data. The fit statistics analysed in this study include: comparative fit index (CFI), root mean square of approximation (RMSEA), goodness of fit (GFI), adjusted goodness of fit (AGFI), and the chi-square.

For the CFI (which is an incremental fit index) values larger than .9 indicate acceptable fit, and values larger than .95 indicate good fit (Hair et al., 2012). The RMSEA (an absolute fit measure) shows good fit when RMSEA values are smaller than .05, and acceptable fit when RMSEA values are smaller than .08. RMSEA values between .08 and .1 are considered mediocre and values greater than .1 therefore are not considered good fit (Browne & Cudeck,

1993; Schermelleh-Engel et al., 2003; Loehlin & Beaujean, 2017). Moreover, according to conventional rules, the GFI (also an absolute fit measure) and AGFI values should exceed 0.9 to be indicative of satisfactory fit (Hair et al., 2012; Nye & Drasgow, 2010). Finally, the p-values of the chi-square test should be statistically non-significant (p > 0.05) – meaning that the null hypothesis cannot be rejected (Loehlin & Beaujean, 2017). This is desired when testing models since the null hypothesis states that there are no discrepancies between the theoretical implied covariance matrix and the observed covariance matrix in the population, whereas the alternative hypothesis holds that they are different (i.e. poor fit). To add to the above fit statistics, another important part of CFA is to assess the path estimates, also called the factor loadings. Factor loadings are usually statistically significant when they are above 0.5.

3.7.3.2 *Exploratory factor analysis*

CFA analysis requires researchers to hypothesise, in advance, the number of factors within a model, whether or not these factors are correlated, and which items/measures load onto and reflect which factors. However, during exploratory factor analysis (EFA), researchers are not required to have any specific hypotheses about how many factors there will emerge, and what items or variables these factors will comprise as EFA aims to identify the factors based on data and patterns that emerge within data. EFA is therefore more explorative in nature (Hair et al., 2012; Loehlin & Beaujean, 2017).

To add to the above, the objectives of EFAs include detecting or assessing the unidimensionality of theoretical constructs, examining the structure or relationships between variables, as well as evaluating the construct validity of scales, tests or instruments (Williams, Brown & Onsman, 2012). EFA does not aim to impose a model on the data, rather EFA tries to identify a model that best fits the data (Loehlin & Beaujean, 2017). EFA makes use of the data input to determine to what extent the items measure the factors which underlie the construct. EFA therefore supports the researcher in exploring relationships in the data, and reporting on the relationships that were found, as well as determining whether the items linked to certain subscales load onto the factors they claim to.

In summary, CFA follows a top-down strategy where the researcher develops conclusions based on theory, and EFA follows an inductive or bottoms-up approach where conclusions are based on specific observations (Hair et al., 2012; Loehlin & Beaujean, 2017). The current study only performed EFA where the CFA results indicated poor model fit, or where convergence could not be reached. In the current study this occurred on the Emotionally

Competent Group Norm Scale and the Group Member Emotional Intelligence Scale. EFA was performed on these scales in order to further explore their underlying factor structure. These results are discussed in Section 4.2.2.3 and Section 4.2.3.3.

3.7.4   Evaluating the overall model

The foregoing section explained how the reliability and validity of the individual scales were analysed. The next section explains how the overall model, consisting of multiple latent variables and indicators, was evaluated. The overall model was evaluated in two sequential phases, with phase 2 being conditional on the results of phase 1. Phase 1 involved an inspection of the measurement model, whereas in phase 2, the structural model representing the relationship between the latent variables was evaluated. Under ideal circumstances the overall measurement (or outer model) would have been tested by means of CFA; however, since the CFA results for two of the multi-dimensional scales (to be discussed in Chapter 4) indicated serious specification errors (presumably due to overly complex measures), it seemed senseless to subject the overall model to CFA. Instead, the study relied on various other criteria provided by partial least squares structural equation modelling (PLS-SEM) to evaluate the overall measurement model. Since the PLS-SEM results indicated acceptable measurement properties, it provided support for proceeding with phase 2 (i.e. evaluation of the structural model). The following section explains the differences between PLS-SEM and covariance-based structural equation modelling (CB-SEM) in more detail, and the specific considerations that guided the researcher in the evaluation of the overall model. Note that since the current study used PLS-SEM in conjunction with CB-SEM, the measurement model is also referred to as the "outer model" and the structural model as the "inner model".

3.7.4.1   Structural equation modelling

Structural equation modelling (SEM) can be defined as "a comprehensive approach to testing hypotheses about relations amongst observed and latent variables" (Hoyle, 1995, p. 4). SEM therefore allows the researcher to examine sets of relationships that are between independent and dependent variables (Hair et al., 2010). SEM is a second generational statistical technique used for testing and analysing multivariate data as well as the empirical testing of theoretical models (Hair, et.al., 2014). According to Hair et al. (2014, p. 3-4), SEM "enable researchers to incorporate unobservable variables measured indirectly by indicator variables. They also facilitate accounting for measurement error in observed variables". There are two types of SEM approaches that can be used:

- Covariance-based structural equation modelling (CB-SEM), and
- Partial least squares structural equation modelling (PLS-SEM) also called PLS path modelling

According to Hair et al. (2014), CB-SEM is one of the more widely used SEM approaches. Its primary use is to confirm or reject theories/structural models by determining how well the proposed theoretical model can estimate the covariance matrix for a sample data set. CB-SEM can measure the overall fit of the measurement model with various fit indices focusing on the discrepancy between the model-implied (theoretical) covariance matrix and the observed covariance matrix. PLS, on the other hand, is primarily used to develop theories through the use of exploratory research. PLS aims to maximise variance in specific target variables. Hair et al. (2014) argued that PLS-SEM should be used in less developed theories where theory does not supply unlimited explanations for the dependent phenomena, especially when the researcher aims to predict and explain the target constructs and not confirm a ready established theory (Hair et al., 2014). The purpose of the current study was to maximise variance in the target variable: Group Emotional Intelligence Norms and Collective Beliefs; and more specifically to explore the impact of Resonant Leadership in the model that controls for members' own emotional intelligence. A comparison of CB-SEM and PLS-SEM is in Table 3.2.

Table 3.2

Comparison between PLS and CB-SEM approaches

Criteria	PLS-SEM	CB-SEM
Objective Approach Assumption	Prediction-oriented Variance-based Predictor specification (non-parametric)	Parameter-oriented Covariance-based Typically, multivariate normal distribution and independent observations (parametric)
Parameter estimates	Consistent as indicators and sample size increase (i.e., consistency at large)	Consistent
Latent variable scores	Explicitly estimated	Indeterminate
Epistemic relationship between and LVs and its measures	Can be modelled in either formative or reflective mode	Typically, only with reflective indicators. However, the formative mode is also supported.

Implications	Optimal for prediction accuracy	Optimal for parameter accuracy
Model complexity	Large complexity (e.g., 100 constructs and 1,000 indicators)	Small to moderate complexity (e.g., less than 100 indicators)
Sample size	Power analysis based on the portion of the model with the largest number of predictors. Minimal recommendation ranges from 30 - 100 cases.	Ideally based on power analysis of specific model – minimal recommendations range from 200 to 800.
Type of optimisation Significance tests	Locally iterative Only by means of simulations; restricted validity	Globally iterative Available
Availability of global Goodness of fit	Are currently being developed and discussed	Established Goodness of fit metrics available

From "Structural Equation Modeling in Information Systems Research Using Partial Least Squares" by N. Urbach & F. Ahlemann, 2010, *Journal of Information Technology Theory and Application, 11*(2), p. 13.

In this study the researcher's original plan was to use CB-SEM to evaluate the overall measurement and structural model. However, the CFA results (which is a covariance-based technique) for two of the individual scales (Group Member Emotional Intelligence and Group Emotional Intelligence Norms) proved to be problematic with respect to the operationalisation of the constructs, both which were theoretically defined as multi-dimensional constructs. This is not to say that these measures are not valid and reliable, but it does create some uncertainty regarding the hypothesised factor structure of the scales. On a practical level, when the CFA results for any of the individual scales is problematic (in terms of poor fit or admissible results), the problem replicates itself when evaluating the overall measurement and structural model using CB-SEM. A decision therefore had to be taken to either modify the factor structure (and aim to continue with CB-SEM), or to use PLS SEM as an alternative method, which is not restricted by covariance-based fit. Since the theoretical rationale for maintaining the existing factor structure was strong, and the internal consistency of the scales high, it was decided to use PLS-SEM. A further motivation for using PLS was that the study was focused more on assessing the predictive capacity of the Resonant Leadership Scale (in terms of its effect on group norms) then on confirming a psychological theory. Note that while the focus of the analysis shifted to PLS based techniques, the study does nonetheless also present the CB-

SEM results for the structural model with regard to the fit (see Chapter 4). The next section discusses the PLS approach in more detail as it applies to the current study and describes the modifications that had to be made to the model due to limitations posed by PLS.

3.7.4.2 *Partial least square (PLS)*

The PLS-SEM approach aims to maximise the variance showed in the dependent variable which is explained by the independent variable. PLS results are calculated by firstly assessing the measurement (outer) model and thereafter the structural (inner) model.

The outer (measurement) model is used to evaluate the reliability and validity of the measures used to operationalise the constructs. The measurement model is assessed by examining the relationships between the latent variables and their reflective indicators. This involves examining the correlations between associated indicators, the factor loadings, as well as the variance accounted for by the reflective constructs (Henseler et al., 2009). During the assessment of the measurement (outer) model the following statistics were considered: alpha coefficient, composite reliability, average variance extracted values, discriminant validity as well as evaluation of the outer loadings.

Thereafter, the inner (structural) model was assessed by examining the specified linkages between the proposed latent variables (Henseler, Ringle & Sinkovics, 2009). During the assessment of the structural (inner) model, the following statistics were considered: multicollinearity through looking at the variance inflation factors, path coefficients of the hypothesized paths, and the predictive accuracy of the model was evaluated through the coefficient of determination (R^2). The results of the analyses are presented and discussed in Chapter 4.

PLS cannot be used to assess fit in the way it is understood in SEM – therefore hypothesis 1 could not be evaluated with PLS. PLS-SEM can also not capture and calculate results where structural models have feedback loops. Hence, the structural model of this study had to be modified in order to calculate the required results through PLS. The modified structural model is indicated in Figure 3.1 below.

Figure 3.1

Modified structural model
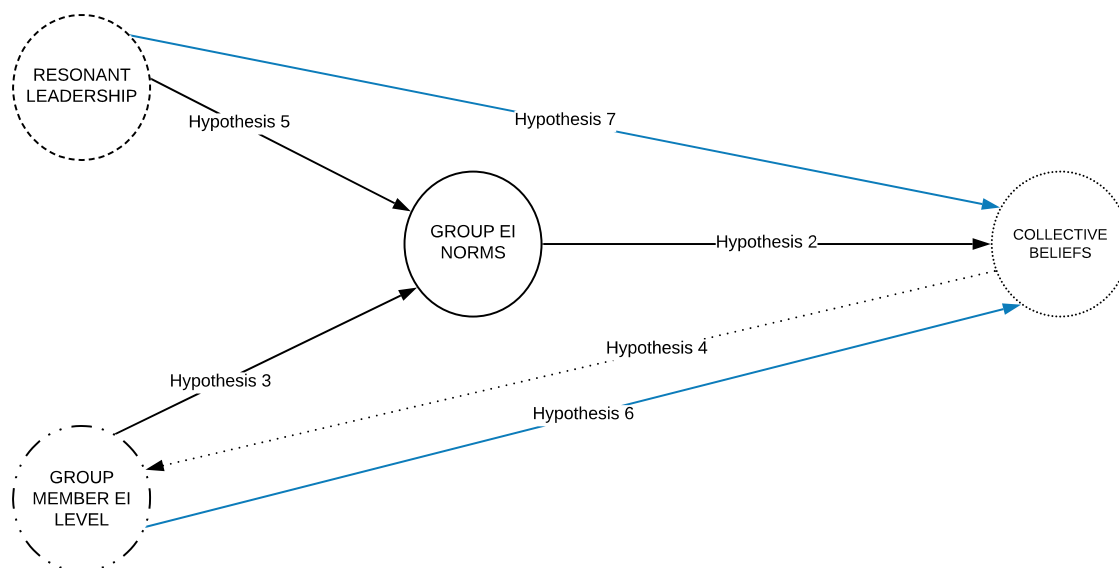
The modified structural model indicated above (Figure 3.1) differs from the original structural model displayed in Figure 2.5. The most important modification was the elimination of the dotted line indicating hypothesis 4. As mentioned above, this modification had to happen because PLS-SEM could not capture and calculate results from a model with a feedback loop. Following the decision to revert to PLS-SEM, along with its focus on the predictive ability of the model, it was also decided to add two additional pathways in the model: Group Member Emotional Intelligence to Collective Beliefs (hypothesis 6) and Resonant Leadership to Collective Beliefs (hypothesis 7). Note that the model was revised before any analyses were performed with regards to the hypothesised relationships between the latent variables. The theoretical underpinning of the added pathways were investigated, and the theoretical arguments for these paths can be seen below.

Hypothesis 6 (modified model): Group Member Emotional Intelligence positively affects Collective Beliefs.

Due to the fact that trust is dynamic in nature, the levels of trust within the group is affected by interactions between members. Prati et al. (2003) argues that these interactions require members to be aware of their responses to others and how others perceive their behaviour. As such, these group members require high levels of emotional intelligence in order to represent themselves in a trustworthy way so that trust within the group can be established. This is confirmed by a study conducted by Rezvani et al. (2018) indicating that the emotional

intelligence of individual members has a positive impact on trust and performance within the team on both an individual and group level.

Black's (2019) study found that team cohesion, and as such the levels of group identity, was highest within groups where members displayed high levels of emotional intelligence. In addition, Black's (2019) study also indicated that self-efficacy acted as a mediating variable between the levels of emotional intelligence of the members and team cohesion. These research findings therefore supported the current study's hypothesis stating that higher levels of emotional intelligence of group members promotes group-efficacy and group identity.

Hypothesis 7 (modified model): Resonant Leadership positively affects Collective Beliefs.

Shared mental models can be described as conscious beliefs and implicit assumptions, are central within the group (Yukl, 2013). Shared mental models as described by Yukl are therefore similar to the Collective Beliefs described in this study, as both are centred around group members adopting the same beliefs or ways of thinking. According to Fung (2018) these shared mental models are natural outcomes when members within a team work together over a period of time. Fung's (2018) study indicated that the role of a leader influences the development of these shared mental models within groups or teams thought a mediating variable called 'team building and participation'. Team building and participation is described as a process whereby a group of individuals have the ability to independently work along with one another toward a common goal or having a common sense of purpose (Fung 2018; PMI, 2008). Dionne (2010) further state that leaders influence shared mental models within teams through the Leader-Member-Exchange theory.

3.8   Conclusion

Chapter 3 captured the research methodology of the study; the hypotheses as well as the research methodologies used to test the hypotheses were discussed. The research design, sampling methods and size, statistical analyses techniques as well as well as the results of these analyses were discussed. In addition, the measurement instruments were discussed. The following chapter discusses the psychometric properties of the measurement instruments used and presents the research results concerning the hypotheses formulated in Chapter 2.

CHAPTER 4: RESEARCH RESULTS

4.1 Introduction

Chapter 3 outlined the data analytic techniques used in this study. The results of these techniques are discussed in this chapter, Chapter 4. The data capturing process is explained, followed by a discussion of the missing values. Thereafter the descriptive statistics and item analysis for the individual scales are discussed with respect to the Cronbach's alpha coefficients, *item total correlation* and *alpha if deleted* scores. This is followed by the confirmatory factor analysis (CFA) results for the scales, and a discussion of the goodness of fit (GFI) statistics. Exploratory factor analysis (EFA) results are also reported for the scales for which alternative factor structures were investigated.

Following the discussion of the individual scales, Chapter 4 reports on the overall measurement (outer) as well as the structural (inner) model by making use of partial least square (PLS) results. The following results are reported on when evaluating the measurement model: alpha coefficient, composite reliability, average variance extracted (AVE) values, discriminant validity and outer loadings. This chapter then presents and discusses the structural model results which include multicollinearity, path coefficients and R square results that were attained in order to test and report on the hypotheses formulated in Chapters 2 and 3.

4.1.1 Data capturing

The raw data was captured in an excel spreadsheet which was imported into a variety of statistic software programs. To calculate the Cronbach's alpha, item total correlation and alpha if deleted values for the descriptive statistics, Statistica 13.5, were used. The CFA, EFA and covariance-based structural equation modelling (CB-SEM) were calculated through the R Lavaan package. The partial least square structural equation modelling (PLS-SEM) results were calculated by using SmartPLS 3.2.9.

4.1.2 Missing values

A sample size of 321 respondents attempted to complete the survey consisting of 97 items. Three of the respondents had more than 10% missing values, which led to a casewise deletion of the respondents' responses. In addition, four respondents who fully completed the survey indicated that they either had not "read or understood the information within the consent form and voluntary consent to participate in the research under the stipulated conditions" or that

they did not "agree that the information provided may be used for future research". These four respondents' data was also subject to casewise deletion in order to respect their right as a research participant.

After casewise deletion had been implemented, the remaining dataset consisted of 314 cases, with 97 items per survey, and only 95 values were missing out of a total 31137 possible item responses. Resultantly, the dataset was only missing 0.3% data points. Missing data imputation was used to deal with the missing data. The imputation by matching procedure was successful as no missing data points were evident in the dataset after the execution of the procedure.

4.2   Item and Factor Analysis of Individual Scales

The literature as described in Chapter 2 was used to identify and create indicator variables to represent the latent variables. The success with which the indicator variables represent the latent variables, comprising the structural model in the study, was empirically evaluated through item analysis, CFA, and EFA. These empirical evaluations are discussed in detail in Sections 4.2.1 – 4.2.4.

The test battery comprises four scales, namely the Resonant Leadership Scale, Group Member Emotional Intelligence Scale, Group Emotional Intelligence Norms Scale, and the Collective Beliefs Scale.

4.2.1   Resonant Leadership Scale

The Resonant Leadership Scale that was used measures the four dimensions of Resonant Leadership as discussed in Chapter 2 – vision (6 items), coaching (4 items), affiliative (6 items), and democratic (5 items). Overall the Resonant Leadership Scale consists of 21 items and is marked on a 5-point Likert scale. The raters, who are group members, rated their respective leaders' standing on Resonant Leadership as an observer.

4.2.1.1   *Descriptive statistics and item analysis*

Item analysis was conducted to examine the psychometric properties of the constructs indicated in the study. Statistica was used to indicate whether the indicators of the latent variables reflect acceptable reliability levels. As previously mentioned, item analysis assesses the homogeneity of subscales and also assists in the identification of poor items. The

descriptive statistics and item analysis results for the subscales, Vision, Coaching, Affiliative and Democratic are presented in Tables 4.1 and 4.2.

According to Nunnally and Bernstein (1994), Cronbach's alpha values show stronger correlation when the values are closer to 1. The suggested critical cut-off score for Cronbach's alpha is 0.70. As seen in Table 4.1, the Cronbach's alpha values of the subscales exceed the suggested cut-off score, ranging between 0.86 – 0.93 (vision = 0.92, coaching = 0.86, affiliative = 0.93, and democratic = 0.89), thus demonstrating that between 86% – 93% of the variance in the items is systematic/true score variance and only 7% – 14% is random error variance. Therefore, all items were retained in the data pool.

Table 4.1

The Cronbach's alpha reliability statistics for Resonant Leadership Scale

RL subscales	Number of Items	Cronbach's alpha
Vision	6	0.92
Coaching	4	0.86
Affiliative	6	0.93
Democratic	5	0.89

Note. Resonant Leadership (RL)

To further explore the statistics, the *item total correlation* as well as the *alpha if deleted* statistics for the Resonant Leadership Scale were inspected (see Table 4.2). The *item total correlation* scores which check for inconsistent items all range between 0.65 – 0.82, which is above 0.4; this indicates good internal consistency (Kleeman, 2009). Furthermore, the *alpha if deleted* scores are all below the original Cronbach's alpha value for their corresponding subscales, indicating that the reliability will not improve if any items are deleted. Therefore, all items were retained in the data pool.

Table 4.2

Item statistics for the Resonant Leadership Scale

RL subscale	Variable	Item total correlation	Alpha if deleted
Vision	Item 1	0.75	0.9
	Item 2	0.77	0.9
	Item 3	0.77	0.9
	Item 4	0.77	0.9
	Item 5	0.72	0.91
	Item 6	0.80	0.90
Coaching	Item 1	0.69	0.84
	Item 2	0.75	0.81

	Item 3	0.69	0.83
	Item 4	0.72	0.82
Affiliative	Item 1	0.76	0.92
	Item 2	0.80	0.92
	Item 3	0.79	0.92
	Item 4	0.79	0.92
	Item 5	0.79	0.92
	Item 6	0.82	0.91
Democratic	Item 1	0.73	0.87
	Item 2	0.77	0.86
	Item 3	0.77	0.86
	Item 4	0.75	0.86
	Item 5	0.65	0.88

Note. Resonant Leadership (RL)

4.2.1.2 Confirmatory factor analysis

The items of the Resonant Leadership Scale were subjected to CFA. The Resonant Leadership Scale's four subscales and their relationship with their respective indicators are represented in the measurement model. The measurement model was fitted by regressing the Resonant Leadership Scale's 21 observed variables/indicator variables (items) onto the four latent factors (Vision, Coaching, Affiliative and Democratic). CFA aims to determine whether the Resonant Leadership Scale's subscales have been successfully operationalised.

The CFA results for the Resonant Leadership Scale's measurement model are presented in Table 4.3. The likelihood chi-square statistic was statistically significant which indicates that the null hypothesis of perfect fit for the Resonant Leadership Scale had to be rejected, $\chi^2(183) = 321.762$, $p < 0.001$. However, the CFI of 0.999 fell above the suggested cut-off scores for good fit (CFI > 0.95). The RMSEA value of 0.049 fell below the cut-off for close fit (RMSEA < 0.05). Furthermore, the GFI (0.997) and the adjusted goodness of fit (AGFI) (0.995) statistics fell above the cut-off scores for good fit (GFI/AGFI > 0.9). As a whole, the fit statistics suggest good fit for the Resonant Leadership Scale.

Table 4.3

Goodness of fit statistics for the Resonant Leadership measurement model

RMSEA	GFI	AGFI	CFI	$\chi^2(df)$	p-value (chi-square)
0.049	0.997	0.995	0.999	321.762(183)	0.000

To add to the above fit statistics, the CFA results revealed that the factor loadings were all statistically significant and above 0.5. The factor loadings all ranged from 0.779 and 0.911. The construct reliability for the four subscales of the Resonant Leadership Scale range between 0.89 and 0.93, which indicates good reliability, supporting the conclusion that the measurement model of the Resonant Leadership Scale achieved good model fit.

4.2.2   Group Member Emotional Intelligence Scale

The Group Member Emotional Intelligence Scale was used to measure the individual group members' emotional intelligence levels based on Goleman's four emotional intelligence dimensions: self-awareness (4 items), self-management (5 items), social awareness (6 items) and relationship management (6 items). This scale consists of 21 items and is marked on a 5-point Likert scale. The rater rated their own emotional intelligence levels when answering this scale.

4.2.2.1   Descriptive statistics and item analysis

Item analysis was conducted on the Group Member Emotional Intelligence Scale's subscales. These four subscales include self-awareness, self-management, social awareness, and relationship management. The descriptive statistics and the item analysis scores are presented below in Tables 4.4 and 4.5.

The Cronbach's alpha scores of the subscales range between 0.77 and 0.88 (see Table 4.4). This demonstrates that 77 – 88 % of the variance in the items is systematic/true score variance and only 12 - 23% is due to random error variance. Based on the high reliability scores, it was decided not to remove any item from the Group Member Emotional Intelligence Scale. To support this, Table 4.5 indicates the item total correlation and alpha if deleted statistics.

Table 4.4

The Cronbach's alpha reliability statistics for Group Member Emotional Intelligence Scale

GMEI subscales	Number of items	Cronbach's alpha
Self-awareness	4	0.77
Self management	5	0.82
Social awareness	6	0.87
Relationship management	6	0.88

Note: GMEI (Group Member Emotional Intelligence)

The *item total correlation* scores for the Group Member Emotional Intelligence subscales (see Table 4.5) all range between 0.46 – 0.74, indicating good internal consistency. Comparing the

large Cronbach's alpha values as indicated in Table 4.4 (0.77 – 0.88) with its corresponding *alpha if deleted* values in Table 4.5, it is evident that if any of the items would to be deleted, the alpha value would decrease. Therefore, all the items of the Group Member Emotional Intelligence Scale were retained.

Table 4.5

Item statistics for self-awareness, self-management, social awareness and relationship management

GMEI subscale	Variable	Item total correlation	Alpha if deleted
Self-awareness	Item 1	0.46	0.77
	Item 2	0.62	0.69
	Item 3	0.65	0.67
	Item 4	0.57	0.72
Self-management	Item 1	0.57	0.80
	Item 2	0.63	0.79
	Item 3	0.63	0.78
	Item 4	0.58	0.80
	Item 5	0.68	0.77
Social awareness	Item 1	0.64	0.85
	Item 2	0.70	0.84
	Item 3	0.71	0.84
	Item 4	0.62	0.86
	Item 5	0.66	0.85
	Item 6	0.70	0.84
Relationship management	Item 1	0.63	0.87
	Item 2	0.72	0.86
	Item 3	0.69	0.86
	Item 4	0.63	0.87
	Item 5	0.74	0.85
	Item 6	0.74	0.85

Note: GMEI (Group Member Emotional Intelligence)

4.2.2.2 Confirmatory factor analysis

The confirmatory factor analysis (CFA) test presented an error warning stating that the covariance matrix of latent variables is not positive definite. When such an error warning is displayed the fit statistics would traditionally not be evaluated. This error warning could indicate that the factor structure of the dataset is not true to the model specified due to one or more factors highly correlating with each other.

The RMSEA value of 0.089 indicated mediocre fit (0.08 < RMSEA < 0.1). Taking into account the error warning and the RMSEA results it is safe to conclude that the Group Member

Emotional Intelligence measurement model was not supported by the confirmatory factor analysis. However, it was decided to maintain the original factor structure (all four dimensions) for the subsequent analyses due to the theoretical underpinning of the scale. As such, the subscale scores were entered as item parcel observed variables in the structural model. This decision was also supported by the high internal consistency indicated by the item analysis results.

4.2.2.3 *Exploratory factor analysis*

The CFA results of the Group Member Emotional Intelligence measurement model proved to be disappointing. As a result, it was decided that the factor structure of the instrument should be analysed in order to gain insight into how the model fit could be improved and identified in subsequent CFA analyses. An EFA was therefore performed on the Group Member Emotional Intelligence Scale. Principle component analysis with direct oblimin rotation was used to conduct the EFA.

Analysing the Scree Plot and the Eigen values indicated in Table 4.6 it is apparent that the result of the analysis indicates the extraction of two factors. This two-factor solution accounted for 59.76% of the total variance. Even though a two-factor solution to the Group Member Emotional Intelligence Scale could be considered as an acceptable interpretation of the factor structure within the current sample, this solution was not accepted due to the deeply rooted theory of emotional intelligence indicating that emotional intelligence consists of four dimensions (Day, 2000). No further analysis was therefore performed.

Table 4.6

Eigenvalues of the Group Member Emotional Intelligence Scale

	Eigenvalues (complete responses) extraction: Principal components			
Value	Eigenvalue	% Total variance	Cumulative Eigenvalue	Cumulative %
1	11.10096	52.86171	11.10096	52.86171
2	1.44882	6.89912	12.54978	59.76084

4.2.3 Emotionally Competent Group Norm Scale

The Emotionally Competent Group Norm Scale (ECGN Scale) measures the nine group emotion intelligence norms as discussed in Chapter 2: understand team members, address unacceptable behaviour, demonstrate caring, reviewing the team, support expressions, build

optimism, proactive problem-solving, understand team context, and building external relationships. This scale consists of 42 items marked on a 5-point Likert scale. The raters rated their group's standing on these nine Group Emotional Intelligence Norms.

4.2.3.1 Descriptive statistics and item analysis

An item analysis was conducted on the Emotionally Competent Group Norm (ECGN) subscales. The ECGN Scale consists of nine subscales as explained in Chapter 3. The ECGN Scale's Cronbach's alpha ranges from 0.85 (CONF) – 0.91 (CARO) (see Table 4.7). This demonstrated that 85 – 91% of the variance in the items is systematic/true score variance and only 9 – 15% is due to random error variance. All items within these subscales were therefore retained.

Table 4.7

The Cronbach's alpha reliability statistics for the Emotionally Competent Group Norm Scale

Emotionally competent group norms subscales	Number of items	Cronbach's alpha
Interpersonal understanding (IPU)	4	0.86
Confronting members who break norms (CONF)	4	0.85
Caring orientation (CARO)	5	0.91
Team self-evaluation (TSE)	5	0.84
Creating resources for working on emotions (RES)	5	0.85
Creating and affirmative environment (AFFEN)	4	0.88
Proactive problem-solving (PPS)	5	0.89
Organisational and intergroup awareness (OIA)	5	0.87
Building external relationships (BER)	5	0.89

The *item total correlations* for all the ECGN subscales (See Table 4.7) all range between 0.84 – 0.91 indicating good internal consistency. The alpha if deleted values in Table 4.8 indicate that the alpha values for subscales IPU, CONF, CARO, TSE, AFFEN and OIA would not increase if items are removed. The degree of internal consistency would rather decrease with the deletion of any one of the nine items. This is further substantiated by the high Cronbach's alpha values indicated in Table 4.7. However, in subscale RES the alpha value would increase with 0.01 if item 4 is removed. In subscale PPS the alpha value would increase with 0.01 if item 4 is removed. And lastly, in subscale BER the alpha value would increase with 0.01 if item 5 is removed. Due to the fact that the increase is not significant or large, these items were retained.

Table 4.8

Item statistics for the nine subscales of the Emotionally Competent Group Norm Scale

ECGN subscales	Variable	Item total correlation	Alpha if deleted
IPU	Item 1	0.65	0.84
	Item 2	0.66	0.84
	Item 3	0.76	0.79
	Item 4	0.74	0.80
CONF	Item 1	0.66	0.82
	Item 2	0.67	0.82
	Item 3	0.69	0.81
	Item 4	0.73	0.79
CARO	Item 1	0.74	0.89
	Item 2	0.76	0.89
	Item 3	0.80	0.88
	Item 4	0.80	0.88
	Item 5	0.73	0.89
TSE	Item 1	0.69	0.79
	Item 2	0.53	0.83
	Item 3	0.63	0.80
	Item 4	0.74	0.77
	Item 5	0.60	0.81
RES	Item 1	0.68	0.81
	Item 2	0.70	0.80
	Item 3	0.71	0.80
	Item 4	0.48	0.86
	Item 5	0.71	0.80
AFFEN	Item 1	0.70	0.86
	Item 2	0.73	0.85
	Item 3	0.74	0.85
	Item 4	0.79	0.82
PPS	Item 1	0.75	0.86
	Item 2	0.73	0.87
	Item 3	0.81	0.85
	Item 4	0.59	0.90
	Item 5	0.79	0.85
OIA	Item 1	0.68	0.85
	Item 2	0.71	0.85
	Item 3	0.74	0.84
	Item 4	0.73	0.84
	Item 5	0.66	0.86
BER	Item 1	0.66	0.88
	Item 2	0.83	0.84
	Item 3	0.78	0.85
	Item 4	0.80	0.84
	Item 5	0.57	0.90

Note: ECGN (emotionally competent group norm); IPU (interpersonal understanding); CONF (confronting members who break norms); CARO (caring orientation); TSE (team self-evaluation); RES

(creating resources for working on emotions); AFFEN (creating and affirmative environment); PPS (proactive problem-solving); OIA (organisational and intergroup awareness); and BER (building external relationships)

4.2.3.2 Confirmatory factor analysis

The CFA test gave an error warning which implied that the covariance matrix of latent variables is not positive definite, indicating that the subscales correlations with one another were too high. The model was therefore not supported by confirmatory factor analysis, and the fit statistics could not be evaluated. However, in order to test the proposed hypothesis, the nine-factor model was retained due to theoretical underpinning of the scale, as well as due to diagnostic value of the nine separate norms discussed in Chapter 2. As such, the subscale scores were entered as item parcel observed variables in the structural model.

4.2.3.3 Exploratory factor analysis

The CFA results for the Group Emotional Intelligence Norms measurement model proved to be disappointing. Therefore, the factor structure of the instrument was analysed in order to gain insight into how the model fit could be improved and identified in subsequent CFA analyses. Consequently, an EFA was performed on the ECGN Scale. Principle component analysis with direct oblimin rotation was used to conduct the EFA.

Through an analysis of the Scree Plot and the Eigen values indicated in Table 4.9 it is apparent that the result of the analysis indicates the extraction of three factors, therefore indicating a three-factor solution for the ECGN Scale. The proposed three-factor solution accounted for 60.26% of the total variance. A three-factor solution to the ECGN Scale could ultimately be considered an acceptable interpretation of the factor structure of the scale within the current sample as it agrees with the higher order clustering of Group Emotional Intelligence Norms into three levels as indicated in Stubbs' (2004) study. Even though the three-factor solution accounts for most of the variance, it was decided to continue with the original nine Group Emotional Intelligence Norms based on the theoretical model underpinning the ECGN Scale. This decision was also supported by the high internal consistency indicated by the item analysis results. No further analysis was therefore performed.

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Table 4.9

Eigenvalues of the Emotionally Competent Group Norm Scale

	Eigenvalues (complete responses) extraction: Principal components			
Value	Eigenvalue	% Total variance	Cumulative Eigenvalue	Cumulative %
1	21.6178	51.47096	21.6178	51.47096
2	2.01081	4.78763	23.62861	56.25859
3	1.68223	4.00531	25.31084	60.2639

4.2.4 Collective Beliefs Scale

The Collective Beliefs Scale measures the group's standing on the three Collective Beliefs; trust (3 items), group efficacy (4 items) and group identity (6 items). The scale consists of 13 items and is marked on a 5-point Likert scale. The raters rated their group's standing on these three beliefs.

4.2.4.1 Descriptive statistics and item analysis

Item analysis was conducted on the Collective Beliefs Scale's subscales. The Collective Beliefs Scale consists of three subscales as displayed in Table 4.10. The Cronbach's alpha values for the Collective Beliefs Scale range from 0.74 to 0.91 (see Table 4.10). This demonstrates that 74 - 91% of the variance in the items is due to systematic/true score variance; hence, all items within these subscales were retained.

Table 4.10

The Cronbach's alpha reliability statistics for the Collective Beliefs Scale

Collective beliefs subscales	Number of items	Cronbach's alpha
Trust	3	0.74
Group identity	4	0.83
Group efficacy	6	0.91

Table 4.11 shows the Collective Beliefs Scale's *item total correlation* and *alpha if deleted* values. *The item total correlations* for the Collective Beliefs subscales all range between 0.49 – 0.8 indicating good internal consistency Furthermore, the *alpha if deleted* scores are all below the original Cronbach's alpha value for their corresponding sub-scales indicating that the reliability will not improve if any items are deleted. Therefore, all items a were retained in the data pool

Table 4.11

Item statistics for trust, group identity and group efficacy

Collective beliefs subscales	Variable	Item total correlation	Alpha if deleted
Trust	Item 1	0.49	0.76
	Item 2	0.57	0.65
	Item 4	0.65	0.54
Group identity	Item 1	0.53	0.85
	Item 2	0.74	0.75
	Item 3	0.68	0.79
	Item 4	0.73	0.76
Group efficacy	Item 1	0.82	0.89
	Item 2	0.78	0.89
	Item 3	0.78	0.89
	Item 4	0.75	0.90
	Item 5	0.80	0.89
	Item 6	0.62	0.92

4.2.4.2 Confirmatory factor analysis

The CFA results for the Collective Beliefs Scale's measurement model are presented in Table 4.12. The likelihood chi-square statistic was statistically significant which indicates that the null hypothesis of perfect fit for the Collective Beliefs Scale had to be rejected, $\chi^2(62) = 154.860$, $p < 0.001$. The CFI of 0.998 fell above the suggested value for good fit (CFI > 0.95). The RMSEA value of 0.069 fell within the range of reasonable fit (0.05 < RMSEA < 0.08). Furthermore, the GFI (0.997) and the AGFI (0.993) statistics fell above the cut-off scores for good fit (GFI / AGFI > 0.9). As a whole, the fit statistics suggest good fit for the Collective Beliefs Scale.

Table 4.12

Goodness of fit statistics for the Collective Beliefs measurement model

RMSEA	GFI	AGFI	CFI	$\chi^2(df)$	p-value (chi-square)
0.069	0.997	0.993	0.998	154.860(62)	0.000

To add to the above fit statistics, the CFA results revealed that the factor loadings were all statistically significant and above 0.5. The factor loadings all ranged from 0.579 and 0.896.

The construct (composite) reliability for the three subscales of the Collective Beliefs Scale ranges between 0.8 and 0.95, which indicates good reliability/internal consistency, supporting the conclusion that the measurement model of the Collective Beliefs Scale achieved good model fit.

4.3   Evaluating the Measurement (Outer) Model

The next section presents the statistical results of the overall measurement model. In order to evaluate the overall model, item parcels were created from the average subscale scores for each dimension. When evaluating the overall measurement model, all the latent variables, together with their respective indicators, are evaluated simultaneously – therefore being a more stringent method for evaluating the construct validity of the measures. As explained in Chapter 3, in the case of CB-SEM, the overall fit of the measurement model can be evaluated with various fit indices – focusing on the discrepancy between the model-implied (theoretical) covariance matrix and the observed covariance matrix. The current study, however, utilised PLS-SEM to evaluate the measurement model (referred to as the "outer" model). Although PLS-SEM does not produce fit statistics, it does provide various criteria that can be used to make informed judgements about the reliability and validity of the measurement model. Assuming the results are satisfactory, the researcher would have confidence that the latent variables (constructs) are successfully operationalised and can subsequently proceed to evaluate the relationships between the latent variables themselves (i.e. the structural "inner" model). It is important to note that because PLS-SEM cannot produce fit indices, hypothesis 1 could not be evaluated in the traditional SEM sense. Instead, various other sources of evidence were considered that are produced by PLS-SEM. The outer model's alpha coefficient, composite reliability AVE values, discriminant validity as well as the outer loadings are discussed in the following sections.

4.3.1   Composite reliability and average variance extracted values

The alpha coefficients, composite reliability and the AVE results of the measurement instruments used in the current study are presented in Table 4.13 below. PLS internal consistency reliability is assessed through the use of Cronbach's alpha and composite reliability calculations. Cronbach's alpha provides reliability estimates based on intercorrelations of the observed indicator variables (Hair et al., 2014). Cronbach's alpha does not however come without its limitations, and therefore it may be appropriate to apply an additional measure of internal consistency. This was done by using the composite reliability. Composite reliability takes the different outer loadings of indicator variables into account.

Composite reliability scores can range between 0 and 1, where higher values indicate higher levels of reliability. Values between 0.6 – 0.7 can be regarded as having acceptable reliability whereas values between 0.70 and 0.90 and above can be regarded as satisfactory.

Convergent validity which can be described as "the extent to which a measure correlates positively with alternative measures of the same construct" (Hair et al., 2014). The method used in the current study to establish convergent validity on the construct level was AVE. An AVE value of 0.50 and higher indicates that the construct explains more than half of the variance of its indicators. Higher AVE values are therefore desired.

The results in Table 4.13 indicate that all the measurement instruments show acceptable internal consistency with alpha scores above 0.70, as well as acceptable convergent validity with composite reliability scores above 0.70 and AVE scores above 0.60.

Table 4.13

Alpha coefficient, composite reliability and AVE values

Latent variable	Manifest variable	Composite reliability	AVE
Resonant Leadership	Vision (α = 0.92) Coaching (α = 0.86) Affiliative (α = 0.93) Democratic (α = 0.89)	0.97	0.89
Group Member Emotional Intelligence	Self-awareness (α = 0.77) Self management (α = 0.82) Social awareness (α = 0.87) Relationship management (α = 0.88)	0.96	0.86
Group Emotional Intelligence Norms	Interpersonal understanding (IPU) (α = 0.86) Confronting members who break norms (CONF) (α = o.85) Caring orientation (CARO) (α = 0.91) Team self-evaluation (TSE) (α = 0.84) Creating resources for working on emotions (RES) (α = 0.85) Creating and affirmative environment (AFFEN) (α = 0.88) Proactive problem-solving (PPS) (α = 0.89) Organisational and Intergroup Awareness (OIA) (α = 0.87) Building external relationships (BER) (α = 0.89)	0.96	0.75

Collective beliefs	Trust (α = 0.74)	0.95	0.88
	Group identity (α = 0.83)		
	Group efficacy (α = 0.91)		

4.3.2 Discriminant validity

Discriminant validity indicates "the extent to which a construct is truly distinct from other constructs, in terms of how much it correlates with other constructs, as well as how much indicators represent only a single construct" (Hair et al., 2014, p. 316). Discriminant validity therefore indicates that a construct is unique in a way that it does not capture phenomena that are already represented within other constructs in the same model. The Heterotrait-Monotrait ratio was calculated to examine the discriminant validity of the measuring instruments. Heterotrait-Monotrait involves analysing within scale item correlations and comparing them to another scale's cross-correlations. The cross-correlation should be lower than the within correlations (Henseler et al., 2015). The discriminant validity results calculated by using the Heterotrait-Monotrait ratio are listed in Table 4.14.

Table 4.14

Discriminant validity (Heterotrait-monotrait ratio)

	Ratio	**95% lower**	**95% upper**	**Discriminate**
GEIN → CB	0.92	0.88	0.94	yes
GMEI → CB	0.82	0.77	0.87	yes
GMEI → GEIN	0.85	0.81	0.89	yes
RL → CB	0.76	0.68	0.82	yes
RL → GEIN	0.79	0.72	0.84	yes
RL → GMEI	0.66	0.58	0.73	yes

Note: GEIN (Group Emotional Intelligence Norms); CB (Collective Beliefs); GMEI (Group Member Emotional Intelligence); RL (Resonant Leadership)

The above results reveal that discriminant validity was achieved for all the measurement instruments. All the measurement instruments (Resonant Leadership Scale, Group Emotional Intelligence Scale, ECGN Scale and Collective Beliefs Scale) met the criteria for discriminant validity.

4.3.3 Outer loadings

PLS Bootstrapping analysis was implemented to evaluate the outer loadings of the measurement model. According to Hair et al. (2014, p.163), bootstrapping is "a resampling technique that draws a large number of subsamples from the original data (with replacement)

and estimates models for each subsample. It is used to determine standard errors of coefficient estimates to assess the coefficient's statistical significance without relying on distributional assumptions". The bootstrap confidence interval gives the 95% lower and 95% upper limit of values "within which a true population parameter will fall with a certain probability" (Hair et al., 2014, p. 163). The results of the outer loadings for the Resonant Leadership Scale are presented in Table 4.15.

Table 4.15

PLS-SEM outer loadings: Resonant Leadership on subscale level

Scale	Subscale	Outer loadings	95% lower	95% upper	Significant
Resonant Leadership	Affiliative	0.95	0.93	0.96	Yes
	Coaching	0.93	0.91	0.94	Yes
	Democratic	0.94	0.92	0.95	Yes
	Vision	0.95	0.94	0.97	Yes

The results in Table 4.15 reveal that the four Resonant Leadership indicators, representing the four Resonant Leadership dimensions, each loaded significantly on the latent construct of Resonant Leadership (loadings ranged between 0.93 and 0.95). All four subscales' loadings are very high. The outer loading results for the Group Emotional Intelligence Norms construct and its nine respective subscales are presented below in Table 4.16.

Table 4.16

PLS-SEM outer loadings: Group Emotional Intelligence Norms on subscale level

Scale	Subscale	Outer loadings	95% lower	95% upper	Significant
Group emotional Intelligence norms	AFFEN	0.90	0.87	0.93	Yes
	BER	0.82	0.78	0.86	Yes
	CARO	0.89	0.86	0.91	Yes
	CONF	0.75	0.68	0.81	Yes
	IPU	0.90	0.88	0.92	Yes
	OIA	0.89	0.86	0.92	Yes
	PPS	0.88	0.84	0.90	Yes
	RES	0.86	0.83	0.89	Yes
	TSE	0.90	0.89	0.92	Yes

Note: IPU (interpersonal understanding); CONF (confronting members who break norms); CAR0 (caring orientation); TSE (team self-evaluation); RES (creating resources for working on emotions); AFFEN (creating and affirmative environment); PPS (proactive problem-solving); OIA (organisational and intergroup awareness); and BER (building external relationships).

The results showed significant loadings for all nine indicators, ranging from 0.75 (confronting members who break norms) to 0.9 (for both interpersonal understanding and team self-evaluation). The outer loading results for the Group Member Emotional Intelligence construct and its four respective subscales are presented in Table 4.17.

Table 4.17

PLS-SEM outer loadings: Group Member Emotional Intelligence on subscale level

Scale	Subscale	Outer loadings	95% lower	95% upper	Significant
GMEI	Relationship management	0.95	0.94	0.96	Yes
	Self-awareness	0.89	0.86	0.92	Yes
	Self-management	0.93	0.90	0.94	Yes
	Social awareness	0.94	0.92	0.95	Yes

Note: GMEI (Group Member Emotional Intelligence)

The results in Table 4.17 indicate that all four the indicators load significantly on the Group Member Emotional Intelligence construct. Outer loadings range from 0.89 (self-awareness) to 0.95 (relationship management). The outer loadings for the Collective Beliefs Scale can be seen in Table 4.18 below.

Table 4.18

PLS-SEM outer loadings: Collective beliefs on subscale level

Scale	Subscale	Outer loadings	95% lower	95% upper	Significant
Collective beliefs	Group efficacy	0.94	0.93	0.95	Yes
	Group identity	0.95	0.93	0.96	Yes
	Trust	0.92	0.90	0.94	Yes

Table 4.18 indicates that the three indicators show significant loadings with Collective Beliefs achieving high outer loadings that range between 0.92 and 0.95.

4.4 Evaluating the Structural (Inner) Model

After assessing the measurement (outer) model, the next step was to assess the structural model, referring to relationships between the latent variables. As explained in Chapter 3, the current study used PLS-SEM to evaluate the model. While the study was interested in explicating the psychological mechanism underlying group emotional intelligence, the dominant focus was on the predictive capacity of Resonant Leadership. The interpretation of

the inner model therefore centres on the PLS-SEM statistics, though the CB-SEM fit results are also briefly reported on.

4.4.1 Partial least square structural equation modelling

Before the coefficient of determination (R square) and the path coefficients are investigated, the structural model first has to be examined for collinearity. This is done in order to ensure that the path coefficient results are not biased due to the methods used to determine them in PLS (Hair et al., 2014).

Structural models in PLS-SEM are assessed based on heuristic criteria that determine the structural models' predictive capabilities. It is assumed that the model was specified correctly, and it is consequently assessed in terms of "how well it predicts the endogenous variables / constructs" (Hair et al., 2014, p. 169). To assess a structural model in PLS-SEM it is key to identify the significance of the path coefficients and the level of R square values.

In order to assess the structural model's collinearity, the variance inflation factors were evaluated and these results can be seen in Table 4.19. When assessing variance inflation factors, predictor variables should not correlate with one another and values should not fall between the range from 5 – 10.

Table 4.19

Multicollinearity: Variance inflation factors

	Collective beliefs	Group Emotional Intelligence Norms
Collective beliefs		
Group Emotional Intelligence Norms	4.251	
Group Member Emotional Intelligence	3.028	1.656
Resonant Leadership	2.327	1.656

The variance inflation factors values in Table 4.19 above are all low, in the range between 1.656 and 4.251, indicating that factors are not correlated to one another. Based on these results it was safe to proceed to the testing of the path coefficients.

The current study's adapted structural model hypothesised paths that were tested through PLS and can be seen in Table 4.20. Path coefficients have standardised values that range from -1 to +1. The closer the path coefficient values are to +1, the stronger the positive relationship between the constructs (vice versa for the negative coefficient values). The closer the path coefficient values are to zero, the weaker the correlation between the constructs.

Table 4.20 indicates that all five of the hypothesised paths were found to be statistically significant.

Table 4.20

Path coefficients

Path	Path coefficient	95% lower	95% upper	Significant	P-value from t-test
H_2: GEIN → CB	0.61	0.48	0.72	Yes	0.00
H_6: GMEI → CB	0.19	0.09	0.29	Yes	0.00
H_3: GMEI → GEIN	0.57	0.49	0.64	Yes	0.00
H_7: RL → CB	0.14	0.03	0.24	Yes	0.01
H_5: RL → GEIN	0.40	0.32	0.48	Yes	0.00

Note: GEIN (Group Emotional Intelligence Norms); CB (Collective Beliefs); GMEI (Group Member Emotional Intelligence); RL (Resonant Leadership)

The next step in evaluating the structural model involves evaluating the coefficient of determination (*R* square). The R square measures the model's predictive accuracy and it represents the variance in the endogenous variables that are explained by all of the exogenous variables linked to it (Hair et al., 2014). R square values range from 0 to 1, where higher values show higher levels of predictive accuracy. The current study's R square values for both Collective Beliefs (0.77) and Group Emotional Intelligence Norms (0.76) are high, suggesting that the structural model accounts for most of the variance in the two endogenous latent variables (77% in Collective Beliefs and 76% in Group Emotional Intelligence Norms).

Table 4.21

R square for the determinants of the structural model

	R square	R square adjusted
Collective beliefs	0.77	0.77
Group Emotional Intelligence Norms	0.76	0.76

4.4.2   Covariance-based structural equation modelling results

As indicated earlier, CFA results for the multidimensional scales, ECGN Scale and Group Member Emotional Intelligence Scale suggested poor fit; however, it was decided to maintain the theoretically derived factor structure. The latter was supported by high internal consistency indicated by the item analysis results. Notwithstanding the foregoing (and using subscale

parcels instead of individual items as indicators), it was decided to also subject the overall model to CB-SEM. The structural model fit statistics can be seen in Table 4.22.

Table 4.22

CB-SEM structural model fit statistics

RMSEA	GFI	AGFI	CFI	χ^2(*df*)	p-value (chi-square)
0.095	0.827	0.779	0.939	630.045(164)	0.000

The fit statistics for the structural model indicate statistically significant likelihood chi-square statistics which indicates that the null hypothesis for perfect fit for the structural model had to be rejected, χ^2(*164*) = 630.045, p < 0.001. The CFI of 0.939 fell below the suggested cut-off scores for good fit (CFI > 0.95) but did still fall above 0.9 which may be seen as acceptable. The RMSEA value of 0.095 fell above RMSEA = 0.08 and indicates mediocre fit. Finally, the GFI (0.827) and the AGFI (0.779) statistics fell below the suggested cut-off score for satisfactory fit (GFI / AGFI> 0.9), therefore indicating mediocre fit. To conclude, the overall fit statistics for the structural model based on CB-SEM suggest that the structural model has poor fit.

However, all the factor loadings of the CB-SEM analysis show to be statistically significant (p < .05) ranging between 0.702 and 0.943, which is above the cut-off of 0.5. Finally, a comparison was done of the path coefficients of the CB-SEM and the PLS-SEM. This comparison can be seen in Table 4.23.

Table 4.23

Comparison of CB-SEM and PLS-SEM path coefficients

Path	PLS coefficient	PLS p-value	Covariance based coefficient	Covariance based p-value
H₂: GEIN → CB	0.61	0.00	0.752	0.000
H₆: GMEI → CB	0.19	0.00	0.112	0.099
H₃: GMEI → GEIN	0.57	0.00	0.609	0.000
H₇: RL → CB	0.14	0.01	0.089	0.152
H₅: RL → GEIN	0.40	0.00	0.382	0.000

Note: CB-SEM and PLS-SEM are both standardised regression coefficients. GEIN (Group Emotional Intelligence Norms); CB (Collective Beliefs); GMEI (Group Member Emotional Intelligence); RL (Resonant Leadership)

It is evident from Table 4.23 that the PLS and covariance-based path coefficients for the structural model are quite similar. The path between Group Emotional Intelligence Norms and Collective Beliefs was statistically significant with both PLS and CB-SEM and their coefficient scores in similar range (PLS = 0.61 and CB-SEM = 0.752). The path coefficients between Group Member Emotional Intelligence and Collective Beliefs, Group Member Emotional Intelligence and Group Emotional Intelligence Norms as well as the path between Resonant Leadership and Group Emotional Intelligence Norms are all within a similar range (PLS compared to CB-SEM coefficient values) and they are all statistically significant. The path coefficient for the path Resonant Leadership to Collective Beliefs is in the same range; however, it shows lower but still statistically significant results in PLS, but does not show statistical significance with CB-SEM.

To conclude, the CB-SEM results do not indicate ideal fit, but the path coefficients that are similar to the PLS path coefficient results to some extent corroborate the results that were derived from the SmartPLS analysis. Based on this, it can be inferred that the structural model provides a plausible explanation of the mechanism driving emotional intelligence in groups. Moreover, the predictive capacity of the model is evident and as such the value of Resonant Leadership.

4.5 Interpreting the proposed hypotheses

Hypothesis 2: Group Emotional Intelligence Norms positively affect Collective Beliefs.

Hypothesis 2 was supported as a significant path coefficient of 0.61 emerged during testing of the structural model. Moreover, the hypothesised direction of this relationship was supported with the results. Therefore, the results suggest that Group Emotional Intelligence Norms are shown to have a positive relationship (0.61) with Collective Beliefs. This indicates that groups who follow emotionally intelligent norms are likely to trust one another (trust), identify with their group (group identity) and believe in their group's ability to succeed (group efficacy). It is concluded that hypothesis 2 was corroborated by the results.

Hypothesis 3: Group Member Emotional Intelligence positively affects Group Emotional Intelligence Norms.

The relationship between Group Member Emotional Intelligence and Group Emotional Intelligence Norms as indicated in hypothesis 3 was supported as a significant path coefficient of 0.57. The results seem to suggest that Group Member Emotional Intelligence has a positive linear relationship with Group Emotional Intelligence Norms. This argues that emotionally

intelligent group norms result out of group members personally displaying emotional intelligence. It is concluded that hypothesis 3 was supported by the results.

Hypothesis 4: Collective beliefs positively affect Group Member Emotional Intelligence.

The theory in Chapter 2 argues that the emotional intelligence levels of the individual group members have a direct influence on the occurrence of the three Collective Beliefs (trust group identify and group efficacy) within groups. As mentioned in Section 3.7.4.2, due to the fact that PLS could not test feedback loops, this hypothesis could not be tested, and therefore the model was modified to account for the limitation posed by PLS. In the modified model, hypothesis 4 was turned around indicating that Group Member Emotional Intelligence levels are positively related to Collective Beliefs. The new path, called hypothesis 6, is discussed below after hypothesis 5.

Hypothesis 5: Resonant Leadership positively affects Group Emotional Intelligence Norms.

Hypothesis 5 was supported by a statistically significant path coefficient of 0.4. The predicted direction of the relationship was also substantiated by the results. This hypothesis indicates that group leaders who follow a Resonant Leadership style of leadership, measured through their ability to create a shared vision (vision), to coach their employees (coaching), value interpersonal relationships (affiliative) and who values other's opinions (democratic), help to create groups that follow emotionally intelligent group norms. Given the fact that the hypothesis achieved statistical significance, it can be deduced from the results that Resonant Leadership does have a positive relationship with Group Emotional Intelligence Norms.

Hypothesis 6 (modified model): Group Member Emotional Intelligence positively affects Collective Beliefs.

The path coefficient results revealed that hypothesis 6 was supported as statistically significant, but small (0.19). This hypothesis was added to the modified structural model due to the fact that PLS could not test feedback loops. This hypothesis states that the presence of emotional intelligence, based on its four subscales (self-awareness, self-management, social awareness, and relationship management) within individual group members has a positive influence on the occurrence of trust, group identity and group efficacy which are subscales of the Collective Beliefs construct.

It can be argued that when individuals show awareness for others, their feelings, wants and needs, it could grow and strengthen the group's identity as individuals could better relate with one another. In addition, when individuals understand one another (social awareness), and know their strengths and weaknesses, group members could better work together as they

know what they can expect from one another – and this could increase trust between group members as well as their belief that they can complete tasks successfully (group efficacy). Lastly, when individuals can manage their own behaviour (self-management) and when they display relationship management as an emotional intelligence dimension (which includes developing others), this could increase the group's belief that they can successfully accomplish their goals, as they would be able to exert their efforts into the right direction (achieving group goals).

Hypothesis 7 (modified model): Resonant Leadership positively affects Collective Beliefs.

This hypothesis, added to the modified model, was supported as a significant, albeit small, path coefficient of 0.14. This result seems to suggest that when groups have leaders who show an emotionally intelligent leadership style it would lead to the occurrence of trust, group identity and group efficacy within the groups that they manage.

It could be argued that when leaders show strong vision by building resonance and moving individuals toward a shared vision, it can increase group identity due to the fact that group members buy into the same shared dream and vision for the future. These are leaders who show coaching as a style focused on the development of their employees. Leaders who challenge their employees to attain better results within a supportive environment could increase group efficacy as individuals grow in skill, knowledge and their personal efficacy beliefs through support of their leader. Leaders who value their employees' inputs and opinions (democratic) may help increase group efficacy due to open discussion and the drawing/sharing of knowledge between employees and the leader before decisions are made. Lastly, leaders who value maintaining harmony and building relationships with their followers, and who encourage their employees to build and strengthen their relationships with one another, may increase trust in the group as members get to know one another on a deeper level.

4.6   Conclusion

This chapter presented and discussed the results of the item and factor analysis and the results based on the PLS analysis of the measurement as well as the structural model. The item statistics for the Resonant Leadership Scale, Group Member Emotional Intelligence Scale, ECGN Scale and Collective Beliefs Scale indicated good internal consistency, and that the reliability would not improve if items are deleted.

Results of the CFA indicated good model fit for the Resonant Leadership Scale as well as the Collective Beliefs Scale. The CFA results for the Group Member Emotional Intelligence Scale

and ECGN Scale did not support the theoretical factor structure, and hence both scales were also subjected to EFA. Even though Group Member Emotional Intelligence Scale's EFA results indicated a two-factor solution, this solution was rejected due to the deep-rooted theoretical foundation of emotional intelligence's four factors. The EFA results for the ECGN Scale presented a three-factor solution which was also rejected in order to follow the theory in Chapter 2 proposing nine factors.

The results of the overall measurement model test indicated that there was acceptable internal consistency reliability and convergent validity. Furthermore, all the outer loadings were significant, and the indicators met the criteria for discriminant validity. The analysis of the structural model indicated that the independent latent variables are not highly correlated, which is not desirable as it indicated that it measures that same construct. All path coefficients were statistically significant and the coefficient of determination (R square) shows predictive accuracy. The following chapter reflects on the findings, limitations of the study, future research recommendations as well as the managerial implications.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

5.1 Introduction

The world of work is increasingly moving toward group-based work structures, making group success an important determinant for organisational success (Kozlowski & Bell, 2013). Therefore, it has become very important to investigate how groups can increase their performance, working toward the attainment of the overall organisational goals and objectives. The foundation of group work is social interactions as group members have to work together toward a common goal, making interpersonal relationships between group members as well as inter-group dynamics an important determining factor for group functioning and performance . The success of personal interactions between group members is influenced by emotional stimuli and emotional reactions that are at play when individuals interact with one another (Brad, 2015; Koman & Wolff, 2008).

These theoretical understandings led to the formulation of the research initiating question pertaining to the sources of emotional intelligence in groups, and the mechanisms through which it can be developed. The study aimed to answer the research initiating question by addressing the following three primary research objectives: Firstly, to explicate the concept of group emotional intelligence and the norms it represents; secondly, to investigate how Group Emotional Intelligence Norms are developed and maintained over time; and thirdly, to investigate the process and competencies by which leaders can advance emotional intelligence norms within groups. Additionally, the study aimed to investigate the predictive ability of Resonant Leadership, beyond that of individual members' own emotional intelligence.

In response to the research initiating question, keeping the above-mentioned objectives in mind, a literature study was conducted which was presented in Chapter 2 of this study. The arguments contained in the literature review culminated in an answer to the research initiating question. These arguments culminated in a proposed structural model that represents the determinants of group emotional intelligence, including the processes by which it can be cultivated. Chapter 3 discussed the research methodology that was used to empirically evaluate the structural model indicating the influence of Resonant Leadership and Group Member Emotional Intelligence on Group Emotional Intelligence Norms. The model was tested with partial least square structural equation modelling and the results of the analysis were presented and discussed in Chapter 4.

This final chapter, Chapter 5, reflects on the results of the study and how it relates to current knowledge in the area of group emotional intelligence. The chapter also considers limitations

of the study, followed by recommendations for future research to be conducted using this study as a basis. The chapter concludes with discussing how the study's findings can be practically applied to business and work settings and why it adds value to the world of work.

5.2   The Research Model

Organisational culture has a great effect on the levels of success within an organisation and within groups (Schein, 2004). This study takes an emotional intelligence perspective toward organisational success due to the fact that social interactions are an unavoidable part of working within an organisation, and emotions are fundamental to these social interactions. Research indicated that when individuals display intelligence in working with their own as well as with others' emotions during social interactions, they can identify a collective outcome and then manage the way they interact with others in order to achieve the outcome (Durskat & Wolff, 2001a).

Group culture is formed by an individual's (leader or group member) behaviour, assumptions, beliefs, values and norms. As a result, when a culture is established, the culture will also impact and influence its group members (Schein, 2004). Consequently, the study argues that the type of organisational culture required to reach organisational success is one where leaders and members of the organisation display emotional intelligent behaviour in their interactions with one another as well as within their interactions with external individuals and organisations.

When new members enter the group, their behaviours are likely to be influenced by the already established culture, therefore an emotional intelligent culture will influence group members to act in ways that portray emotionally intelligent group norms. Therefore, in order for individuals to create a culture that portrays emotionally intelligent norms, it was hypothesised that the individuals (group leader and group members) who participate in the establishment of the culture should be emotionally intelligent. Based on this argument, the study hypothesized that Resonant Leadership, a leadership style characterised by the leader displaying high levels of emotional intelligence, positively relates to the occurrence of emotional intelligence norms within the group. It is further hypothesised that the group member's individual level of emotional intelligence also has a positive effect on the occurrence of Group Emotional Intelligence Norms. These group norms are further hypothesised to lead to a set of Collective Beliefs (trust, group identity and group efficacy) which are known to improve group performance.

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5.3   Reflection on Research Results

The current study defines group effectiveness or group success as groups where participation between group members is evident, one where group members cooperate and collaborate with one another and further, where they focus on improved decision-making, on finding creative solutions to problems and where there are high levels of productivity. Furthermore, the presence of shared mental models or conscious group beliefs within groups is found to increase group performance (Edwards, Day, Arthur, & Bel, 2006; Lim & Klein, 2006; Mohammed, Ferzandi, & Hamilton, 2010; Yulk, 2013). Concurrent with the above, this study reveals that the foundation for these aforementioned measures lies within three Collective Beliefs that are shared within the group or organisation, namely trust, group identity, and group efficacy. These Collective Beliefs support an individual's willingness to fully engage with the group and its tasks. Druksat and Wolff's (2001b) research indicates that in order to support behaviour that is in line with these three Collective Beliefs (trust, group identity and group efficacy), emotional intelligence norms should be developed and established within the organisation and its groups.

Emotional intelligence within groups is important because, as previously mentioned, emotions are an integral part of social interactions. Druskat and Wolff's research (2001a) indicated that there are certain cultural norms that highly relate to emotionally intelligent groups. These norms aim to guide individuals' interpretation of emotional stimuli and guide them in their reaction toward the stimuli so that they can react in an emotionally intelligent way.

Druskat and Wolff (2001a; 2001b) identified nine group norms that, when present, can lead to trust between group members as well as the existence of group identity and group efficacy. These group norms include the following:

- Interpersonal understanding
- Confronting members who break norms
- Caring orientation
- Team self-evaluation
- Creating resources for working on emotions
- Creating an affirmative environment
- Proactive problem-solving
- Organisational and intergroup awareness
- Building external relationships.

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As indicated in Chapter 2, Section 2.3.2, these nine Group Emotional Intelligence Norms are broken up into three levels; the individual level, group level and cross-boundary level. The individual level represents the group members' inter-group relationships with one another – showing awareness for their group members as well as being able to effectively manage the group members. The group level represents the ability to understand and manage the group as a single entity within the organisation. Lastly, the cross-boundary level entails showing social awareness of where the group fits into the bigger context of the organisation and displaying social skills through building external relationships with individuals outside the organisation.

The statistical results in the current study yielded strong support for the postulated positive linear relationship between Group Emotional Intelligence Norms and Collective Beliefs (hypothesis 2; $\beta = 0.61$; $p < 0.05$). This finding confirms previous research concerning the important role of Group Emotional Intelligence Norms in relation to trust, group identity, and group efficacy (Druskat & Wolff, 2001a; 2001b).

Hypothesis 2, being statistically significant, supports the theory stating that if (on an individual level) group members take the time to try and understand one another's perspectives in order gain an interpersonal understanding; if members call out and confront one another for deviating from the group norms; and if group members communicate positively toward and affirm one another, these groups are more likely than others to display the Collective Beliefs of trust, group identity, and group efficacy which according to theory are further linked to the levels of group effectiveness and/or success. On a group level, if groups take the time to evaluate and review their current reality in terms of the emotional state, strengths and weaknesses; if an environment is created and resources are provided to deal with and discuss emotional stimuli within the group context; if a positive work environment is created that inspires group members and builds optimism in the face of challenges; and if groups are able to anticipate problems and take action to prevent and resolve problems in order for the group to accomplish their objectives, these groups are more likely to have the trust, group identity and group efficacy within their group. On a cross-boundary level, when groups display the ability to understand the organisational system as a whole and how the group's goals fit into the organisation's strategic objectives as well as understand external stakeholders' needs and concerns; and if these groups can effectively and strategically build and maintain strong positive relationships with stakeholders outside the boundaries of the group, these groups will be more likely to display Collective Beliefs of trust, group identity and group efficacy linked to higher group performance and success.

The results from this study therefore corroborate the notion that higher levels on the Group Emotional Intelligence Norms, indicating a group culture of emotional intelligence, are associated with higher levels on the collective belief scores that are theoretically linked to higher levels of group effectiveness, performance and group success. The study further aimed to uncover how this emotionally intelligent group culture (reflected by the Group Emotional Intelligence Norms) could be supported. It was hypothesised that the group members' individual levels of emotional intelligence as well as the leader's leadership style will influence the development, establishment and maintenance of these emotionally intelligent group norms.

The research results confirmed the positive relationship between Group Member Emotional Intelligence and Group Emotional Intelligence Norms (hypothesis 3; $\beta = 0.57$; $p < 0.05$). These statistically significant results corroborate the theory that group members need to be emotionally intelligent themselves in order to effectively follow the four phases of symbolic interactionism aiming to create Group Emotional Intelligence Norms and also to act in accordance to these nine Group Emotional Intelligence Norms. It is therefore evident that individual group members play an important role in the development and maintenance of Group Emotional Intelligence Norms. More specifically, in order for group members to develop and maintain norms that create emotional intelligence in groups, the group members should display elements of personal emotional intelligence based on the four dimensions of emotional intelligence: self-awareness, self-management, social awareness, and relationship management (Day, 2000; George, 2000; Jordan et. al., 2002).

Self-awareness can be explained as the individual's ability to recognise and understand their own internal feelings, emotions and perspectives, especially when an emotional reaction is triggered. It entails the awareness of the individual's own strengths and limitations as well as the ability to effectively use these strengths with self-confidence (Day, 2000; Goleman, Boyatzis & McKee, 2002; Koman & Wolff, 2008; Stubbs, 2005 & Watkin, 2000). Self-management entails the individual's ability to practise control over and to regulate their own emotions and emotional impulses, channelling them into a positive direction. Self-management furthermore entails being flexible and adaptive in behaviours in order to facilitate the desired outcomes (Koman & Wolff, 2008; Stubbs, 2005 & Watkin, 2000). Social awareness is associated with the individual's level of external awareness, and entails having empathy and then using that understanding of others to build rapport. Social awareness does not merely have to do with person-to-person understanding but can also expand to include organisational and group awareness. Relationship management includes the individual's ability rely on their social skills and to make use of their understanding of others' emotions to

strengthen these individuals' developmental needs (Goleman, et.al., 2002; Koman & Wolff, 2008; Stubbs, 2005 & Watkin, 2000).

Druskat and Wolff (2001a) discussed different influences that leverage and influence the majority of a group's emotional intelligent behaviours and decisions. Within these influences, a large theme is formal and informal leaders. It was therefore hypothesised that leadership will influence group members to develop and act in accordance with the Group Emotional Intelligence Norms. This study chose a leadership style routed in emotional intelligence, called Resonant Leadership, and hypothesised (hypothesis 5) that Resonant Leadership is positively related to Group Emotional Intelligence Norms. This hypothesised relationship was supported and a statistically significant path coefficient of 0.4 ($p < 0.05$) was found.

There are four Resonant Leadership dimensions, namely visionary, coaching, affiliative and democratic. Leaders who display the Resonant Leadership dimension, visionary, have a clear picture of the future goals. They also have the ability to share these dreams with their followers in a way that inspires and motivates them to buy into and commit to working toward the achievement of the leader's vision (Goleman, et.al., 2002a). Leaders who display coaching as a Resonant Leadership dimension show interest in others' lives. They display the ability to identify other individuals' strengths and weaknesses and they also challenge and assist these individuals in the attainment of their personal goals while taking the organisation's goals into consideration (Goleman, et.al., 2002a). Leaders who display affiliative as a Resonant Leadership dimension value building relationships with their followers and peers; they value collaboration and harmony, they display high levels of empathy and they assist others in building connections and relationships with one another (Goleman, et.al., 2002a). Lastly, leaders who display the Resonant Leadership dimension, democratic, value others' knowledge and perspectives. They will try to motivate their followers and peers to share their opinions, knowledge, and participate in decision-making processes (Goleman, et.al., 2002a). The results therefore suggest that if group leaders score high on the foregoing four dimensions of Resonant Leadership, the group members will be more likely to behave according to the nine Group Emotional Intelligence Norms as indicated by Druskat and Wolff (2001a, 2001b).

Confirmatory factor analysis results failed to support the theoretical factor structure implied by the Group Member Emotional Intelligence and Group Emotional Intelligence Norms' item-level measurement models, raising some concerns about operationalisation of these constructs. The scales, however, showed high internal consistency indicated by the item analysis results. Moreover, since the hypothesised structures have strong theoretical foundations, and serve the diagnostic purposes of the scales, it was decided not to modify the structure. To test the overall measurement model, dimension parcels were created and instead of using covariance-

based structural equation modelling (due to the foregoing issue with the individual scales), it was decided to use partial least square structural equation modelling (PLS-SEM).

One of the limitations of using PLS-SEM is that it cannot capture or calculate results where structural models have feedback loops. Within the original structural model, hypothesis 4 indicated a positive relationship path moving from the Collective Beliefs (trust, group identity and group efficacy) toward Group Member Emotional Intelligence, thus forming a feedback loop. This feedback loop had to be eliminated – this was done by turning the path direction around, creating a new hypothesis called hypothesis 6. The implication of using PLS-SEM is therefore that the theoretically based hypothesis (hypothesis 4) could not be statistically tested, and therefore the results and implications for this hypothesis cannot be discussed. As seen above, one of the consequences of using PLS-SEM was that the original structural model had to be adapted. Following the decision to revert to PLS-SEM, along with its focus on the predictive ability of the model, it was also decided to add two additional pathways in the model: Group Member Emotional Intelligence to Collective Beliefs (hypothesis 6) and Resonant Leadership to Collective Beliefs (hypothesis 7). Note that the model was revised before any analyses were performed with regards to the hypothesised relationships between the latent variables.

According to the study's results, the path from Group Member Emotional Intelligence to Collective Beliefs (represented by hypothesis 6) was found to be statistically significant, albeit small ($\beta = 0.19$; $p < 0.05$). These results imply that when group members have a high average of personal emotional intelligence, the chances are that there will be higher levels of trust, group efficacy and group identity within their group. Lastly, statistical results for hypothesis 7 revealed that the direct path between Resonant Leadership and the Collective Beliefs of trust, group identity and group efficacy was statistically significant but small ($\beta = 0.14$; $p < 0.05$). It can therefore be inferred that in this study, the group leader's leadership style, Resonant Leadership, does have an influence on the Collective Beliefs of the group they are leading. Therefore, in groups where the leader displays Resonant Leadership, there is more likely to be trust, group identity and group efficacy within the group.

5.4 Limitations of the Study

Non-probability convenience sampling was used, therefore making use of population elements that happen to be available or in proximity of the researcher (Babbie & Mouton, 2001). Due to the fact that the sample was not chosen randomly, factors unknown to the researcher may have predisposed the sample to sampling bias. In addition, the study did not request any

biographical information from the respondents, and therefore the demographics of the respondents are unknown. Consequently, it can not be claimed that the sample was representative of the South African population. Caution should therefore be taken when generalising these results to the South African population.

The factor structure for the Emotionally Competent Group Norm Scale and Group Member Emotional Intelligence Scale was less than optimal, resulting in problems when covariance-based structural equation modelling was attempted. This study therefore had to make use of PLS-SEM which does not allow for testing the overall model fit of the structural model. To this effect, the success with which the model explains the overall psychological mechanism could not be evaluated sufficiently. However, in this study, a main focus was to establish the predictive validity of Resonant Leadership, and for that purpose, PLS-SEM provides useful information for assessing the prediction of target constructs.

Another limitation is that the current study made use of raters who measure their own emotional intelligence levels (Group Member Emotional Intelligence) – therefore making use of self-reporting which rendered the study vulnerable to response bias. Response bias may occur if the respondents answer the questions in a socially desirable way by responding to the questionnaire in a way that inflates or deflates their scores according to what they see as the socially desirable response in order to convey a more favourable image of themselves. This could lead to an inaccurate reflection of the constructs being measured and/or artificially inflated inferences being made from the results (Sallis & Saelens, 2015).

Furthermore, raters measure their group leader's standing on the four Resonant Leadership dimensions as well as their group's norms and the group's Collective Beliefs. Although the groups are expected to be the unit of analysis in these types of studies, the current study used the individual team members as the units of analysis as well as the units of observation. The ideal, however, would be to collect data from a number of different groups and generate aggregate scores for the groups. Within this ideal scenario the groups become the unit of analysis and the individuals within the groups become the unit of observation, leaving less space for method bias.

The current study's measurement instruments made use of external raters for measuring leaders standing on Resonant Leadership and groups standing on Group Emotional Intelligence Norms and Collective Beliefs. This could be seen as a limitation due to personal bias of the test taker. The researcher acknowledges that the individual measuring their leader's and their group's norms may skew the results as their perspectives of their leader and

their group could be influenced by personal factors such as individual levels of emotional intelligence as well as their personal relationships with their group leader and group members.

5.5 Recommendations for Future Research

It is suggested that future researchers make use of complete groups of three or more individuals rather than using one individual's results as a representation of a whole group and its leader. The suggestion is therefore to use the group members as a unit of observation and the group as the unit of analysis. By doing this, the researcher can make use of average group scores when determining the leader's standing on Resonant Leadership and the group's standing on the Group Emotional Intelligence Norms and the Collective Beliefs, therefore minimising personal bias.

As seen from the discussion on the latent variables in Chapter 2, Resonant Leadership influences the group's level of emotional intelligence through the presence of Group Emotional Intelligence Norms. High levels of Group Emotional Intelligence Norms consequently lead to the collective belief of trust, group identity and group efficacy, which in turn has a positive influence on group effectiveness. Team effectiveness could also be added into the structural model as a lag outcome to further demonstrate the direct and indirect influence of the leader's leadership style on organisational performance. Moreover, using objective measures of group effectiveness would further substantiate the actual effect of Resonant Leadership on organisational performance – not inflated by common method bias.

Chapter 2 also discussed mindfulness, hope and compassion as antecedence to leaders' level of Resonant Leadership. These three antecedents could be discussed within the literature study and added to the structural model to be tested in order to create a more holistic view on Resonant Leadership. Furthermore, it is suggested that future research should elaborate on the specific influence the leaders' personal level of emotional intelligence has on their Resonant Leadership scores.

More research can be done regarding the factor structure of Group Emotional Intelligence Norms and Group Member Emotional Intelligence. The Group Emotional Intelligence Norms factor structure indicated that there are three and not nine factors – this confirms the theory that there are three higher order categories (referred to as levels) in which the nine norms operate, but does not support the distinctiveness of the nine norms themselves. More research is required to study the factor structure of the questionnaire, considering the possibility of a second-order factor model, or possibly a bi-factor model. The theoretical categorisation of the nine dimensions also needs to be revisited, and further explored with EFA.

The Group Member Emotional Intelligence factor structure indicated that there was strong evidence for two factors, and not four. This however contradicts the strong foundation of theory stating that there are four dimensions to emotional intelligence. It could therefore be recommended that the Group Member Emotional Intelligence Scale can be analysed in order to identify any deviation from the definition of constructs and also to identify possible overlaps between the questions that could result in the two-factor structure. The questionnaire could therefore be modified and re-tested to see if the statistical results change.

The structural model suggests that the effects of Resonant Leadership and Group Member Emotional Intelligence on Collective Beliefs are mediated by Group Emotional Intelligence Norms. This mediation effect was implied in the Literature Review but remained untested. It is therefore suggested that this mediation effect portrayed in the structural model should be empirically tested and the effects thereof discussed in order to strengthen the theory discussed in the Literature Review.

The definition of emotional intelligence could be elaborated on in order to include the 'traditional" broad perspectives of emotional intelligence. It is therefore suggested that future research explain emotional intelligence's theoretical orientation and discern between the ability, trait or behavioural framework used to define emotional intelligence within the current study. This distinction may have some relevance at the group level. Moreover, the emotional intelligence literature used could be expanded on to include a larger variety of more recent studies in support of the theoretical arguments.

Finally, future research could aim to include more on integrative theories that guide theorising. To support the theoretical argument further, the processes through which the constructs influence one another could be explained on the basis of these integrative theories. As such, more psychological theories that explain the emergence of group-level constructs from individual constructs could be discussed.

5.6   Managerial Implications

Given the prominence of groups in modern organisations, managerial interventions should focus on increasing group emotional intelligence levels (denoted by nine Group Emotional Intelligence Norms) in order to increase organisational success. To this effect, the present study aimed to identify and understand the sources of emotional intelligence in groups, and through which mechanisms these sources can be developed. The style of leadership was identified as a critical factor for facilitating group emotional intelligence norms (in addition to individual member's own emotional intelligence). More specifically, the study showed that an

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emotionally intelligent leadership style called Resonant Leadership has a positive significant impact on the levels of emotional intelligence in groups.

The concept resonance (being in tune, synchronised) argues that all individuals' behaviour and motivation are driven by emotions and stimulated by their leaders (Boyatzis et al., 2005). Therefore, if leaders display negative attitudes and behaviours their negativity will flow into the organisational and group cultures, which negatively impacts employee performance and creates dissonance. Contrastingly, if a leader displays positive attitudes and behaviours, it will have positive effects on the organisation, its employees, and working groups. Boyatzis and McKee (2005) indicated that this positive effect creates an organisation culture where employees feel renewed, creative, hopeful and compassionate. The awareness of the effect resonance and dissonance have on organisations coupled with the development of the Resonant Leadership Scale may, through self-awareness and training, guide leaders in creating resonance within their organisation.

Leaders experience high levels of stress due to the high level of responsibility, self-control needed, and the number of crises and threats they have to manage on a daily basis (McKee et al., 2005). Resonant Leadership as well as the leader's ability to be mindful, have hope, and show compassion (which are requirements in the *Cycle of Renewal* discussed below) can assist organisations by creating resilient leaders by resetting the leader back into a positive balance. By doing this, leaders are able to display resonance and create a positive organisational culture in spite of the stressors that accompany their role. Boyatzis and McKee's (2005) research presented an occurrence called the *Sacrifice Syndrome*. This syndrome can be seen in leaders who are caught in a harmful pattern of work behaviours where they sacrifice too much for their job, consequently offering up their personal well-being. A leader cannot sustain effectiveness and efficiency if they cannot sustain themselves and their personal well-being (McKee et al., 2005). Boyatzis and McKee therefore investigated ways in which a leader can escape from the cycle of negativity and dissonance in the *Sacrifice Syndrome*, and how to adopt a positive outlook. Their research revealed that this can be done by learning and applying the principles of the *Cycle of Renewal*.

The *Cycle of Renewal* aims to produce three types of positive attractors used to reset the individual back into a positive balance (Boyatzis & McKee, 2005). These three elements (mindfulness, hope and compassion) are needed for a leader to renew him/herself and to sustain resonance within the organisation and to sustain relationships needed to do their jobs well (Taner & Aysen, 2013; McKee et al., 2006). The three elements, mindfulness, hope and compassion are seen as the foundation for Resonant Leadership.

In order to measure Resonant Leadership, a scale had to be developed. The Resonant Leadership Scale was designed to identify the leaders standing on the four dimensions of Resonant Leadership (visionary, affiliative, coaching, and democratic). This scale showed good reliability and validity as indicated in Section 4.2.1 in Chapter 4. The Resonant Leadership Scale is valuable as it distinguished between the four of the Resonant Leadership dimensions where other known Resonant Leadership scales only give an overall score of Resonant Leadership. This makes the scale a useful diagnostic tool for leadership development in organisations. Leadership development programmes can be created based on the theoretical foundation of Resonant Leadership as it is evident from the results that Resonant Leadership does have a positive relationship with emotionally intelligent group norms.

Emotions are born out of social interactions and are therefore an unavoidable consequence of individuals working together within a group. Emotions have implications for groups as emotions lead to behaviour, indicating change in individual and environmental relationships. These changes lead to a consequential emotion which may furthermore change the dynamic of the group and the interactions within the groups (Druskat & Wolff, 2001b). It is therefore argued that if group members display awareness of their and others' emotions, and if they have the ability to manage these emotions, they can ultimately determine how they interact with one another within the group in order to achieve cooperation and collaboration (Druskat & Wolff, 2001a).

Based upon the above argument, the second factor having a positive significant impact on, and acting as a source of group emotional intelligence within the present study, was the individual levels of emotional intelligence possessed by the individual members of the group. The results indicated that the higher the emotional intelligence levels of the individual group members, the higher the levels of Group Emotional Intelligence Norms. The implication for this is the awareness that emotional intelligence of the individual employees has an impact on Group Emotional Intelligence Norms, group performance and consequently on organisational success. This awareness could motivate organisations to invest in emotional intelligence training for their employees as it is evident from this study that higher levels of individual emotional intelligence lead to higher levels of group performance. This awareness could furthermore change the way management looks at the recruitment and selection process, as it is evident that the individual emotional intelligence levels, not only the skills and abilities of the employees hired, has a significant impact on effectiveness, performance and success.

The present study investigated what emotional intelligence on a group level looks like. Druskat and Wolff (2001a; 2001b) identified nine Group Emotional Intelligence Norms that were used

to measure the emotional intelligence levels of groups. Within the theoretical discussion of Chapter 2, practical guidelines were given regarding how groups can behave, and what habits they can instil within their groups so as to instil these norms and ultimately increase their groups' emotional intelligence levels. The practical guidelines allow for easy ways to develop coaching or training and development material for group development within organisation. The theory emphasised the link between the Group Emotional Intelligence Norms and Collective Beliefs (trust, group identity and group efficacy), and moreover explained how the three Collective Beliefs are fundamental to collaboration, cooperation, participation, improved decision-making, creative solutions and higher productivity which are in turn measures of group success. This explanation could therefore support the argument explaining why it is important to do training and coaching with groups regarding the development of Group Emotional Intelligence Norms.

5.7   Conclusion

The purpose of this study was to identify what the sources of emotional intelligence within groups are. Group emotional intelligence in this study was operationalised as the occurrence of nine group norms referred to as Group Emotional Intelligence Norms. The literature study investigated the mechanisms though which these Group Emotional Intelligence Norms could be developed. Resonant Leadership and the Group Member Emotional Intelligence levels were identified as two constructs that act as sources of the nine norms. It was further hypothesised that group emotional intelligence (as denoted by the nine norms) would be positively related to group effectiveness. The statistical results supported the underlying relationships that exist between all the variables. The present study therefore provides insights into the complexity of the Group Emotional Intelligence Norms phenomenon and the determinants. These insights can assist organisations in developing interventions aimed at increasing emotional intelligence in groups and consequently increasing organisational success. Moreover, the Resonant Leadership Scale explained significant variance in group emotional intelligence (as denoted nine Group Emotional Intelligence Norms) beyond that explained by the group members' own emotional intelligence, indicating the predictive validity of the newly developed scale.

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APPENDIX 1

UNIVERSITEIT
STELLENBOSCH
UNIVERSITY

APPROVED WITH STIPULATIONS
REC: Social, Behavioural and Education Research (SBER) - Initial Application Form

26 November 2019

Project number: IPSY-2019-11602

Project title: *The Influence of Resonant Leadership on Group Emotional Intelligence Norms

Dear Miss Liisa Ferreira

Your REC: Social, Behavioural and Education Research (SBER) - Initial Application Form submitted on 6 November 2019 was reviewed by the REC: Humanities and approved with stipulations.

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
26 November 2019	25 November 2022

PLEASE RESPOND TO THE FOLLOWING STIPULATIONS:

The researcher may proceed with the envisaged research provided that the following stipulations, relevant to the approval of the project are adhered to or addressed:

1) Please add to the invitation to consent that the anonymised data may be used in future in other research as well to ensure that further consent need not be obtained should that happen. [RESPONSE REQUIRED]

HOW TO RESPOND:

Some of these stipulations may require your response. Where a response is required, you must respond to the REC within **three (3)** months of the date of this letter. Your provisional approval will be withdrawn automatically should your response not be received by the REC within 3 months of the date of this letter.

For instructions on how to respond to these stipulations, please download the FAQ on how to edit your application and follow the steps carefully: HOW TO RESPOND TO REC FEEDBACK.

Where revision to supporting documents is required, please ensure that you replace all outdated documents on your application form with the revised versions.

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (11602) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version

APPENDIX 2

RESONANT LEADERSHIP QUESTIONNAIRE:

Focusing on your group leader's behaviors at work, please indicate the extent to which you agree or disagree with each statement:

1=   Strongly Disagree

2 =   Disagree

3=   Neutral / Uncertain

4 =   Agree

5 =   Strongly Agree

Vision:

1. My leader has a clear vision and picture of what the future of our group looks like.
2. My leader communicates his/her vision to the group.
3. My leader's actions align with his/her vision for the group.
4. My leader is open to discuss and willing to provide information to the group regarding his/her vision.
5. My leader helps me understand how I contribute to achieving the groups' shared vision.
6. My leader inspireds me to work toward reaching our groups future goals.

Coaching:

1. My leader works together with others to identify and investigate their goals and values.
2. My leader helps individuals to expand their range of skills and abilities.
3. My leader gives timely and constructive feedback.
4. My leader gives challenging tasks while providing the necessary resources to successfully complete it.

Affiliative:

1. My leader motivates cooperation within the group.
2. My leader creates a work environment that I want to be part of.
3. My leader acknowledges the feelings and views of all group members.
4. My leader places high value on building relationships with followers and peers.
5. My leader works towards creating and maintaining peace and harmony within our group.
6. My leader strengthens connections between individuals and groups.

Democratic:

1. My leader encourages group members to share their opinions and perspectives.

2. My leader values all group members inputs and opinions.
3. My leader values the knowledge of the group.
4. My leader draws upon the knowledge of the group during decision making.
5. My leader knows how to build buy-in from key people.

GROUP MEMBER EMOTIONAL INTELLIGENCE QUESTIONNAIRE:

Focusing on the work group you are / have been part of, please indicate the extent to which you agree or disagree with each statement regarding the group. Please keep the same group in mind as used in previous questions.

1=   Strongly Disagree

2 =   Disagree

3=   Neutral / Uncertain

4 =   Agree

5 =   Strongly Agree

Self-Awareness

1. Our group members are aware of their own feelings.
2. Our group members are aware of how their feelings drive their behaviour.
3. Our group members are aware of how their actions affects others.
4. Our group members have realistic opinions of their personal abilities, and strengths, weaknesses.

Self-Management

1. Our group members have the ability to manage, control and regulate their emotions.
2. Our group members can manage their emotional reactions to accomplish desired outcomes.
3. Our group members have the ability to be flexible and adaptive when needed.
4. Our group members take initiative.
5. Our group members can stay calm during stressful times.

Social Awareness

1. Our group members understand other people's feelings, emotions and needs.
2. Our group members show empathy toward others.
3. Our group members are able to attentively listen to others and understand their perspectives.
4. Our group members are able to understand the political and social climate of the organisation.

5. Our group members are aware of the guiding values and unspoken rules their environment.
6. Our group members are able to pick up on emotional cues.

Relationship Management

1. Our group members effectively manage emotions within interpersonal relationships.
2. Our group members know how to maintain good relationships with others.
3. Our group members communicate clearly with others.
4. Our group members create buy-in from and influences others to support their initiatives.
5. Our group members work well in a team.
6. Our group members are able to manage conflict in a successful manner.

GROUP EMOTIONAL INTELLIENCE NORMS QUESTIONNAIRE (Druskat & Wolff, 2013):

Focusing on the work group you are / have been part of, please indicate the extent to which you agree or disagree with each statement regarding the group. Please keep the same group in mind as used in previous questions.

1=   Strongly Disagree

2 =   Disagree

3=   Neutral / Uncertain

4 =   Agree

5 =   Strongly Agree

Interpersonal Understanding
1. We make an effort to understand each other's' perspectives.
2 We know which tasks are best suited to the skills and interest of each member.
3 We try to understand each other's concerns.
4 We try to understand each other's strengths and development areas.

Confronting members who break norms
1 If a group member behaves in a way that feels unfair to the rest of the group, we let him/her know.
2 We tell members who aren't doing their fair share to work harder.
3 We provide constructive feedback to members whose behavior is unacceptable.
4 We let members know if they are not meeting the group requirements and needs.

Caring orientation
1 Members of this group act in ways that show they care about each other.
2 Every member in this group is treated with respect.
3 We express appreciation for group member effort.
4 We let our group members know that we value their contributions.

5   We accommodate one another's needs.

Team self-evaluation

1   Our group takes time to discuss our successes and areas of development.
2   We talk about how the group's mood is affecting our work.
3   We regularly evaluate our group's performance.
4   We spend time assessing how well we're working together.
5   We seek external feedback to help us evaluate how our group is performing.

Creating resources for working on emotions

1   We take time to talk about frustrations and other feelings in the group.
2   We have developed methods to help us tackle emotionally charged issues
3   We have expressions we use to make it easier to discuss moods and feelings in the group.
4   We use humor to help us ease tension in the group.
5   We make time to discuss tensions in the group.

Creating an affirmative environment

1   When something goes wrong, we see it as a challenge rather than an obstacle.
2   We encourage a positive outlook within this group.
3   We encourage each other to be optimistic when facing challenges.
4   When a setback disrupts our progress, we express optimism about overcoming it.

Proactive problem solving

1   When we see a problem emerging, we act on it right away.
2   We try to anticipate potential difficulties before they occur.
3   We act proactively to prevent problems from occurring.
4   We solve our own problems rather than wait for help from other.
5   We act decisively to address emerging challenges.

Organisational and intergroup awareness

1   We figure out why decisions that affect our group get made.
2   We work to understand the priorities of the leaders in our organisation.
3   We make an effort to understand how this group's work contributes to the organisation's goals.
4   We seek out information about the concerns and needs of decision makers in the organisation.
5   We seek information about the criteria used to evaluate our group's work.

Building external relationships

1   We work to build relationships with other groups in the organization.
2   We build relationships with individuals outside our group who can make a difference in our performance.
3   We build relationships with people outside our group who can help us meet our objectives.
4   We build relationships with people outside our group who can provide us with resources and support.

5   Other groups in the organisation know that if they need our groups help, we will give it to them.

COLLECTIVE BELIEFS QUESTIONNAIRE:

Focusing on the work group you are / have been part of, please indicate the extent to which you agree or disagree with each statement regarding the group. Please keep the same group in mind as used in previous questions.

1=   Strongly Disagree

2 =   Disagree

3=   Neutral / Uncertain

4 =   Agree

5 =   Strongly Agree

Trust:
1   We are willing to be vulnerable in front of one another.
2   We fulfill our obligations.
3   We meet one another's expectations.

Group Identity:
1   Our group can be clearly distinguished from other groups.
2   We feel included and attached to the group.
3   Our group members internalise group norms and attitudes.
4   We are committed to the group and the its collective goals.

Group Efficacy:
1   We can be effective as a group.
2   We can overcome problems through a collective effort.
3   We are confident in our ability to successfully accomplish our goals.
4   We are optimistic about our group's ability to accomplish tasks and produce the desired outcomes.
5   We believe our group has the ability to succeed.
6   We can be more effective as a group than individual entities.