

**Leadership behaviour that facilitate shared leadership emergence in
internationally dispersed non-formal teams.**

Name: Jandre Van Zyl

Student number: 28234945

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

01 December 2020

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Jandre Van Zyl

01 December 2020

Abstract

Globalisation and the increased complexity of organisations creates the need for alternative leadership approaches that can harness the collective intellectual capital that exists within the dispersed employees of organisations. As dispersion of teams increase, some traditional leadership approaches become less effective. Shared leadership however, has greater effects on team performance when team dispersion increases. Studies into shared leadership increased over the past decade, however the antecedents that facilitate shared leadership are still not exhaustive, and the majority of studies have been in co-located and formal teams.

This study explored how shared leadership can be facilitated in internationally dispersed non-formal teams through increased team connectedness, leader humility, empowering leadership, participative leadership, and quality leader-member exchanges. This qualitative study inductively explored the perspectives of twelve purposively sampled internationally dispersed team members, who represented three different functional non-formal teams. Semi-structured in depth interviews were conducted, after which the data was analysed using categorical aggregation and thematic analysis.

The study offers a theoretical framework of leadership in internationally dispersed non-formal teams, which serve as a basic for future empirical research. It provides leaders of teams and organisations, as well as human resource practitioners with guidance on how to achieve the benefits of shared leadership of teams in this context.

This study was limited to one large multi-national organisation (Hilti Corporation), which operates in the global construction and industrial sectors. Participants represented nine nationalities, dispersed across eight countries, on four continents.

Keywords

Shared leadership, internationally dispersed teams, non-formal teams.

Contents

Chapter 1	1
1. Introduction to Research problem and purpose	1
1.1. Problem statement	1
1.2. Purpose statement	1
1.3. Problem context	1
1.4. The effectiveness of various leadership approaches in different contexts 3	
1.5. Antecedents of shared leadership	4
1.6. Conclusion	6
Chapter 2	8
2. Literature review	8
2.1. Defining shared leadership	8
2.2. Measuring shared leadership	9
2.3. Shared leadership and improved team outcomes	10
2.4. Antecedents of Shared leadership	16
2.5. Leadership approaches	18
2.6. Exchange	22
2.7. Conclusion	23
Chapter 3	25
3. Research questions	25
3.1. Research question 1: (Team connectedness)	25
3.2. Research question 2: (Leadership approach)	25
3.3. Research question 3: (Quality exchanges)	26
Chapter 4	27
4. Proposed Research Methodology and Design	27
4.1. Choice of methodology	27
4.1.1. Philosophy	27
4.1.2. Approach	27
4.1.3. Methodological choices	27
4.1.4. Purpose of research design	27
4.1.5. Strategy	28
4.1.6. Time horizon	28
4.1.7. Techniques and procedures	28

4.1.8.	Population	29
4.1.9.	Unit of analysis	29
4.1.10.	Sampling method and size	30
4.1.11.	Measurement instrument.....	31
4.1.12.	Data gathering process.....	32
4.1.13.	Analysis approach.....	33
4.1.14.	Quality controls	33
4.1.15.	Limitations	35
Chapter 5	37
5.	Results	37
5.1.	Description of sample	37
5.2.	Introduction to results.....	38
5.3.	Results for research question 1: (Connectedness)	39
5.3.1.	The influence of the leader on connectedness	39
5.3.2.	The influence of members on connectedness	49
5.3.3.	Contextual influences on connectedness	51
5.3.4.	Influence of exchange	52
5.3.5.	Degree of connectedness	55
5.3.6.	Outcomes of connectedness	55
5.4.	Research question 2: (Leadership approach)	56
5.4.1.	Non-formal leader humility.....	57
5.4.1.1.	Expectations of the humble leader	57
5.4.1.2.	Team perception of leader humility	58
5.4.1.3.	Team response to leader humility.....	58
5.4.1.4.	Outcomes of leader humility	59
5.4.1.5.	Boundary conditions of humility.....	60
5.4.1.6.	Limitations of humility	61
5.4.2.	Empowering leadership	62
5.4.2.1.	Empowering leader behaviour	62
5.4.2.2.	Task empowerment	64
5.4.2.3.	Internal team dynamics.....	66
5.4.3.	Participative leadership.....	66
5.4.3.1.	Expectation of the leader for participation	66

5.4.3.2.	Team perception of participative leadership.....	68
5.4.3.3.	Individual member influence on participation.....	69
5.4.3.4.	Contextual influence on participation.....	69
5.4.3.5.	Outcomes of participative leadership.....	70
5.4.3.6.	Limitations of participative leadership	71
5.5.	Research question 3: (High quality leader-member exchange).....	72
5.5.1.	Types of exchange.....	73
5.5.2.	Formal exchanges	73
5.5.3.	Informal exchanges	74
5.5.4.	Mix virtual and physical	76
5.5.6.	Trust for quality exchange	78
5.5.7.	Means of exchange.....	80
5.5.8.	Process of shaping outcomes	81
5.5.9.	Outcome expectations of exchanges.....	83
5.6.	Conclusion of results	84
5.6.1.	Conclusion of research question 1	84
5.6.2.	Conclusion of research question 2	85
5.6.3.	Conclusion of research question 3	87
Chapter 6	89
6.	Discussion of results	89
6.1.	Discussion of research question 1	89
6.1.1.	Leader influence on connectedness.....	89
6.1.2.	Members influence on connectedness	92
6.1.3.	Contextual influences.....	93
6.1.4.	Influence of exchange	94
6.1.5.	Degree of connectedness and its outcomes	95
6.1.6.	Conclusion of research question 1	95
6.2.	Discussion of research question 2	96
6.2.1.	Non-formal leader humility.....	97
6.2.2.	Empowering leadership	99
6.2.3.	Participative leadership.....	103
6.3.	Discussion of research question 3	107
6.4.	Conclusion of discussion of result	114

Chapter 7	115
7. Conclusion and recommendations	115
7.1. Principal conclusions	115
7.1.1. Research question 1 – Connectedness	115
7.1.2. Research question 2 – Leadership approach	116
7.1.3. Research question 3 – Exchange	118
7.1.4. Conclusion of principle findings	119
7.2. Implications for management and other relevant stakeholders	121
7.3. Limitations of the research	121
7.4. Suggestions for future research	122
8. Reference List	124
9. Appendices	130
Appendix 1 – Ethical clearance	130
Appendix 2 – Consistency matrix	131
Appendix 3 – Interview guide	132
Appendix 4 – Code report	136

List of tables

Table 1: <i>Description of sample diversity (gender, age, nationality, residence, tenure, internationally dispersed team experience, and specific team tenure)</i>	37
Table 2: <i>Themes associated with non-formal team connectedness.</i>	39
Table 3: <i>Themes associated with non-formal leader humility, empowering leadership and participative leadership</i>	56
Table 4: <i>Themes associated with high quality leader-member exchange</i>	72

List of figures

Figure 1: <i>A typical structure of internationally dispersed non-formal teams.</i>	2
Figure 2: <i>Key constructs studied.</i>	7
Figure 3: <i>Network illustration in internationally dispersed non-formal teams, adapted from Nordbäck and Espinosa (2019).</i>	10
Figure 4: <i>Overall framework of the constructs explored in this study</i>	24

Figure 5: <i>Addition of the research questions to the framework of the constructs explored in this study</i>	26
Figure 6: <i>Graph depicting code saturation</i>	38
Figure 7: <i>A framework for the establishment of connectedness between internationally dispersed non-formal team members</i>	96
Figure 8: <i>A framework of non-formal leader humility in dispersed teams</i>	99
Figure 9: <i>A framework of empowering non-formal leadership in internationally dispersed teams</i>	103
Figure 10: <i>A framework of participative leadership in internationally dispersed non-formal teams</i>	107
Figure 11: <i>A framework of quality exchange in internationally dispersed non-formal teams</i>	113
Figure 12: <i>Framework of leadership in internationally dispersed non-formal teams</i>	120

Chapter 1

1. Introduction to Research problem and purpose

1.1. Problem statement

As globalisation and the complexity of organisations increase, organisations are required to exploit the collective knowledge and leadership that rests within their business to remain competitive (Hoegl & Muethel 2016; Sweeney, Clarke & Higgs, 2019). One approach to achieve this is through the establishment of internationally dispersed non-formal teams. The dynamics between formal leaders of co-located teams are different from that of non-formal leaders of geographically dispersed non-formal teams. In addition, traditional leadership approaches become less effective when dispersion and cultural differences increase (D’Innocenzo, Mathieu, & Kukenberger, 2016; Sweeney et al., 2019), highlighting the need for alternatives. Shared leadership in the form of mutual horizontal influence has been found to improve outcomes of dispersed teams. However, even though the outcomes are known, current research does not provide sufficient insight into how non-formal leaders can facilitate the emergence of shared leadership in this context.

1.2. Purpose statement

The purpose of this study is to explore what the leadership behaviours of non-formal leaders are, that facilitate the emergence of shared leadership between the members of geographically dispersed non-formal teams. It informs a framework of non-formal leadership in dispersed work teams and thus contributes to the body of knowledge on shared leadership emergence in dispersed teams.

1.3. Problem context

Globalization is making it increasingly challenging for individual leaders to obtain the necessary knowledge, skills and experience to lead teams of knowledge workers through vertical leadership approaches (D’Innocenzo et al., 2016). Multi-national organisations are increasingly deploying horizontal structures, where employees are part of formal co-located work teams, in addition to being part of geographically dispersed non-formal project or functional teams (Hoch & Dulebohn, 2017). Additionally, traditional hierarchical reporting structures are changing, with centralised leaders who

are required to influence outcomes of dispersed teams without formal authority through reporting structures (Chiu, Owens & Tesluk, 2016). An example of such an arrangement is a country level subsidiary of a global organisation that has leaders for different functions of the business like a *marketing manager*, who are part of a formal team in their organisation. In addition, this person is concurrently part of another dispersed non-formal team such as a *regional community of marketing managers*.

The purpose of these non-formal teams is to; harness the collective knowledge and experience of its members toward defining more nuanced and informed strategies, increase functional innovation, and duplicate best practice. Even though these non-formal teams do not have formal reporting structures, the responsibility of team outcomes often rests with a non-formal leader such as a '*regional marketing manager*'. In this context, a leader needs to influence team outcomes without formal reporting structures, while concurrently dealing with the complexities of geographic dispersion (most often international). Figure 1 below visually illustrates the team context described in the preceding section.

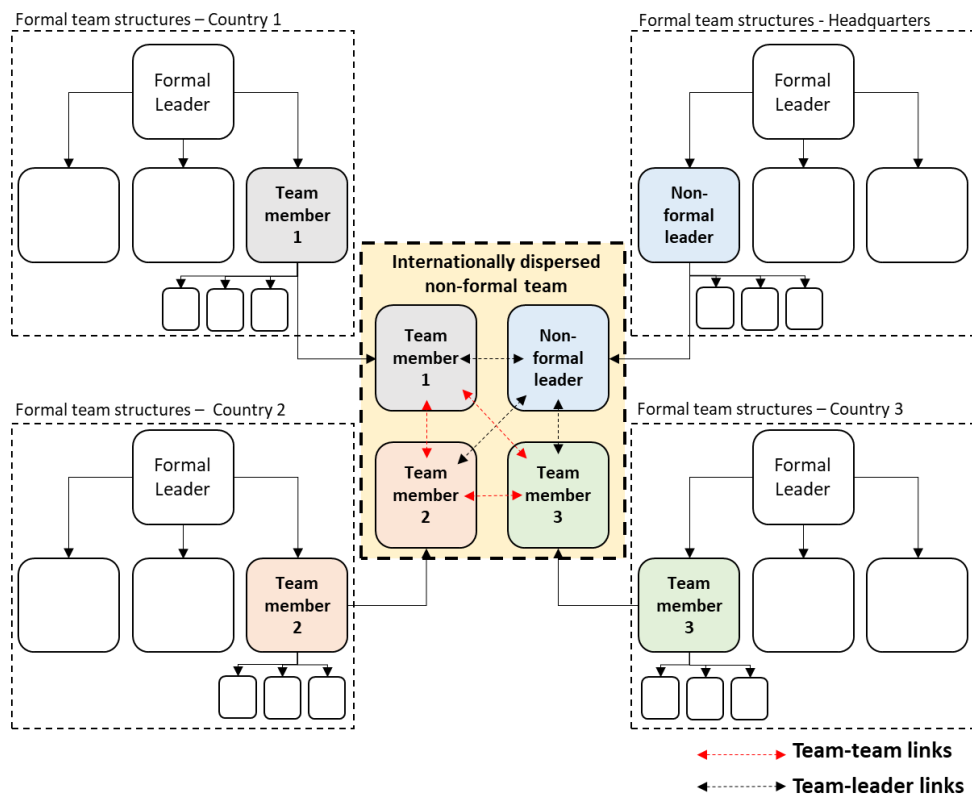


Figure 1: A typical structure of internationally dispersed non-formal teams.

1.4. The effectiveness of various leadership approaches in different contexts

Hoegl and Muethel (2016) found that vertical forms of leadership that are reliant on the direct influence of leaders on followers, are less effective when teams are dispersed geographically. *Transformational leadership* (Eisenberg, Post & DiTomaso 2019; Hoch & Kozlowski, 2014) and *leader-member-exchange* become less effective as teams become more dispersed, while shared leadership and structural supports in dispersed teams are positive determinants of team performance (Hoch & Kozlowski, 2014). The challenge is emphasised by the findings that more than half of global dispersed teams fail to reach their objectives due to ineffective coordination of their activities (Muethel, Gehrlein & Hoegl, 2012).

Traditional vertical leadership approaches such as empowering leadership, transactional leadership, and directive leadership, rely on the notion that there is some level of formal hierarchy or reporting structure (D’Innocenzo et al., 2016). This suggests that the leaders direct influence in a downwards direction onto the follower (D’Innocenzo et al., 2016). These forms of leadership will not provide sufficient guidance for leaders who need to influence laterally in a context where there is no formal reporting structures. As the complexity of organisations increase, and more leadership capacity is required to remain competitive (Hoegl & Muethel 2016), there is an opportunity and a need for organisations to deploy the leadership capabilities that rests within team members beyond formal leaders, to increase the organisation’s capability to exploit opportunities (Sweeney et al., 2019).

Scholars propose shared leadership as an alternative in the context of dispersed and virtual teams (Wu, Cormican & Chen, 2020; Hoch & Dulebohn, 2017). Hoch and Kozlowski (2014) and Hoegl and Muethel (2007) proposed that shared leadership resulting from proactive followership and mutual influence, is effective for leading dispersed teams to achieve higher individual and team level performance. The effectiveness of shared leadership that has been reported in many studies is underpinned by its ability to harness the collective experiences, competencies, and capabilities of a team, and its ability to enable dynamic leadership approaches where power and influence is not centralized, but distributed within the team through a leadership network (Sweeney et al., 2019).

Shared leadership is reported to improve team member's networking propensity, citizenship and social integration (Sweeney et al., 2019), all of which are challenges experienced by geographically dispersed and non-formal teams. Shared leadership has the biggest impact on team performance when the type of work requires extensive knowledge, is complex and the team members have a high levels of autonomy (D'Innocenzo et al., 2016; Sweeney et al., 2019). This context is consistent with that faced by many dispersed non-formal teams that could be deployed for reasons that could include; functional strategy development, project execution, serving as a '*competence centre*' to create and duplicate organisational best practice, or communities between globally dispersed functional level experts who represent their own individual markets in projects with specific objectives.

These teams are often led by leaders who fill senior strategic functions, but have no formal authority over the team members in terms of reporting structures. In this context, where there is a high level of autonomy, high geographic dispersion, complex and interdependent tasks, and significant cultural differences between members, traditional vertical leadership approaches are less effective (D'Innocenzo et al., 2016; Sweeney et al., 2019). Yet, these conditions described creates an environment conducive for the emergence of shared leadership (D'Innocenzo et al., 2016; Sweeney et al., 2019).

When individual team members themselves enact leadership within the team, they share more information and resources, and have higher levels of commitment toward the team (D'Innocenzo et al., 2016). This is valuable to members of dispersed teams who are often deprived of information and resources and can feel isolated as a result. Non-formal leaders are highly dependent on the support and contribution of team members of non-formal teams. This is due to the contextual and functional level knowledge and expertise the team needs to achieve its objectives. Non-formal leaders face a challenging leadership context were they have to deliver the same outcomes as formal leaders without the support of formal reporting structures, which supports the exploration of how a non-formal leader can personally facilitate shared leadership within the team.

1.5. Antecedents of shared leadership

There are extensive studies into the antecedents of shared leadership in terms of; the internal and external environment, task characteristics, and team characteristics

(Serban & Roberts, 2016; Sweeney et al., 2019). The majority of the antecedents of shared leadership identified in prior research as discussed by Sweeney et al. (2019) are not within the direct control of non-formal leaders of dispersed non-formal teams. The average age, gender and cultural diversity, in addition to task related aspects such as interdependence and cohesion discussed by Sweeney et al. (2019), are mostly fixed in the short to medium term.

Knowing these antecedents could help interested organisations understand how to create holistic environments that could support shared leadership emergence within the organisation, and could support efforts to source and select effective future team members (Chiu et al., 2016). However, it is less helpful for individual non-formal leaders who want to pragmatically facilitate shared leadership within a team to improve team outcomes. As teams become more dispersed, a formal team leader's ability to communicate directly and frequently diminishes, and with it, the leader's ability to influence the team members directly (Avolio, Kahai, & Dodge, 2000). It can thus be expected that the effectiveness of direct influence by a non-formal leader will be even less in dispersed teams.

Shared leadership increases in dispersed teams as the number of team members that enact proactive followership and mutual influence increases (Hoegl & Muethel, 2007). This in turn results in better team and individual level outcomes, as team members search for information and feedback to increase the quality of their task level strategies, and better align with overall team objectives (Hoegl & Muethel, 2007). In a recent meta-analysis Wu et al. (2020) identified aspects of the **internal team environment** such as; understanding objectives, emotional and psychological strength, and participative decision making, in addition to **team characteristics**; like heterogeneity, as antecedent of shared leadership, but acknowledge that further exploration should be done.

Zhu, Liao, Yam and Johnson (2018) conducted a review of the research on shared leadership and identified antecedents related to the *formal team leader* which include several vertical leadership approaches such as empowering leadership, transformational leadership, and leader-member-exchange. All of these vertical forms of leadership have been identified as less effective in dispersed teams (Eisenberg et al., 2019; Hoch & Kozlowski, 2014; Hoegl & Muethel, 2016), and are built on the premise of

formal authority or hierarchy, which is less applicable to non-formal leaders without formal reporting lines. More research is required into the interactional relationships that influence the decisions of team members to share in the leadership process (Sweeney et al., 2019). These findings support the view that there is a need for further research on shared leadership emergence in dispersed non-formal teams.

Sweeney et al. (2019) identified that the study of shared leadership have been focused on non-commercial organisations in the past and suggests that more qualitative research is required into shared leadership in diverse commercial contexts to expand our understanding of this type of leadership across different organisation settings. This study aims to address this call to action. As the distal outcomes of shared leadership has been well documented, and as much of the research into the antecedents of shared leadership only focuses on influences such as *team environment*, *task environment*, and *team level characteristics*, Serban and Roberts (2016) suggests that further qualitative research should be done to understand the antecedents of shared leadership in more depth.

Chiu et al. (2016) studied the influence of formal leader humility on shared leadership in teams. They highlight the difference between formal leaders and non-formal leaders in modern organisational structures, and suggest that there is a need to further explore how non-formal leaders, who are not directly assigned to a team in terms of reporting structures, can influence the emergence of shared leadership (Chiu et al., 2016). This would contribute to a deeper understanding of how to facilitate shared leadership emergence. Chiu et al. (2016) explains that earlier shared leadership research concentrated on the influence of the formal leader on shared leadership of the team, through supportive actions and by granting leadership authority to the members of the team. However, it has not been established whether this supportive leadership behaviour is effective in all contexts to increase shared leadership (Chiu et al., 2016).

1.6. Conclusion

Our current understanding of shared leadership is limited in terms of how its emergence can be facilitated in organisations, as well as the conditions under which this type of leadership approach is effective (Chiu et al., 2016). The need for further research into the antecedents of shared leadership is echoed by Zhu et al. (2018), based on the

potential it has to improve the effectiveness of teams. Figure 2 below provides an overview of the aim of the study to explore the non-formal leadership behaviour that facilitate shared leadership emergence for the realisation of improved performance in the context of internationally dispersed non-formal teams.

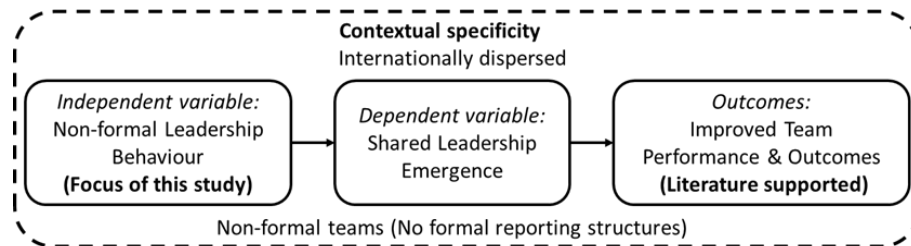


Figure 2: *Key constructs studied.*

Chapter 2

2. Literature review

2.1. Defining shared leadership

D’Innocenzo et al. (2016) defines shared leadership as follows, “*Shared leadership is an emergent and dynamic team phenomenon whereby leadership roles and influence are distributed among team members*” (p. 5). Sweeney et al. (2019) explained that shared leadership in commercial organisations are concerned with informal peer-to-peer influence toward goals achievement, which is typical in horizontal organisational structures. Chiu et al. (2016) proposed that shared leadership can be defined in terms of a collective leadership network created over time through the interactions of team members who assume the role of both leader and follower by allowing themselves to influence the team when needed, while being open to being influenced by others in other cases, to achieve team outcomes.

Song, Gu and Cooke (2020) explain that shared leadership is entrenched in the engagements between team members where leadership responsibility is coordinated and distributed among members, so that each member leads and follows concurrently. Hoegl and Muethel (2016) adds that shared leadership entails team members engaging in leadership behaviour that extends beyond their own team responsibilities, to include leadership of the interconnected activities of everyone in the group. Nicolaidis et al., (2014) emphasised that shared leadership involves mutual influence during interactions between team members who voluntarily share leadership functions within the team. D’Innocenzo et al. (2016) explained that shared leadership is most often informal in nature and emanates from within the team, however they acknowledged that this is not conclusive and that shared leadership structures can be constructed formally.

D’Innocenzo et al. (2016) suggested that shared leadership should be viewed in terms of the distinctive influence of individual team members on one another through the distribution of leadership among members, and not as equally distributed leadership among all members. They went on to explain that shared leadership is dynamic, and it changes over time as the distribution of leadership shifts within the team to individual members or multiple members at the same time (D’Innocenzo et al., 2016). These shifts

happen based on the various leadership roles and responsibilities that might be required for the team to achieve their desired outcomes (D’Innocenzo et al., 2016).

Zhu et al. (2018) reviewed the definitions of shared leadership defined by several authors over the past two decades and identified three common elements that emerged from most definitions. The first element is that shared leadership involves *peers influencing each other laterally* as opposed to conventional vertical influence (Zhu et al., 2018). The second element is that shared leadership *emerges at team level* and is associated with the collective leadership influence that resides in the group (Zhu et al., 2018). And the third commonality is that shared leadership entails the *distribution of leadership influence* between the members of the team as opposed to leadership influence that are centralised with individuals (Zhu et al., 2018).

2.2. Measuring shared leadership

In the context of dispersed and informal teams, led by non-formal leaders (No formal reporting structures), this study looks at the propensity of individual team members to share in the leadership by performing formal leadership functions within the team. It also looks at how this shared leadership propensity is facilitated through the behaviour of the non-formal leaders to which the team members are linked. D’Innocenzo et al. (2016) supported this approach with their findings that the measurement approaches of shared leadership contributed significantly to the differences between the reported influence of shared leadership on team outcomes. They further specify that network distribution approaches reported a higher correlation between team performance and shared leadership, than those studies using aggregated measurements (D’Innocenzo et al., 2016).

This suggests that shared leadership should not be viewed in terms of the aggregate leadership of the team as a whole, but rather in terms on the amount and quality of influence interactions that happen between individual members of the team (Wu & Cormican, 2016). Zhu et al. (2018) also explained that by taking a social network approach, the antecedents and outcomes of shared leadership can be studied at the individual level, as it looks at the individual connection between different members of the team. Figure 3 below illustrates the possible networks that can exist within internationally dispersed teams.

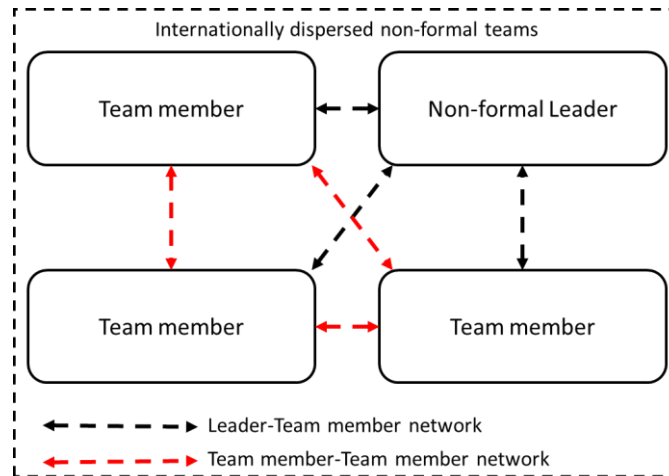


Figure 3: *Network illustration in internationally dispersed non-formal teams, adapted from Nordbäck and Espinosa (2019).*

2.3. Shared leadership and improved team outcomes

Shared leadership and team performance

Higher levels of shared leadership within dispersed and co-located teams was found to be a strong predictor of improved team outcomes in several studies and research into the field of shared leadership have increased substantially over the last two decades (D’Innocenzo et al., 2016; Hoch & Dulebohn, 2017; Hoch & Kozlowski, 2014; Hoegl & Muethel, 2007; Hoegl & Muethel 2016; Wu et al., 2020; Zhu et al., 2018;). Nicolaides et al. (2014) looked at vertical leadership and shared leadership independently, and found that their influence on team performance were similar, however, they found that when they are combined, shared leadership supports an incremental increase of performance outcomes in addition to the effects of vertical leadership. This finding provides promising insight into informal dispersed teams, whose members are in most cases exposed to both vertical and horizontal forms of leadership influence that comes from a formally assigned hierarchical leader that is often located close to the team members, as well as a non-formal leaders of the informal dispersed team.

Shared leadership and common goal orientation

Even though the positive effects of shared leadership is advocated widely, a recent study provides an important caveat to consider, which is related to the low authority differentiation that shared leadership introduces into teams. The concept of authority

differentiation was introduced to describe a collective body of theory (which includes shared leadership) that relates to how decision making responsibility in teams are distributed either *among all the members (Low authority differentiation)* or centralised with a few members or *individual (High authority differentiation)* (Nederveen Pieterse et al., 2019).

Nederveen Pieterse et al. (2019) studied the effects of common goal orientation on teams where there is *low authority differentiation*, and found that it is necessary for these teams to have a common goal orientation. These findings are based on the view that if members have different perspectives of what the goal is, their efforts and strategies would not be aligned, which would lead to wasted energy that could be applied towards sharing and discussing information, perspectives, and ideas that support task execution (Nederveen Pieterse et al., 2019; Nordbäck & Espinosa, 2019). In internationally dispersed non-formal teams, the authority that rests with the leader differs between teams based on the specific context and based on the perception of hierarchy that the team members have of the non-formal leader. It can however be argued that in general there is lower *authority differentiation* between the members of the non-formal teams and the non-formal leader, when compared to teams where there are formal reporting structures in place. *This emphasises the importance for a common goal orientation in non-formal teams, and highlights the need to understand the process of aligning internationally dispersed non-formal team members towards a common goal.*

Coordination of leadership

A great deal of coordination is required between internationally dispersed team members due to differences in time zones and cultures (Hoegl & Muethel 2016), making collaboration on team tasks increasingly complex and introduces significant task interdependencies. In the context of high interdependencies, shared leadership has a greater influence on team performance (Fausing, Joensson, Lewandowski & Bligh, 2015; Zhu et al., 2018), supporting its applicability to dispersed informal teams. In a recent study conducted in the context of globally dispersed virtual teams, Nordbäck and Espinosa (2019) found that for shared leadership to be effective in this context there has to be explicit coordination of the shared leadership behaviours and activities that are undertaken in the team. Their findings indicate that if the share leadership activities are

not formally coordinated in this context, it could lead to shared leadership having detrimental impact on team performance as members are potentially being 'led' away from overarching team objectives (Nordbäck & Espinosa, 2019).

Seshadri and Elangovan (2019) also highlights some of the complexities of leading globally dispersed teams as; *acknowledging and managing significant differences* between individual team members (such as culture, values, norms, work ethics etc.); *coordinating the individual competencies* of team members toward effective outcomes; and *maintaining effective communication*. (Nordbäck & Espinosa, 2019) provide insights into two ways shared leadership behaviour in teams can be coordinated. The first is through behavioural leadership coordination that happens *mechanically* through processes or management tools, or *organically* through meetings and information sharing (Nordbäck & Espinosa, 2019). The second is implicit coordination through the perceptions of whether an emerging leader is legitimate or whether team members see themselves as being legitimate leaders (Nordbäck & Espinosa, 2019). ***These findings support the further exploration of how leadership activities should be coordinated in internationally dispersed non-formal teams and how members of the team can legitimise their own leadership or see legitimacy in the leadership of their peers.***

Internal team environment

Several studies found that shared leadership, based on its ability to improve trust, cohesion, and learning within the team, increases team performance and effectiveness (Sweeney et al., 2019). Zhu et al. (2018) identified that shared leadership increases team and task satisfaction, which could improve team efficacy and goal commitment, which has been identified as mediators between shared leadership and other distal outcomes. Serban and Roberts (2016) found that shared leadership improves the satisfaction that team members experience after completing a task that was ambiguous to start, however they did not find evidence of shared leadership influencing team performance and team satisfaction when shared leadership was tested as a moderator between these outcomes and task cohesion and the internal team environment. This suggest that shared leadership does not significantly increase performance outcomes when there is existing task cohesion and a positive team environment. ***Due to the diversity of contexts experienced by internationally dispersed team members,***

task cohesion is difficult to facilitate, supporting the applicability of shared leadership in this context.

Harnessing collective knowledge for creativity

The ability to harness the collective knowledge of team members with diverse perspectives is one of the main reasons driving the establishment of internationally dispersed teams (Hoegl & Muethel 2016). Vandavasi, McConville, Uen and Yepuru (2020) found that when members of a team engage in acts of knowledge sharing, team innovation is likely to increase. They further identified that shared leadership mediates the positive impact of knowledge sharing on innovation behaviour (Vandavasi et al., 2020), providing support for the positive effects and importance of shared leadership on team and individual level innovation.

Zhu et al. (2018) explains that shared leadership improves the creativity and innovation of teams, which are outcomes that are necessary for the success of informal teams of knowledge workers assigned to complex and often, ambiguous projects. Shared leadership in engineering design teams increased team creativity when shared leadership strength was measured using network density in a study by Wu and Cormican (2016). Song et al., (2020) describe creativity as fundamental for enabling organisations to increase or maintain a competitive advantage, and found that shared leadership can be facilitated through autonomous work environments, which in turn will lead to increase team creativity.

Song et al., (2020) also found that shared leadership mediates the positive relationship of *'high involvement work systems'* on team creativity, further supporting its applicability. These are all outcomes that are desired in the context of internationally dispersed non-formal teams, assembled with the objective of harnessing the collective intelligence of all members (Hoegl & Muethel 2016). Lyndon, Pandey and Navare (2020) recently found that without team learning, shared leadership would not result in increased team creativity. ***These findings point towards the need for a team environment and leader that supports and encourages learning, for the positive effects of shared leadership to be realised.***

Trust

The results from a study conducted recently by Klasmeier and Rowold (2020) showed that through building trust, and by applying transformational leadership, organisations could increase shared leadership emergence. In another study conducted by Lyndon et al., (2020) cognitive trust was found to support the emergence of shared leadership in teams. Seshadri and Elangovan (2019) emphasises the importance of building trust in globally dispersed teams to support sharing of information between members, and to achieve increased performance. The importance of trust between members of dispersed (virtual) teams is emphasised by Breuer, Hüffmeier and Hertel (2016), who found that trust has a positive influence on team performance, with this positive influence being more pronounced in virtual teams than in physical teams. It was further found that shared leadership mediates the positive effect of trust and transformational leadership on team performance and creativity outcomes (Klasmeier & Rowold, 2020), emphasising the value of shared leadership approaches in teams.

Trust can be built between different entities such as between members of the team, or trust in the leader, all of which have a positive influence on team performance (De Jong, Dirks & Gillespie, 2016). In the context of internationally dispersed teams, trust takes longer to build than in co-located teams due to the lack of physical interaction and the nature of virtual interactions (Seshadri & Elangovan, 2019). Virtual communication is subconsciously perceived to be more risky than physical communication, due to the limited ability to interpret body language or expressions that can lead to miss interpretations, misunderstanding or conflicts (Breuer et al., 2016). Higher risk perception increases the need for trust to enable members to share important information, provide open feedback, request support, display vulnerability, and engage in constructive conflict, which would increase coordination and effectiveness (Breuer et al., 2016). ***The importance of trust in dispersed teams cannot be more pronounced in the literature, which accentuates the validity of exploring its emergence in teams, to support shared leadership.***

Team virtuality and connectedness

Virtuality and high-dispersion is defined in terms of the extent to which members are located in different geographic locations, interactions are primarily facilitated through

electronic (virtual) means, culture and nationalities are different, and time zones are different (Eisenberg et al., 2019; Hoch & Dulebohn, 2017). Zhu et al. (2018) explain that team virtuality and team connectedness positively moderates the outcomes of shared leadership. In addition, elements like *shared mental models*, *team trust*, *team cohesion*, *team consensus*, *information sharing*, and *coordination of roles*, serve as mediators between shared leadership and performance, creative and attitudinal outcomes (Zhu et al., 2018). For geographically dispersed teams, the predominantly digital interactions between team members suggest a high level of virtuality, which supports the use of shared leadership in this context. Members of dispersed teams often experience different environmental contexts such as different societal cultures and norms, which creates barriers to understanding and trusting each other, resulting in ineffective communication and collaboration (Eisenberg et al., 2019).

In internationally dispersed teams, inspirational leadership was found to positively contribute to team trust if the leader creates and shares a common goal, encourages individual exchanges between team members without the leader's involvement, and displays trust in the abilities of the team members (Seshadri & Elangovan, 2019). The positive effects of trust on performance is underpinned by team members that can show vulnerability and apply their energy and efforts to productively contributing to the team, as opposed to trying to guard against the perceived ill intentions of other team members (De Jong et al., 2016). Creating trust and a feeling of connectedness between the members of the team and between the leader and members, is challenging in the context of internationally dispersed and non-formal teams. We make the following argument based on these findings: *Due to the contextual challenges of facilitating connectedness, trust, cohesion, consensus, shared mental models, and coordination among the team, in addition to the importance of these elements to shared leadership effectiveness, it is important to explore how these outcomes can be achieved in internationally dispersed non-formal teams.*

As an overarching question this research explores how a non-formal leader could create a 'bridge' between dispersed (virtual) team members to improve 'connectedness' (Used as overarching concept for trust, cohesion, consensus, shared mental models, collectivism). This will support shared leadership

emergence (Zhu et al., 2018), and support its positive outcomes as described in the preceding literature.

2.4. Antecedents of Shared leadership

In a meta-analysis conducted by Sweeney et al. (2019), the antecedents of shared leadership in commercial organisations are discussed under four team related themes, which include; characteristics of the individual team members, the composition of the team, the internal environment (Serban & Roberts, 2016), and external team environment.

Individual characteristics

Individual team member characteristics that supports shared leadership emergence include integrity, commitment, conscientiousness and an eagerness to learn and gain new experiences (Sweeney et al., 2019). In terms of dispersed non-formal teams, the influence of the non-formal leaders on individual characteristics is limited in the short to medium term. In the medium to long term, this could potentially be influenced through development programs, sourcing, and selection processes. Other individual factors that influence team members' propensity to engage in shared leadership is feeling of being fairly rewarded for efforts, and psychological empowerment (Grille, Schulte & Kauffeld, 2015). In the context of non-formal teams, the non-formal leader is often not in control of extrinsic rewards of team members, however the leader can reward members for efforts through other means such as recognition for quality contribution or opportunities for exposure and development.

Team composition and characteristics

Team composition that support shared leadership emergence include higher number of female team members, lower average age of the team members and increased national diversity (Sweeney et al., 2019). Hoch and Dulebohn (2017) reviewed the extent literature on team personality composition and shared leadership in virtual teams, and proposes that the top five personality traits (emotional stability, agreeableness, extraversion, conscientiousness, and openness) at the team-level (team personality), are positively related to shared leadership emergence. Internationally dispersed teams typically have a high cultural diversity, which should support shared leadership

emergence, however gender and generational diversity is not a given. Team composition, similar to individual characteristics, are not within the control of the non-formal leaders, and can be influenced through human resource management practices in the medium to long term.

Zhu et al. (2018) describe team level characteristics such as team collectivism, integrity, trust, personality, voice and a shared vision as antecedents of shared leadership. Serban & Roberts (2016) identified task cohesion as an antecedent of shared leadership. A common purpose, support, trust among team members, and team member voice, are all part of the team environment that support shared leadership emergence (Sweeney et al., 2019; Zhu et al., 2018). Drescher & Garbers (2016) identified that having a team environment that is collaborative and where members support each other, supports shared leadership by enabling members to feel that they have; social support; a shared purpose; the ability to participate, and a voice. ***We explore how the internal team environment of internationally dispersed non-formal teams can be improved by linking these antecedents to the concept of team connectedness, to gain a better understanding of how shared leadership can be facilitated.***

Dispersion and the non-formal team

Leadership is complicated in internationally dispersed non-formal teams due to members' inability to interact in person, in addition to internal organisational conflicts that team members might have, such as commitments towards their formal teams (Hoegl & Muethel, 2016). Conflicting priorities will prevent team members from committing to non-formal team objectives, and will result in reduced levels of engagement and participation. The authority that the *formal leader* of a team has supersedes the authority of the *non-formal leader*, which would influence the leader's ability to apply direct influence.

The conflict between commonality and diversity

In the context of vertical leadership, *leader prototypicality* encourages members to engage in leadership behaviour (Grille et al., 2015). Aspects of internationally dispersed non-formal teams, like cultural diversity or context of the geographic location of members could reduce the perception of the leader being prototypical of the group. Drescher and

Garbers (2016) indicates that shared leadership emergence and its outcomes are supported by commonality of team members, as commonality encourages ongoing interactions and communication between team members where knowledge is shared and where leadership can be exchanged. Highly diverse internationally dispersed teams could have challenges with developing a feeling of commonality.

The functional diversity (such as differences in perspectives or experiences) that was found to support shared leadership emergence (Kukenberger & D’Innocenzo, 2020), could reduce the perception of a collective identity for teams in this context, who might feel that their context is so different to the rest of the team that they cannot relate. A collective identity shared between the members of the team enables collective leadership to emerge, while incongruence of the values of different team members reduces team members’ participation in team activity (Drescher & Garbers, 2016). ***This raises the question of how the diversity of the members of internationally dispersed non-formal teams can be harnessed for team performance, and mitigate the possible negative impact on the team’s collective identity, to support shared leadership emergence. This question is linked to non-formal team connectedness which is explored in this study.***

2.5. Leadership approaches

Leader humility

Even in a formal leadership context, conventional leadership approaches that aim to exert direct influence over team members towards outcomes are less ineffective when members become dispersed (Hoegl & Muethel, 2016). Chiu et al. (2016) and Zhu et al. (2018) found that, in the context of a formally assigned leader, high leader humility positively influences shared leadership within a team, while this relationship is strengthened by the proactive personality of team members.

They further explained that formal team leaders can exercise behaviours like; praising team members publicly to bring attention to their capabilities; making team members exemplars; or being open to learning from team members, which will support feelings of mutual dependence within the team and support shared leadership (Chiu et al., 2016). ***This raises the question whether the humility of the non-formal leader will have***

the same influence as that of a formal leader on team members' propensity to share in the leadership of the team, considering that humility could potentially be perceived in a different light when it is displayed in the absence of hierarchy or formal reporting lines.

Participative leadership

Sweeney et al. (2019) identified participative leadership behaviour, which is associated with empowerment, as antecedent of shared leadership. Nicolaidis et al. (2014) explained that if team members engage in shared leadership, information is shared more freely and member participation increases, which improves team effectiveness and commitment. As dispersed informal team members also have other responsibilities toward their formal co-located teams, their participation in informal team activities could be limited, depriving the team of possible valuable information and contributions. This supports the view that shared leadership could be a feasible alternative leadership approach in this context.

When considering the definition of shared leadership discussed earlier as a phenomenon where members of the team exert mutual influence over one another to achieve team goals (D'Innocenzo et al., 2016), it can be contrasted with teams that have strong informal hierarchies where influence ability is concentrated with few influential team members (Oedzes, Rink, Walter & Van Der Vegt, 2019). Even though informal hierarchies positively influence certain team outcomes in specific contexts, it could lead to *reduced team creativity* by reducing the amount of diverse perspective that are shared in the team, as only individuals higher in the hierarchy are able to exert influence while others only follow (Oedzes et al., 2019).

Many internationally dispersed non-formal teams are created with the specific intention of leveraging the diversity of information, knowledge, experience, and perspectives that rest with the individual members of the team (Hoegl & Muethel 2016). Kukenberger and D'Innocenzo (2020) found that functional diversity supports shared leadership emergence, but emphasises that this relationship only holds true if the diversity of perspectives, knowledge, and information is valued in the team and if there is a positive climate where all members can participate in constructive debate of differing views.

Oedzes et al. (2019) shared the same view that team members need to be able to participate in constructive debate where differing views can be combined to construct inclusive outcomes and to be creative. In internationally dispersed non-formal teams (no formal reporting structures) there is a high probability that informal hierarchies could emerge as members of the non-formal team try to establish where they fit in the team, or as new members join established teams, where hierarchies already exist. This has implications for shared leadership emergence, which is contingent on mutual influence, participation (Sweeney et al., 2019), and inclusion of diversity Kukenberger and D’Innocenzo (2020).

Even though national and functional diversity could support shared leadership emergence in teams, the fact that the team members are dispersed internationally could reduce the team’s ability to create an environment where the team feels like they are a collective unit that has a voice and that can trust each other to work toward achieving a shared vision. This view is supported by Seshadri and Elangovan (2019) who propose that the leader should foster trust, ensure inclusive communication that is equitable and adapted to suit members’ communication needs, and be considerate and adaptive to cultural differences. ***This highlights the importance of understanding what the informal leaders’ role is in the creation of a team environment where team members are willing to engage and participate. This raises the question: Would participative leadership by the non-formal leader encourage team members to share in the leadership of the team?***

Empowering leadership

Empowering formal leader behaviour such as; providing members autonomy and authority to act and take decisions; encouraging within-team information exchange; and providing freedom of expression, would encourage more team members to exert influence over team outcomes (Oedzes et al., 2019), and by definition support share leadership. Several authors who found that vertical empowering leadership (Fausing et al., 2015; Sweeney et al., 2019; Zhu et al., 2018) and psychological empowerment (Grille et al., 2015) increases the probability of shared leadership emergence, supports this notion.

Hoegl and Muethel (2016) found that a significant portion of leaders underestimate the levels of shared leadership that exist in teams, causing leaders to undermine team performance by not giving members enough autonomy and empowerment to influence how team outcomes are achieved. This is especially harmful in internationally dispersed teams, where it is impossible for the non-formal leader to have direct control over the actions of team members. Leaders undermine the emergence and effectiveness of shared leadership by; *not acknowledging that leadership can be shared* in the team; *being over confident* in their leadership ability; and by having a *fear of making themselves redundant* (Hoegl & Muethel, 2016).

Eva, Cox, Tse and Lowe (2019) defined a number of interventions that could be used to facilitate collective leadership such as *appreciative enquiry* and *dynamic facilitation*. Furthermore, if leaders can; *accept their limited influence* and bounded knowledge of what team members need to do; show *respect for the competence* of the members of the team; actively encourage the *distribution of task leadership*; engage in *participative decision making*; and reduce perceived hierarchy by becoming a '*member of the team*', shared leadership can be enabled (Hoegl & Muethel, 2016).

It must be noted that the studies included in the meta-analysis performed by Sweeney et al. (2019) and other cited authors, does not sufficiently address the behaviour that a ***non-formal leader*** of a dispersed *non-formal team* can use to facilitate shared leadership. Most of these antecedents are defined in the context of co-located teams (apart from Hoegl and Muethel (2016)) with formal leaders, which leaves its applicability to a non-formal leaders of dispersed teams open for exploration. Hill and Bartol (2016) studied the effects of empowering leadership on geographically dispersed teams who predominantly engage using virtual means, and found that empowering leadership has a positive effect on virtual collaboration of teams, the effect of which increases as members become more dispersed.

By its nature, empowering leadership is a vertical process, yet the non-formal leaders of dispersed teams could potentially have other means of empowering team members beyond vertical means. The non-formal leaders, in the context described in the problem statement, often have access to valuable resources that could empower team members. This could potentially include; access to information, organisational influence, and

physical resources to name but a few. The non-formal leaders also have the ability to apply participative leadership approaches in this context, by encouraging and enabling team member participation to influence and shape decisions and outcomes. ***This raises the question: What are the empowering behaviours of non-formal leaders that would influence team members to share in the leadership of the team?***

2.6. Exchange

Transformational leadership, coaching, and quality leader-member exchanges, are formal leader factors that serve as antecedents for shared leadership (Zhu et al., 2018). Shared leadership has been positioned as a social-relational construct that is associated with *dialogic organisation development*, which refers to the influencing of a group through interventions in the form of dialogue (Eva et al., 2019). The concept of shared leadership is embedded in the notion that influence exchanges and network creation between team members happens during interactions and engagements (Song et al., 2020; Chiu et al., 2016). Dispersed team performance is significantly influenced by effective communication, with un-prompted informal communication specifically supporting team effectiveness (Eisenberg et al., 2019). If team members and formal leaders engaged in high quality leader-member exchanges, the team members are more likely to take on a leadership role in informal contexts (Zhu et al., 2018).

To further understand how to facilitate shared leadership, we refer back to the measurements of shared leadership. High network density in the form of a higher numbers of leadership ties between multiple members of the team, increases the teams' ability to share knowledge (Wu & Cormican, 2016). This *increased knowledge sharing* increases the teams' creative capacity, while network centralisation has the opposite effect (Wu & Cormican, 2016). From these findings, the argument is made that increased network density should be combined with high quality engagements between members of the team, to share knowledge and experience that support learning.

In internationally dispersed non-formal teams, network density could become centralised if most of the leadership ties are formed with the non-formal leader, and if ties are not extended between the members of the team. This emphasises the need to understand how to increase the connection between team members and how quality exchanges can be facilitated. It was already mentioned that leader-member exchange

become less effective as teams become more dispersed (Hoch & Kozlowski, 2014). ***This raises two questions. Can non-formal leaders have the same influence as formal leaders on the leadership propensity of non-formal team members, through individual exchanges? What is the nature and type of exchanges in a dispersed context that are most likely to influence team members to share in the leadership of the team?***

2.7. Conclusion

It has been established and is well supported that existing research does not fully describe the antecedents of shared leadership (Chiu et al., 2016; Fausing et al., 2015; Hoch & Kozlowski, 2014; Muethel et al., 2012; Serban & Roberts, 2016; Zhu et al., 2018). None of the studies presented explores leadership behaviour that facilitate shared leadership emergence from the perspective of the team members, and studies of the antecedents of shared leadership in the specific context of geographically dispersed teams are sparse. Furthermore, these studies consider formally appointed leaders of teams, and does not consider informal leadership structures.

Current research does thus not provide sufficient insight into what non-formal leaders can do to facilitate the emergence of shared leadership in the context of internationally dispersed non-formal teams. This study qualitatively explores how shared leadership can be facilitated through the *increase of network density* in internationally dispersed non-formal teams, by taking a combined approach of; *increasing team connectedness, participative leadership, empowering leadership, leader humility*, and through *high quality exchanges*.

From the literature reviewed, the following arguments are made to frame the research objective. Connectedness will support more frequent and higher quality engagements between the members of the team that extends beyond the non-formal leader, thus increasing the number of leadership ties. Through participative leadership, these leadership ties can be exploited by facilitating inclusivity of the diversity of perspectives that have been found to support performance outcomes and shared leadership.

Through empowering leadership, the members of the team will be empowered with the necessary resources, support and authority to take on leadership roles in the team and

to engage freely without the non-formal leader orchestration. Leader humility will support an environment where members are more open to engage with the leader on a peer-to-peer basis, and thus be more open to taking leadership roles in the team. Finally, high quality exchanges will support the increase of network density by increasing the number and effectiveness of individual exchanges where information, knowledge, and leadership are exchanged, thus strengthening the networks and relationships in the team. Figure 4 below provide an overview of the key constructs that were identified in the literature that are explored in this study, in the specific context of internationally dispersed non-formal teams.

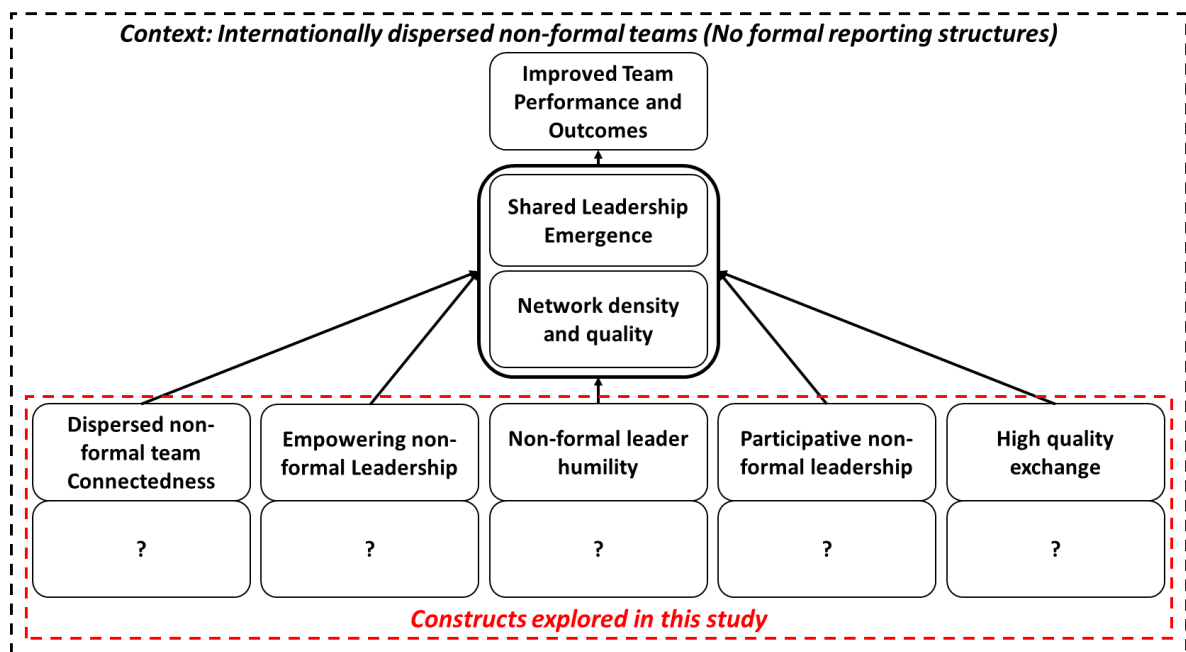


Figure 4: Overall framework of the constructs explored in this study

Chapter 3

3. Research questions

The following research questions that this study aims to answer intends to expand our understanding of the facilitation of shared leadership emergence in dispersed non-formal teams.

3.1. Research question 1: (Team connectedness)

What non-formal leader behaviours support increased connectedness between dispersed non-formal team members?

To answer this question, the researcher explored what team members perceive as non-formal leader behaviours that facilitate; *the creation of connections between team members; improved team trust; a feeling of being a collective; increased team voice; and the willingness to influence team decisions* (Sweeney et al., 2019; Zhu et al., 2018). Answering this question provides guidance to leaders on how to narrow the ‘perceived distance’ between dispersed non-formal team members to facilitate the emergence of shared leadership.

3.2. Research question 2: (Leadership approach)

*How do team members of dispersed non-formal teams perceive and react to **non-formal leader humility, empowering behaviour, and participative leadership** by the non-formal leader?*

To answer this question, the researcher explored how team members’ perception of non-formal leader humility influence their willingness to share in the leadership of the team (Chiu et al., 2016; Zhu et al., 2018). The researcher explored the role that empowering behaviour and participative leadership plays in influencing the team members toward shared leadership (Fausing et al., 2015; Sweeney et al., 2019; Zhu et al., 2018). Each construct was explored individually in this study, as the literature suggests that these leadership approaches individually support shared leadership emergence in other contexts. Answering this question provides practical guidance to leaders about what are appropriate leadership styles to deploy in this leadership context.

3.3. Research question 3: (Quality exchanges)

What type of exchange behaviour will facilitate shared leadership emergence in dispersed non-formal teams?

To answer this question, the researcher explored what the nature is of leader-member-exchanges between team members and the non-formal leader that support the propensity of team members to exert leadership, and to identify what are the most appropriate and effective means of exchange for shared leadership to be achieved (Hoch & Kozlowski, 2014; Zhu et al., 2018). Answering this question provides practical guidance to leaders on how to manage exchanges with non-formal dispersed team members to facilitate shared leadership.

Figure 5 below is a repeat of figure 4 in chapter two, with the addition of the research questions related to the different constructs.

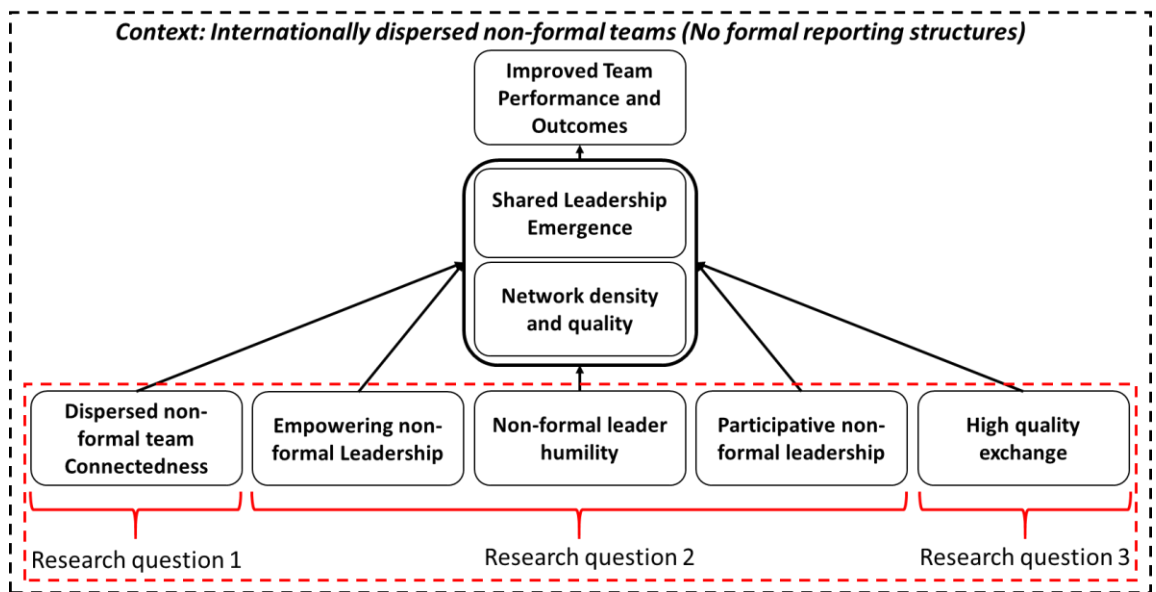


Figure 5: Addition of the research questions to the framework of the constructs explored in this study

Chapter 4

4. Proposed Research Methodology and Design

4.1. Choice of methodology

4.1.1. Philosophy

The philosophy of the qualitative case study was *interpretivism* (Yazan, 2015), which involved the subjective interpretation of information gathered from personal interviews with individuals about their subjective perspectives (Bhattacharjee, 2012). Kelliher (2011) explain that interpretivism takes the view of a socially constructed reality, where there is great opportunity for the in-depth understanding of perceptions of individuals considering the uniqueness of a specific context (Yazan, 2015). This philosophy enabled the in-depth exploration of the research questions through the gathering of rich qualitative data from individual geographically dispersed team members, to gain insight into leadership behaviour within the specific context that the case provided.

4.1.2. Approach

An *inductive approach* was adopted, which is appropriate when the researcher aims to develop new theory (Bhattacharjee, 2012; Lawrence, 2011). Existing theory on the leadership behaviour that facilitate shared leadership of team members in dispersed teams is limited and it is thus needed to build theory to this extent for future testing.

4.1.3. Methodological choices

Mono-method was used for this study based on the time constraints of the research project.

4.1.4. Purpose of research design

The purpose of this study was *explorative*, to gain initial insight (Bhattacharjee, 2012), from the perspective of dispersed team members, about what the leadership behaviours of non-formal leaders are that facilitate the emergence of shared leadership of dispersed non-formal team members. We observe the emergence of shared leadership in dispersed teams, and several studies have identified that shared leadership improves team outcomes in dispersed teams (Hoch & Kozlowski, 2014; Hoegl & Muethel, 2007;

Wu et al., 2020). On the other hand, studies about the leadership behaviours of non-formal leaders that support the emergence of shared leadership is sparse.

4.1.5. Strategy

A multi case analysis strategy (Several teams within one organisation) was followed for this study. Yazan (2015) explains that a case can be described as a phenomenon that is observed within a specific context of which the boundaries can be clearly defined. Creswell, Hanson, Clark Plano and Morales (2007) explains that a case study strategy is appropriate when research attempts to provide an in-depth descriptive (Hodkinson & Hodkinson, 2001; Yazan, 2015) account of a phenomenon, where the context of a case can provide particular insight (Yazan, 2015). Eisenhardt (1989) explains that it is suitable for studying new topic areas, and for application at different levels of analysis, allowing for exploration from different perspectives. This strategy was appropriate for this study as the different perspectives obtained from multiple cases bound by its' specific context (Creswell et al., 2007) provided an opportunity to gain heuristic (Yazan, 2015) insight into leadership behaviour that facilitate shared leadership of dispersed non-formal team members, from multiple perspectives.

4.1.6. Time horizon

The time horizon was cross sectional, and was taken at a single point in time (Smith et al., 2002), considering that the researcher was bound by time constraints with this study (Creswell et al., 2007). Cross sectional studies can be used to uncover relationships between elements and for the identification of patterns of these relationships (Eisenhardt, 1989). This study took place at a single point in time, and does not consider changes over time. The intent was to gain insight into the relationship between non-formal leadership behaviour and shared leadership of followers, and to identify the patterns that emerge that can contribute to our knowledge of this phenomenon in dispersed teams.

4.1.7. Techniques and procedures

The techniques and procedures was semi-structured. Creswell et al. (2007) explain that case study research designs have some level of structure but that a fundamental aspect of qualitative research is its emergent nature. Enough structure was provided to ensure

the study stays in line with the research questions that it aims to answer, but sufficient flexibility was allowed for the emergence and pursuit of new, unplanned and unforeseen outcomes (Creswell et al., 2007; Hodkinson & Hodkinson, 2001; Jacob & Furgerson, 2012).

4.1.8. Population

The population of interest was non-formal leaders of dispersed non-formal work or project teams, typically found in multi-national organisations with horizontal structures. The study was done in one large multi-national organisation operating in over 120 countries globally (*Hilti Corporation*). This organisation makes use of a mix of vertical and horizontal structures. Each country it operates in has formal vertical leadership structures, while it deploys less formal matrix structures to drive segment and business unit strategies, initiatives, and projects beyond the boundaries of individual countries. The specific population that was studied are leaders of non-formal team members who are geographically dispersed across Africa, the Middle East, Europe, Asia, and North America. Each team represented a *single case* within the organisation that represented the over-arching case. The organisation within which the study was conducted, deploy strategic 'hub' teams located in regional and global headquarters, who are responsible for defining and implementing segment and business unit strategies in multiple countries, through the collaboration with team members dispersed internationally. There are no formal reporting relationships between these strategy leaders and the dispersed team members. However, they have formal leadership responsibility for their respective segments or business units. By selecting multiple cases to explore the single issue (leadership behaviour that facilitate shared leadership in dispersed non-formal teams), it was possible to gain different perspectives on the issue from each case (Creswell et al., 2007). The specific context of non-formal leadership structures and the dispersed nature of teams, provided an opportunity to gain in-depth insight into what leadership behaviour of informal leaders are likely to facilitate shared leadership emergence.

4.1.9. Unit of analysis

The unit of analysis refers to the subject that will be studied, and can be at an individual or group level or a specific object (Bhattacharjee, 2012). As this study aimed to explore specific behaviour of individual leaders, the unit of analysis was at an individual level

(Bhattacharjee, 2012). Specifically non-formal leaders of geographically dispersed non-formal teams. The study was done from different perspectives with the main object of studying the individual leader.

4.1.10. Sampling method and size

The sampling method was non-probability purposive sampling. Purposive sampling was required as the sampling was done before the start of data collection (Yazan, 2015). For the interviews to provide information-rich data to answer the research questions, the participants were selected based on distinct characteristics (Etikan, Musa & Alkassim, 2016; Guest, Bunce & Johnson, 2006; Morrow, 2005; Morse, Barret, Mayan, Olson & Spiers, 2002). The individual characteristics of the sampled individuals (team members and leaders) were defined to gain the desired insight.

Characteristics of the sampled team members included:

- They are responsible for executing and implementing strategic priorities defined by the non-formal leaders (ensures task interdependency between leader and team member (Fausing et al., 2015)).
- They are located in a different country relative to the strategic leader of their business unit or segment (ensures geographic dispersion).
- They have no formal reporting line to the strategic leader of the segment or business unit (Ensures no formal hierarchical authority).

Characteristics of the leaders included;

- They are formally responsible for the individual business units or segments that the sampled team members work in (ensures a link between leader and team member, to link multiple perspectives to one relationship).
- The team leader and team member tenure in current non-formal teams overlap by more than twelve months (Ensures sufficient time has passed to allow for interaction between individual team members and leader).

The different functional areas represented by the non-formal leaders and team members included; marketing management, human resource management, and engineering management. Interviews were done with four members (three team members and one

non-formal leader) of each team with a total number of twelve interviews conducted (Guest et al., 2006; Morrow, 2005) as data neared saturation (Morse et al., 2002).

This purposive sampling enabled the study of leadership behaviour in the context of dispersed teams and non-formal leadership structures, to address the need for further exploration of the antecedents of shared leadership in different organisational contexts identified in the literature review.

4.1.11. Measurement instrument

Some commonly used measurement instruments in case study research are; documents, archives, interviews, direct or participant observations, and artefacts (Yazan, 2015). The measurement instruments for this study were semi-structured interviews. Yazan (2015) described three principles to apply when using any of the mentioned instruments; *multiple data sources* (Creswell et al., 2007; Roulston, 2010), compiling a *database of all case data*; in addition to making and documenting clear *links between evidence and research questions and final conclusions*. By following these principles the quality of the insight and validity of the data collected was improved (Roulston, 2010; Yazan, 2015).

The first step in the process of conducting the research with interviews was to create an interview protocol that was followed throughout the research, including the interview questions that was asked (Bhattacharjee, 2012). Sound protocol increases the validity of the data collected (Yazan, 2015). The interview protocol for this study followed the fourteen step approach described by Jacob and Furgerson (2012), which will not be fully elaborated here. A large part of the interview protocol related to the questions, and how they were asked (Jacob & Furgerson, 2012). To define the interview questions, the conceptualisation of the constructs under study was done first (Bhattacharjee, 2012). The constructs that were studied are *leadership behaviours* (defined in chapter two and three) associated with *shared leadership emergence*. Definitions of each construct were informed by the related literature which in turn informed the interview questions (Bhattacharjee, 2012; Jacob & Furgerson, 2012).

The interviews started with an opening script to provide the interviewee with important information about the study and to clarify important definitions (Jacob & Furgerson,

2012). The first few questions were easy to answer before gradually working toward big expansive more difficult to answer questions (Jacob & Furgerson, 2012). All questions was open ended and the researcher remained flexible to adapt when needed (Hodkinson & Hodkinson, 2001; Jacob & Furgerson, 2012). To improve reliability and validity, the interview protocol stipulated that interviews were to be done in a neutral tone, questions were non-leading, and the interviewer refrained from showing agreement or disagreement (Bhattacharjee, 2012). To ensure that the meaning of responses were correctly interpreted (Roulston, 2010), interpretations were restated and clarifying questions were asked. Before formal interviewing started, a pilot interview was done to test the protocol and structure, and amendments was made to ensure the reliability and quality of the data collected (Jacob & Furgerson, 2012; Yazan, 2015).

4.1.12. Data gathering process

Each semi-structured interview was recorded electronically after obtaining consent from the responded to so (Bhattacharjee, 2012). The interviewer made hand written notes of important comments, responses, observations, reactions, questions, body language, personal impressions and other contextual factors that provided depth to the data collected (Bhattacharjee, 2012). Each interview was transcribed into text for analysis, and for evidence of reliability and accuracy (Bhattacharjee, 2012; Roulston, 2010). Data gathering and analysis was done concurrently, which allowed the researcher the ability to adapt the interview process, style, and questions to support the exploration of emerging themes and the discovery of rich nuanced data to answer the research questions (Bhattacharjee, 2012; Morse et al., 2002; Yazan, 2015;). This emergent and iterative strategy of data collection is a fundamental aspect of trustworthy qualitative research (Morse et al., 2002; Yazan, 2015). To triangulate data and create more nuanced insight, interviews with non-formal leaders were conducted first, to obtain their account of their personal leadership behaviour and the shared leadership behaviour of their team members. Personal observations of virtual interactions between non-formal teams were made during business engagements. This was used to subjectively triangulate the account of the leader and the team members, to increase the validity of the data collected. Collecting data at multiple levels of the organisation and triangulation of different sources of data provided different perspectives, well-nuanced data, and increase reliability (Bhattacharjee, 2012). The confidentiality of the participants was

ensured by removing all identifiable information from the data that are reported in the study. The data collected is stored safely in electronic format on a personal computer, external hard drive, and in a Google Drive cloud storage solution for at least 10 years. In addition, the data collected was submitted to the Gordon Institute of Business Science for safekeeping for the same period.

4.1.13. Analysis approach

Data analysis in qualitative research is a process of sense making by *interpreting* what was heard and seen, *consolidating* data into themes, and *distilling* data to create meaning (Yazan, 2015). The case analysis was done through subjective analysis (Bhattacharjee, 2012), direct interpretation, thematic analysis, and categorical aggregation of the case data to identify the emerging themes and constructs (Yazan, 2015). These themes and constructs were then combined into a generalizable and overarching set of constructs (Bhattacharjee, 2012). The data analysis approach was done following a similar structure to what Corley & Gioia (2004) defined in their study. The first step in the process was to identify individual concepts (units of meaning) from the interview data, and to assign each of the different concepts a descriptive code (Corley & Gioia, 2004). These codes were then studied to identify relationships, which allowed the grouping of the codes in higher order themes (Corley & Gioia, 2004). Finally these themes were aggregated together to define a set of overarching constructs for each research question (Bhattacharjee, 2012; Corley & Gioia, 2004). Personal case experience was used to enrich the data (Bhattacharjee, 2012).

4.1.14. Quality controls

For rigor to be ensured, reliability and validity was achieved through five verification strategies applied throughout all aspects of the qualitative research process (Morse et al., 2002). First, *Methodological coherence* was achieved by matching the research questions, methods and analysis throughout the execution of the study, as changes were required to some of these aspects to ensure all components fit together to answer the research questions (Morse et al., 2002). Second, an *appropriate sample* of respondents, from both positive and negative cases (Shenton, 2004), who are embedded in the issue under study were selected and interviewed until saturation, which ensures replicability and comprehensiveness (Morse et al., 2002). Third, data was

collected and analysed concurrently to ensure that the researcher was entrenched in the data, to know what is known and unknown, supporting true purposive sampling to deeper explore the constructs that emerge and support the achievement of saturation and replicability (Morse et al., 2002). Fourth, *theoretical thinking* was applied throughout the engagement with the data, to incrementally build the understanding of the phenomenon through an iterative process where insights that emerge from collected data was verified with new data, and new insights from new data was verified with previous collected data (Morse et al., 2002). Lastly, the iterative verification process supported consistency of constructs and development of a comprehensive well informed model non-formal leadership in dispersed teams (Morse et al., 2002).

Before data is collected in a case study, the quality of the design must be tested for construct validity, internal validity, external validity, and reliability (Yazan, 2015). Qualitative researchers believe there are multiple perspectives to a case and that there is thus no way of identifying the single best perspective, however, procedures and protocols that help ensure the validity of the data collected is important (Yazan, 2015). To ensure trustworthy qualitative research, credibility, transferability, dependability and confirmability must be ensured (Shenton, 2004). *Validity of constructs* were achieved by using multiple data sources such as interviews with leaders and team members and direct observations of virtual team interactions, to allow triangulation between sources (Shenton, 2004; Yazan, 2015). Records of evidence that link data to constructs were kept (Yazan, 2015).

Internal validity and credibility, also referred to as causality (Bhattacharjee, 2012), cannot be inferred from cross-sectional studies, considering that the measurement of cause and effect is done at the same point in time which does not allow the inference of which variable is the cause and which variable is the effect (Bhattacharjee, 2012). Even though this study was cross sectional in nature, the qualitative nature of the measurements, and the cognitive ability of the interviewed individuals, allowed for exploration of the perceived cause and effect from the perspective of the team members and leaders (Hodkinson & Hodkinson, 2001). Even though this data is subjective, it is also rich, and by using reputable data analysis techniques like categorical aggregation, thematic analysis, internal validity was increased (Yazan, 2015). The use of semi-structured interviews allowed the researcher flexibility to explore themes that emerge

spontaneously by probing into the perceptions of causality from the individuals toward whom the effect was directed (Hodkinson & Hodkinson, 2001). This approach increased the internal validity compared to other cross sectional types of study such as surveys that are static and do not have the ability to manipulate the cause (Bhattacharjee, 2012). The honesty of the interviewees was ensured by emphasising voluntary participation, the right to withdraw or not answer a question, the reassurance that there are no wrong answers, and by offering confidentiality (Shenton, 2004).

External validity/transferability refers to the level of transferability (Shenton, 2004) and generalisability of the research outcomes (Bhattacharjee, 2012; Yazan, 2015). The thick description of the case under study increases its external validity (Shenton, 2004; Yazan, 2015). A multi case study has higher internal validity compared to other strategies such as a single case study, and has high external validity (Bhattacharjee, 2012; Yazan, 2015). By studying multiple cases (different teams), the study provided different perspectives on the same issue within a single context. The individual cases were selected purposefully in a manner that ensured each team had different work responsibilities, which increased the generalisability of the outcomes. The data analysis process described earlier allows for the disregard of individual contextual differences between cases (Bhattacharjee, 2012). *Reliability/dependability* was ensured by; following sound protocol; maintaining a comprehensive database of data; using an audit trail, and by providing a detailed discussion about the researchers association with case (Yazan, 2015).

4.1.15. Limitations

This study was done within a cross-sectional time horizon due to the limited timeframe for the research to be conducted, which gives only a limited view of the process that is associated with the phenomenon under study (Bhattacharjee, 2012) and does not allow for the inference of causality. Bhattacharjee (2012) explained that a limitation of case study research is the subjectivity of the interpretation of the qualitative data, and the dependence on the researcher's individual experience for the successful integration of the collected data into insightful theory, which was relevant in this case given the researcher's novice status. Even though the researcher had several quality control measures in place to improve rigor, it was impossible to provide transparency for all the

assumptions made by the researcher during the research process (Hodkinson & Hodkinson, 2001). The researcher's close relationship with the case under study increased the risk of personal biases influencing the objectivity of interpreting the information received. The high level of contextual specificity of the study reduced the generalizability of the findings to other contexts (Hodkinson & Hodkinson, 2001). The study was within a single industry and within a large multi-national organisation, which could reduce the generalizability of the findings. As this study focussed on specific behavioural themes that could serve as antecedents of shared leadership, there was a risk of missing other leadership behaviours that could lead to the same outcome. This study thus does not provide a comprehensive account of the leadership behaviours that serve as antecedents of shared leadership in dispersed non-formal teams, but rather provide insight into a specific few behavioural themes on which future research can expand.

Chapter 5

5. Results

5.1. Description of sample

To answer the research questions, a total of twelve interviews were conducted within one large global organisation, which represents the overarching case that was studied. The interview participants were sampled purposively based on a set of pre-defined criteria that ensured they would have insight and experience within the specific context, to be able to add value to the topic under study. Participants were part of three distinct non-formal internationally dispersed teams, each representing one case within the larger case. Each of the three teams represented different functional areas, which included marketing management, engineering management, and human resources management. The functional diversity of the teams increased the diversity of perspectives gained on the topics under study and increases generalisability. Within each of the three teams, one non-formal leader and three team members were interviewed, which allowed for the exploration of the research questions from both perspectives and for the triangulation of the data. Team members had different levels of experience in this specific team context, ranging from two to thirteen years. The cumulative experience of all the participants in internationally dispersed teams, amount to 81 years, which supports the value that the sample added to this research study.

A detailed description of the sample that participated in this research is summarised in the table 1 below.

Table 1: *Description of sample diversity (gender, age, nationality, residence, tenure, internationally dispersed team experience, and specific team tenure).*

	Gender diversity	Age of members	Nationality diversity (# of different countries)	Residency diversity (# of different countries)	Cumulative Hilti tenure (years)	Cumulative internationally dispersed team experience (Including outside Hilti) (years)	Shortest and longest tenure in current non-formal team (years)	Shortest and longest duration members know each other (years)
Team 1	3 Male & 1 Female	35-44	4	4	53	26	1 to 6	1 to 6
Team 2	4 Female	35-44	4	3	19	26	2 to 3	2 to 3
Team 3	4 Male	45-54	3	4	81	29	2 to 11	9 to 11
Complete sample	7 Male & 5 Female	35-54	9	8	153	81	1 to 11	1 to 11

5.2. Introduction to results

The results are presented under the headings of the three research questions. The main themes per question, identified during the analysis of the interviews with the leaders and members of the three non-formal internationally dispersed teams, are then presented. The analysis approach adopted for this study followed the approach defined by Gioia, Corley and Hamilton (2013). The interview data was coded by assigning individual units of meaning to responses received from participants, which structured the data into first order concepts. A total of 324 different codes were identified from the twelve interviews. The codes within each of the research questions were then studied to identify relationships between codes. Based on these relationships, the codes were then categorised into different groups (Second order themes). In some sections where the groups contained large numbers of codes, the groups were divided into sub-groups. The groups and sub groups were finally aggregated into themes within each of the constructs explored per research question.

The code development in this study is consistent with the findings of Guest et al. (2006), which demonstrates that the data for this study was nearing saturation, based on the small number of new codes identified in the final three interviews. The number of new codes identified in each of the twelve interviews are shown below in Figure 6

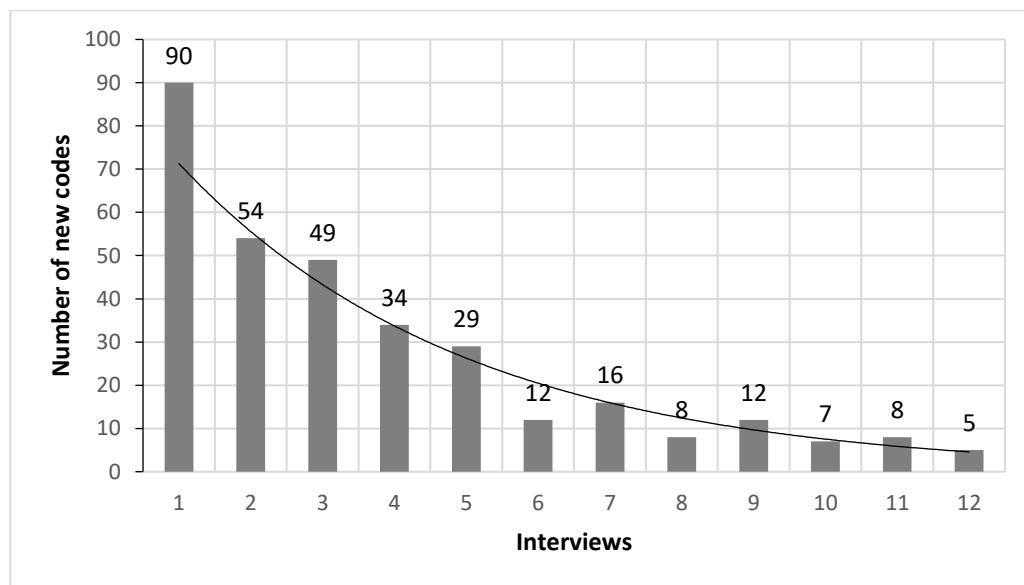


Figure 6: Graph depicting code saturation.

5.3. Results for research question 1: (Connectedness)

Research question 1: What non-formal leader behaviours support increased connectedness between dispersed non-formal team members?

Three open ended questions were asked which aimed at firstly gaining an understanding of how connected the team members felt to each other in the non-formal dispersed teams, and to understanding the reasons that underpin the varying levels of connectedness. The second question was aimed at understanding the role played by the non-formal leader in supporting team connectedness. The final question explored how the team members influence team connectedness. The results are presented under the key themes that emerged from the responses around connectedness. The themes that relate to the construct of team connectedness are summarised in table 2.

Table 2: Themes associated with non-formal team connectedness.

Themes	# Groups	# Codes	Code frequency
Leader influence on connectedness	9	66	219
Member influence on connectedness	3	25	53
Contextual influences	3	12	36
Influence of exchange	3	26	61
Degree of connectedness	1	4	15
Connectedness outcomes	1	4	9

5.3.1. The influence of the leader on connectedness

Leader as participation facilitator

a) Perception of participative leadership

Both team members and leaders explained that the non-formal leader is expected to be the *facilitator* of the activities and engagements of the non-formal team, in order to achieve participation towards inclusive outcomes that connect the team. Team members

perceived participative leadership displayed by the non-formal leader, as having a positive impact on improving the connectedness of the team.

Interview 3: “[The leader] is the facilitator of the discussion, of the topics, to highlight which are the big ones, and manage the discussion that it deals in the constructive direction.”

Interview 11: “The non-formal team leader has been doing a great job in creating the community by initiating the discussions, all that part is fantastic.”

b) Leader's behaviour for participation

According to participants, the leader is expected to encourage the sharing of ideas, knowledge, experience, and insights within the team by involving members into relevant conversations, and treating them as partners. They also felt that the leader must be willing to give up control and empower team members to participate.

Interview 10: “Please give me your feedback and comments. And in most of the cases with us the input is welcomed and integrated into the final product, but when it isn't, an explanation is given to the individual as to why not.”

Interview 12: “[the leader] opened the space for others to participate, maybe others have different ideas or different inputs. Not necessarily different but valuable inputs to the topic.”

Participants stated that the leader should connect members by bringing together the inputs of the team to achieve majority buy-in, instead of aiming to develop the perfect solution.

“To have ... 70-80% to which everybody agrees on is much more powerful than having the 100% that may be 2 out of 8 believe in”

c) Outcomes

Participants asserted that active facilitation of participation makes them feel respected and valued as important members of the team.

Interview 10: “When this type of behaviour is expressed towards me I would, number one, feel that my opinion is valued, that I am a respected peer in this particular forum.”

Interview 5: "So utilizing that makes me feel I have something to say, I'm of importance, [the leader] trusts what I do, and trust me in the position I am in."

d) Participative decision making

The respondents pointed out that participation should lead to agreement and action by the team, include participative decision-making, and prevent top down decisions.

Interview 7: "You should know better your [local requirements] than myself, so you should be able to take a decision better than I possibly can, and so that you feel the ownership of that decision, and that decision is not coming from whoever, but you have taken it consciously."

Interview 4: "But you need to gather the opinions and then discuss what makes sense and to come up with sort of agreement with the team to go forward."

e) Limitations of participation

The leaders' role as facilitator was emphasised during the interviews. Participants claimed that too much participation could lead to endless and unproductive discussions if the leader does not facilitate. They felt that participation is less valuable and ineffective if a topic is unknown or unfamiliar to the team.

Interview 10: "When we seek out too many opinions, it slows down the velocity of decisions and the overall timeline of the project."

Interview 10: "We also have an understanding that if you don't have an expertise in the subject matter, you should remain silent. We remain efficient this way by not speaking for the sake of speaking."

Leader as development partner

According to participants, the non-formal leader should take part in the personal development of team members. They acknowledged that formal team members' development needs are given priority over the non-formal team. Participants felt that the non-formal leader should show interest in understanding the development needs, career aspirations, and personal goals of team members.

Interview *“I would ... encourage both of them to ... have a discussion whether it as a career discussion, whether it is a performance discussion, I would actually appreciate it if both of them can attend that meeting and not have the formal leader have this conversation alone with me.”*

According to participants, one on one's with team members enable a more intimate and specific understanding of individual expectations and objectives. In addition, members expect to get personal feedback and coaching from the non-formal leader during exchange. Members also want to be provided the space and freedom to fail and make mistake in order to learn.

Interview 8: “... in terms of the personal growth ... also for [the leader] to play a coaching role in terms of how do I deal with difficult conversations or difficult situations. Both in terms of work, but also in terms of personal life and creating that balance.”

Leader as trust builder

a) Create a plan of action for trust

Participants asserted that the leader should invest time into building relationships between members of the team. They further emphasised that even though the team members are dispersed, physical interactions are an important means that support relationship building.

Interview 6: “Key to success is your own effort and your time spent and your energy spent to create this. And if you are not doing this, there is no way that it can just establish from the air.”

Interview 11: “All these events we create when we get to be face to face, these experience exchanges, or summits, definitely they help.”

b) Make trust visible

Participants drew attending to the fact that the leader should display trust in individual team members and the ability of the team. It was stated that the leader should allow topic owners and subject experts to take decisions, while not scrutinising team decisions unless there are fundamental issues.

Interview 3: “So what we would definitely expect from [the leader] is that if there are decisions [by the team], that [the leader] accepts it and says ‘okay guys you discussed it. I trust you.’ That would be something that is definitely important that this does not get questioned again.”

Participants acknowledged that trust and respect which supports connectedness takes time to build, but can be lost very easily. They also stated that trust within the team is a fundamental requirement for team connectedness, emphasising the need for the leader to actively pursue the building and maintaining of inter-team trust.

Participants pointed out that members trust each other cautiously, and they highlighted the importance of the leader facilitating and moderating a safe team environment where members are encouraged to be open to build trust.

Interview 5: “It is [the leader’s] critical responsibility to make sure that our meetings are considered safe for everyone to speak.”

Interview 5: “So [the leader] has to be that moderator, if someone is too cynical, ... harsh in the negative, [the leader] needs to have that eye to make sure that everybody is ... comfortable and ... even if I say something very wrong ... I don’t get negative feedback. So [the leader] needs to moderate from that end, making sure that we all respect each other, or at least are cautious to each other.”

c) Openness

Members perceived leader humility as positively influencing connectedness and supporting trust. In addition, they claimed that trust and leader humility support constructive debate and openness of members to challenge each other. According to participants, openness within the team should be actively encouraged by the leader, as openness builds relationships, which in turn supports further openness.

Interview 6: “Being humble and just also share a little bit something about yourself, it also helps a lot to build relationship.”

Interview 12: “I wouldn’t be very close with [the leader] if [the leader] did not open up first to me on a personal level about what [the leader] feels and how things are going on with the [the leader’s job], and then I open up with [the leader].”

Leader provides direction (Common goal)

Participants asserted that the leader should define an overarching objective and direction, and that the team should collectively work towards this common goal. They also pointed out that this common objective should be 'over-communicated' to the team. They further stated that the leader must help connect the day-to-day reality of the team with this big picture.

Interview 6: "I think more important from that position specifically is creating a strategy that we altogether go, as a one goal and then we team up to achieve it."

Interview 7: "But the prerequisite number one is that we have an overarching common strategic frame that we all, no matter what, we fall under. If we were belonging to different churches, there would be immensely more complicated."

Interview 5: "As a leader you see the bigger picture rather than each of us seeing it on our own, we are quite individualized in our pictures."

Leader aligns objectives and expectations

a) Clarifies boundaries

One participant emphasised that the leader should clarify roles and responsibilities of team members and other associated functions, so that individual expectations of members are clear.

Interview 8: "We have come a long way since, with clear roles and responsibilities, and I think that has also made it easier to understand who is responsible for what."

Interview 8: "Because at some point it did create friction amongst us, because we believe that [other members] was supposed to pick it up."

Participants also felt that the leader should set the boundaries and expectations in terms of team engagements, so support the emergence of the desired team culture.

Interview 8: "But also to establish a team culture. I think that's very important because I mean culture of course speaks to what we do here, and setting the boundaries in the ground rules for that."

b) Involves members

According to participants, the non-formal teams' agenda should be defined in collaboration with the members of the team, through a process of facilitation, to ensure alignment with the needs of the team.

Interview 2: "That's why I think identifying where they need help, and building the agenda and our everyday interactions based on that, is quite important."

Interview 2: "Regular meeting as the whole team where we define the agenda based on needs."

c) Agree and formalise

One participant asserted that there should be formal contracting done for agreed priorities for the team, and that formal KPI's should be set to drive those priorities.

Interview 2: "We did a contracting meeting at the beginning of the year. The [formal leaders], the [team members], me, and the core team reporting into me. We sat down and we said what are the priorities..."

Interview 2: "And after that contracting, the KPI's that we measure the projects that we work on are around that contracting and that prioritization. So no one can say that we did not discuss that before. It sets the stage gets by doing contracting."

d) Involve the formal leader

Participants pointed out that there should be alignment between the formal and non-formal leader to support member participation within the non-formal team. They claim that there should be a common cause between the formal and non-formal team, and that contradicting priorities should be avoided.

Interview 5: "The link between the informal leader and the formal leader is extremely important. Because if I have two leaders, one formal, one informal and both of them have totally different and not aligned, let's say visions, strategies, way of communications and it's not clear between them both, the person who falls in between that gap is going to be the individual."

Interview 2: "Because otherwise they all belong to different organisations and they do not feel like we have a common cause. If I include [formal leaders] in our common cause,

then [team members] will feel obliged, but also feel like they have a better sense of belonging this in that sense.”

Leader coordinates strengths

a) Understand strengths

According to the interviewees, the leader is expected to understand and respect the strengths and weaknesses of individual members of the team and to use this understanding to coordinate their strengths to achieve better team outcomes. They explain that showing respect and appreciation for team members competence increases connectedness in the team, while leadership also emerges from strengths.

Interview 4: “The Captain is a player in the team who knows exactly the strength and weaknesses of the team.”

Interview 10: “So in this community, myself, but also my colleagues, continually try to provide encouragement and statements of respect when we are in extended forms.”

b) Connect members

Participants stated that the leader should further mix members who are strong in certain areas, with others that want to develop in that specific area. This creates opportunities for peer-to-peer coaching and knowledge sharing which increases connectedness between members.

Interview 5: “Putting two or three of us in some kind of project where [the leader] knows one of us is quite strong in that, so there is the experience exchange.”

c) Assign ownership

According to participants, the leader should distribute tasks between team members based on their individual strengths, and that task owners should be empowered to make decisions. This increases the confidence and participation of team members.

Interview 2: “Use peoples strengths, because not everyone is strong at everything. So pick the ones that are strong at a certain topic and have them lead that discussion or lead the project.”

Interview 7: "But ultimately it boils down into that sense of pride of being ... selected out of the team to drive this initiative ... because [the team member] is the right person to drive this initiative. Typically this is extremely motivating and then you feel like you can show your competence..."

Interview 2: "You didn't really need a hierarchical figure to make a decision because you knew who the subject matter expert was."

Leader creates networks

Participants indicated that it is a key responsibility of the leader to facilitate connection between the members of the team and to expand their networks within the organisation. Participants expect the leader to connect team members by creating smaller task or project teams. They also claimed that these teams can often include members from the broader communities outside the non-formal team to support network expansion.

Interview 5: "[The leader] is the one who can manoeuvre the projects and working relationships where we can actually build that informal connection by working in smaller teams."

Interview 3: "I think this does not only include the [non formal team] because then when you look at the slightly broader area that includes [other teams] and there it needs to be very connected and a lot of trust put into what the people are doing."

Leader adapts to individual members

a) Situational leadership

Participants asserted that the context of internationally dispersed teams introduce complexities, and that these complexities require the leaders to adapt their leadership approach to the specific situations and individual cultures, to achieve connectedness.

Interview 6: "I think this is also important that there is no single approach towards everybody but you adjusting your style and you also adjusting to the culture."

Interview 12: "But the complexity that I am facing is different than what they are facing. Maybe if I open up, maybe if I explain to [the leader] the complexity that I have, maybe

[the leader] would support me even or [the leader] would at least have empathy with what I am facing.”

b) Understand team member needs

Participants drew attention to the fact that the leader should understand and respect the different needs and realities experienced by the individuals. They also claimed that the leader should align and balance the needs of the different team members.

Interview 2: “When I arrived all of the policies were for example written around [one specific] country’s reality, and then when you form that myopia the market organisations naturally feel un-empowered, naturally feel like outsiders.”

Interview 1: “So basically our road maps need to be initiated based on what is important for the markets.”

c) Context

According to participants, the feeling of connectedness reduces when members feel that their context is different to the rest of the team.

Interview 2: “when you believe that your country is all that's different, then you don't feel as part of the group.”

Leader holds members accountable

Participants perceived accountability and ownership to be empowering, and they indicated that this empowerment increases connectedness. They stated that members should be accountable for their inputs and contributions to the outcomes of the team, and for the topics they lead.

Interview 5: “it will actually give all of us a piece of a contribution and you will feel that you are responsible and you're an important part of the team rather than just a receiver from the bigger informal team.”

Interview 11: “What we miss sometimes it's a little bit more sharpness, little bit more decision making, implementation, following up, and accountability for certain things.”

The concept of accountability is also linked to empowering leadership.

5.3.2. The influence of members on connectedness

Mutual trust and respect between members

Participants acknowledged that to apply shared leadership, trust is required for members to be willing to be led by their peers. They claimed that to achieve trust, team members must get to know one another, and understand and respect their cultural differences. They stated that the team should be open about strengths and weaknesses, and must be open to acknowledge what works and what does not.

Interview 4: "First, we need to create the trust. Individually across each other. Otherwise shared leadership becomes impossible. We will not be able to have it if we do not have the trust."

Interview 9: "With [team members] it was not the same, and then we need to understand each other considering also that the culture of the different countries are different."

Interview 1: "So the only way that we're going to be able to reach there is if we feel as a team and working together very transparently on what works and what does not work."

Members take the lead

a) Proactive engagement

Team members acknowledged that it is not the sole responsibility of the leader to connect the team. They recognised that members should individually engage on topics of mutual interest without the involvement of the leader, and that they should not only trigger these engagements based on problems.

Interview 5: "If I hear that someone is working on something that I'm curious about, I should be proactive enough to link to that person sending an email, calling that person, saying, 'You are working on that. It is pretty cool. Can you help me out or give me more ideas?'"

Interview 5: "I think the proactivity and self responsibility is very important. So not only depending on our informal leader. I have to be honest, we have to be also proactive."

b) Collaboration

Participants claimed that members should share experiences spontaneously when it could support the achievement of team goals, and that they must work together to co-create team outcomes.

Interview 5: “If I know that I’ve done something and it worked well, I need to be proactive in sharing that to the team and not wait for a formal meeting.”

Interview 11: “My role basically here can be as ... sharing my experience. My regional experience from one hand, and also looking to my past experiences.”

c) Leadership

Participants acknowledged that leadership within the team comes more naturally for some people, and that natural leaders emerge when members engage spontaneously with one another. They described this type of leadership as not being one directional and that it supports team progress.

Interview 3: “And when we were defining the new way of doing [initiatives]. What I did is I defined something, and ... I called up the [other team members] to get the pre-alignment, that I can say this is what [the team] says is good with us, to just speed it up.”

Members work as one

According to participants, the team should work as one to achieve connectedness. They indicated that members should show pride in the achievements of their colleagues, and share in each other’s successes to achieve this. They also claimed that members should build on each other instead of relying on individual efforts.

Interview 4: “We need to be proud of success stories happening in [other team member’s country].... and we talk about this initiative as [the successful team member] talk about it.”

Interview 1: “The feeling that somehow people are playing off each other, they are actually adding on each other, there is a much stronger feeling of ties.”

Team members should be willing to defend the decisions and actions of the non-formal team with their formal leaders, as well as work together to influence formal leaders.

Interview 1: “So, if we as a [non formal team] are able to challenge back [formal leaders], or to have a good conversation as a team with the [formal leaders], that will put us ... at a level of connectedness, much higher than we are right now.”

5.3.3. Contextual influences on connectedness

Influence of formal team context

Participants pointed out that the formal team context is an important influencer of team connectedness. They stated that the requirements of their formal teams place pressure on them to manage the day-to-day operations, making the non-formal team activities second priority.

Interview 5: “Because it is an informal team, sometimes I get so preoccupied on our own formal team and where the team is, I tend to forget ... I could have shared this to [other team members] because I know that they are doing the same thing.”

Interview 2: “Maybe some of our projects have been nice to have at moments where people are struggling with day-to-day operations and are firefighting.”

Influence of the non-formal team context

Participants also claimed that the context of the non-formal team influences team connectedness. They stated that before team members participate, they want to understand where they fit in the group. They also asserted that members must be entitled to speak, and that their contributions must be able to influence team decisions.

Interview 12: “I have my own story. Let us say that they do not know anything about me. So if they are clear with me at the beginning and they said, 'look, we are open here, we will listen', and they explain to me what kind of environment they are, maybe it would be easier for me from the beginning to open up.”

Interview 7: “A team where there's not master and slaves. It is somebody that has different responsibilities, but no master, no slaves.”

Interview 11: “But if you ask me how connected are we now these days from a business point of view? I think that we are connected in a formal way, on the minimum level.”

Why?... [The non-formal leader] involves us in some decisions, but we do not have really a final say in those decisions.”

Commonalities between team members

According to participants, commonalities between team members have a profound impact on team connectedness. The members of one of the teams studied explained how their shared work history of over a decade supports deep connection. This same team said that through trust and respect for each other, they are able to actively practice shared leadership. Members of teams in this context also point out that shared values between team members support connectedness. Furthermore, they stated that mutual work or personal interest increases connectedness by transcending individual differences.

Interview 11: “I am connected quite well for I think many reasons. First is about history. We have a past together. We all came from [similar situation] when we were dealing with our ... business where we have a similar start. So with that, we know each other very well and we are very well connected.”

Interview 10: “But [the members of this team] and I have been working together for 12 years. So we came into this situation with a mutual respect that I continually reinforce it.”

Interview 9: “So I feel very much engaged by the culture of our company and I recognize very much those values in [the non-formal team]. There are people with a lot of courage, people with a lot of commitment and so on. So those common elements for me are probably the ones that link me in a very empathic way to those people.”

5.3.4. Influence of exchange

The *influence of exchange* theme emerged during the questioning about *connectedness* indicating a strong link between the constructs of connectedness and leader-member exchange. This provided a natural bridge to research question three where this construct was explored in greater detail.

Informality of exchange

a) Prioritise informal exchange

Participants pointed out some leaders underestimate the value of informal exchange and as a result do not exert enough effort into creating informal connection between team members. They further claimed that the leader should create opportunities for informal exchange as it increases the frequency of engagement, supports ongoing conversation, and encourages sharing of ideas.

Interview 5: "So there is a lot of benefits too that and I still think that the experience exchange is massive when there is that kind of informality that I can just pick up the phone and ask."

Interview 5: "Exchange becomes easier and there is an easier flow. I do not have to wait for a formal path to receive that kind of experience exchange. If I get stuck, I will just pick up the phone and ask [a team member] what she did on that matter."

b) Relationships built through informal exchange

The teams interviewed highlighted that informal exchanges help build stronger relationship beyond work, and these extended relationships improves connectedness. They endorsed a healthy balance between business and personal connection, and stressed that less formal exchanges help build support structures. They added that through informal exchanges the leader can better understand the needs of each team member, and that team members can get to know each other through informal exchanges.

Interview 6: "I think it's generally very important not only for this community, but specifically when you do not have direct link or direct reporting and you want to have people connected, you need to have this informal way of communication."

Interview 9: "One element that I think is important is that somehow we also created the opportunity to stay connected physically together. Opening some space, some room for non-formal relationship, so not purely business related relationship."

Interview 5: "So building that kind of relationship makes the feeling of a support system a lot stronger."

Physicality

The participants discussed the value of physical interactions for developing relationships and trust between dispersed team members. They acknowledged the value and power of virtual exchanges, but stressed that it falls short of being a complete substitute for physical interactions for building of relationships.

Interview 4: "I will feel that we're not really close to each other because always when you don't have this physical activities or team bonding, you feel that there is something missing."

Interview 6: "Obviously face to face is much better, and that's for me still the most preferable way because even if you do a lot of online discussions and meetings, you are still missing this touch and feel that you know you are not getting when you have face to face meetings."

Frequency

As this study was conducted during a global pandemic, participants reflected on the effects of the pandemic on the frequency of engagements in the team. It was noted by all three teams that the frequency of engagement increased significantly. It was then highlighted that the frequency of exchanges between members of these teams significantly influences team connectedness. They added that when combined with informality, it also supports relationship building. They asserted however, that frequent exchanges should be relevant, efficient, and have a cause. In addition, they expressed that these exchanges should go 'two-ways' where both parties exchange value.

Interview 6: "The other thing that I need to acknowledge is that these days we have the frequency of interaction, which plays a crucial role in feeling connected."

Interview 6: "And the intensity of communication for a dispersed team that you do not see every day. That you do not meet in the office. That you not meet for the weekly catch up call or whatever. The intensity of communication, effective communication, not just 'Okay, we need to meet' but we need to meet and discuss about something relevant for you. These are the parameters that are paramount."

5.3.5. Degree of connectedness

Participants argued that connectedness develops over time, and that there is a difference between formal (business) and non-formal (Personal) connectedness. They proposed that personal connectedness is a deeper level of connectedness, which takes longer to achieve than formal connectedness. They further added that trust, like connectedness, comes in different levels, and is linked to connectedness.

Interview 12: "It took me a really long time to find my place and to connect with the team. It was not easy for so many reasons. It took me almost, 9 to 10 months to realize where I am with this team, although the team is very welcoming and everything is positive. But it is somehow complex."

Interview 5: "We are quite connected on a formal basis. So formally, we meet once a month virtually. We used to meet twice a year physically one to one. So on a formal basis I would say we are very much connected. On an informal one to one basis, not so much."

5.3.6. Outcomes of connectedness

When participants reflected on their connectedness with their team, they highlighted several outcomes that increased connectedness will support. The outcomes mentioned include increased empathy between team members, improved team dynamics, increased participation, and more effective business execution.

Interview 9: "Also, now a little bit going beyond the pure professional part. Because I feel very much connection with [the team] I feel very much empathy with them. So I feel I understand when [member 1] is under stress or when [member 2] is happy. And this is important because probably it also makes the connection more broad than a pure topic related professional relationship."

Interview 6: "And the community is a very important topic because only by being in community you feel stronger, you feel fun, and you also feel that you can express your opinion better and louder, and you can also align better."

5.4. Research question 2: (Leadership approach)

Research question 2: How do team members of dispersed non-formal teams perceive humility, empowering behaviour and participative leadership by the non-formal leader?

Participants were asked open-ended questions about how they feel when the non-formal leader displays humility, empowering leadership, and participative leadership behaviour. *The aim was to gain insight into the perception of these leadership approaches in internationally dispersed non-formal teams, and to explore how these leadership approaches can be applied in the specific context to facilitate shared leadership.* The constructs of *leader humility, participative leadership, and member empowerment* emerged early in most interviews during the responses to connectedness (Research question one). This provided a natural bridge to explore these constructs deeper to answer research question two. The themes within the constructs of *non-formal leader humility, empowering leadership and participative leadership* that emerged from the participants' responses are summarised in table 3 below.

Table 3: Themes associated with non-formal leader humility, empowering leadership and participative leadership.

Themes	# Groups	# Codes	Code frequency
Non-formal leader humility			
Outcomes	3	15	39
Expectations of the humble leader	2	7	9
Perceptions of the humble leader	1	3	5
Team response	1	3	8
Boundary conditions	1	2	4
Limitations	1	6	24
Empowering leadership			
Leader behaviour	5	29	47

Task empowerment	4	18	36
Internal team dynamics	1	2	4
Participative leadership			
Expectation of leader for participation	3	12	22
Team perception	1	4	14
Individual team member influence	1	4	11
Contextual influence	1	4	5
Outcomes	3	12	30
Limitations	1	3	5

5.4.1. Non-formal leader humility

5.4.1.1. Expectations of the humble leader

Humble leader facilitates input

The members of the dispersed non-formal teams expressed that the humble non-formal leader should extract input of team members through open questions and active listening. They further emphasised that the leader should synthesise these inputs, instead of taking a hierarchical stand and imposing their own opinions top down.

Interview 5: “[The leader] takes our input but connects all the inputs together and gives it back to us, saying ‘Okay, with all your inputs, this is the way we are going forward’. So I think the humbleness and the same time the leadership comes in that [the leader] might take a couple of ideas from the ground but [the leader] connects it together.”

Interview 9: “They pull the things out of you, they don't push you, they pull. So this humility needs a little bit of patience, a lot of questions, but with a very soft way of working, a soft way of interacting you. They can extract the best out of you and they can really lead without imposing or going top down.”

Humble leader aligns team towards a goal

Some participants argued that the humble leader must keep the team oriented towards the overarching goal, and must ensure that humility does not get in the way of providing clear direction. This links to the concept that '*humility should be balanced*', which will be discussed later. One leader proposed that a humble non-formal leader must show team members 'what is in it for them' to get their commitment.

Interview 5: "Again, as I say, as a leader you see the bigger picture rather than each of us seeing it on our own, we are quite individualized in our pictures. [The leader] should be a bit more strategic and see the whole picture, because [the leader] is also connected to the level above."

Interview 2: "Because then when you are humble when they also know that you are not their immediate manager, then you need to constantly show the value in a task in order to get them engaged in it."

5.4.1.2. Team perception of leader humility

Several participants highlighted that humility creates a perception that the leader is genuine and more relatable as fellow human. Two respondents pointed out that there are often unrealistic expectations placed on leaders, which is a perception that leader humility can overcome.

Interview 1: "Humility shows a very high level of being genuine"

Interview 8: "The reality is that we tend to think of leaders as people that have a title that should always have the answer. They are perceived to have power and authority and so forth."

Interview 8: "But I actually appreciate someone that shows humility. It shows that the person is indeed a human being that also experience normal day-to-day things and problems, just like anybody else."

5.4.1.3. Team response to leader humility

Most participant interviewed expressed a positive perception of non-formal leader humility, or experienced positive responses to humility by team members. The

participants argued that this is universally true for formal or non-formal teams. One leader, who is a self-proclaimed humble leader (and endorsed by his team), cautions against too much humility, which links to the concept that ‘*humility should be balanced*’.

Interview 1: “So I think always the reaction towards that is extremely well.”

Interview 6: “It is always good to see that you are not just talking to robot or Superman and Superwoman. But that there is something there that is also related to a normal human being. So for me it is a positive, and being this type of personality requires a lot of courage. So for me it is a big bonus.”

5.4.1.4. Outcomes of leader humility

Members co-create

Participants commented that humility encourages more open sharing of ideas and increases the willingness to engage in constructive debate, which results in the co-creation of outcomes. One leader proposed that humility allows the leader to gain insights from members that shape long term strategies.

Interview 10: “So this humility is to me showing, we can have a disagreement, we could have a passionate discussion, we can come to a compromise, and we can move on to the next topic or the next phase of our relationship without having that have been adulterated by a previous disagreement.”

Interview 2: “So I think it works well because at this level especially you need to acknowledge that people have really great ideas. Being a humble leader I think makes people speak up more freely and openly, and then it helps great ideas emerge. And as a result you are a better team with better ideas.”

Interview 2: “I always had a feeling that we had to centralized things, but the full picture came into being through the feedbacks of others, through observations, through one on one discussions with them.”

Removes hierarchies

Participants reasoned that humility by the non-formal leader increases trust in the leader, and encourages the rest of the team to show humility and vulnerability themselves.

Some participants added that humility reduces the stigma attached to hierarchy and that it makes them feel like peers rather than subordinates. In addition, interviewees argued that humility encourages leadership to emerge from within the team and that it makes members feel they can influence team outcomes. One participant cautioned against leaders that abuse hierarchical power for sole decision making, thus supporting the use of humility in this context.

Interview 3: "I like it because it allows me to think that, with him displaying humility it allows you to freely act and also trust that if you make mistakes, they'll be corrected but you will not be penalized for it."

Interview 10: "I feel that I am peer and not an adversary or subordinate."

Interview 7: "On the other side, being humbled makes the whole leadership within the team surfacing up."

Interview 10: "whereas with the humble leader I walk into the discussion saying I'm dealing with somebody that has an open mind and open ears and there is a possibility that I have the chance to bring them my way in this particular agreement. I feel that the outcome of the discussion is going to be something that I can influence versus I had no chance to."

Improves team dynamics

Participants noted that humility improves internal team dynamics by making members and leaders more prone to listen and act, in addition to supporting creativity.

Interview 1: "It opens a lot of doors because this is more or less what makes people more prone to listen and more prone to act, versus actually being arrogant or being condescending or coming actually from a top down approach and so forth."

Interview 12: "It welcomes creativity. It welcomes new ways of looking at things."

5.4.1.5. Boundary conditions of humility

Some participants challenged the value of humility as a standalone trait. Two participants stressed that for humility to have a positive outcome, there are prerequisites such as respect, trust, and a qualified team. One participant interestingly

proposed that the team defines the level of humility that is appropriate for the leader to maintain.

Interview 9: "This is possible because the respect and the trust is there and probably a kind of prerequisite for being successful in this humility approach."

Interview 7: "A few times [the leader] was a little bit on the directive side. It all depends on the quality of the team, and I do not think that there is an answer that fits all the possible cases. If you have a very qualified team of people that share a common goal, these disadvantages of the humble model are very minimal. Because in the end you share that goal and no matter what, you go."

Interview 7: "So you have always the two sides. If the team allows, you can stay humble and nobody confuses it for 'Oh yeah, no clue'."

5.4.1.6. Limitations of humility

Participants discussed certain scenarios where teams need low humility to manage team dynamics, and where they need a firm stance to bring things to conclusion. They highlighted that too much humility can lead to too many opinions in extended teams.

Interview 7: "In some other cases, when some people that want to surface out, or they want to show off and you have that kind of attitude all over the place. You need to be ready to become more directive and apply a little bit of direction or directive style, because that would completely poison the atmosphere."

Interview 2: "With the bigger team when I show humility, which is always, there is also a bit too many voices with no faces."

Participants affirmed the possibility that humility can be mistaken for weakness if the leader does not adopt a balanced approach, with only one participant disagreeing with this notion. Most participants endorsed a balanced approach to non-formal leader humility, and stressed that humility on its own is not an ideal approach.

Interview 7: "Being humble has a lot of advantages. It has one big disadvantage. Sometimes it is confused for weakness, it is confused for missing direction, it is confused for; 'Yeah, okay, let us decide, I have no idea, I am very weak'. And this is the biggest, in my opinion, negative side effects of humbleness."

Interview 6: "I think some people believe that it can be perceived as a weakness. I'm not part of those people. I honestly believe that we're all a simple human beings and we have our strong parts or strong sites and our weak sides."

5.4.2. Empowering leadership

5.4.2.1. Empowering leader behaviour

Aligns team towards a goal

Several participants expressed the view that the leader should facilitate the *alignment of the team towards a common goal* to support empowerment. They also commented that the leader should show members 'what is in it for them'. In addition, participants argued that the leader should allow for, and support with, connecting the reality on the ground with the big picture, and that the leader must explain the 'why' behind the goal.

Interview 6: "So I think the more important is that [the leader] creates this 'one goal' perception for the region and that all organisations go together to achieve this goal. I think that for me is the most important expectation from this role."

Interview 2: "but I think when you believe that your country is all that's different, then you don't feel as part of the group. You just listen to it and do not implement. So what I also do as a leader is to acknowledge the differences, but also try to show the similarities so that they also feel like they are part of the group, they are empowered."

Interview 7: "you can call it the "what is in it for me?".... If out of the project you don't feel that you have any benefit, you will not be so committed."

This *common goal orientation* is linked to *connectedness* and *leader humility*.

Shows trust in members

Participants emphasised the importance of the leader to trust team members for them to be empowered. One participant specifically focused on the importance of the leader being able to hand over control of topics to team members and to make trust visible.

Interview 5: "And then comes the fact that [the leader] trusts a lot. It gives even more empowerment to take decisions."

Interview 3: "Putting people in charge ... and accepting the results."

Interview 10: “But one aspect of empowerment is to say, even though this is my area of expertise, I recognize you also have a very high level of expertise and I trust you to run this topic.”

The concept of *trust* links back to *connectedness*, while the *leader as facilitator* is linked to the constructs of *participative leadership* and *leader humility*.

Expands networks

A few participants proposed that the leader should support team members to expand their networks and influence, and to help them to manage ‘up’. One participant in particular introduced the concept of a ‘circle of influence’, arguing that an extended circle of influence is empowering for team members.

Interview 8: “We always talk about a circle of influence. To expand my presence within a circle of influence, whether it is within this community, or beyond in business. And that actually creates a better platform and understanding then of what leaders are. I mean I have seen it plenty of times where you would be roped in to get introduced to someone to actually expand your own ‘circle of influence’. And building relationships which in itself actually also contributes to self promotion and also then further career development.”

Interview 3: “[The leader] is a lot more involved in all these processes, so [the leader] will naturally be a lot more into details, but [the leader] also needs to help us manage up for example.”

Holds members accountable

Several participants linked the concept of accountability and ownership to empowerment, and proposed that the leader should hold members accountable. One participant illustrated the empowering nature of direct feedback from the leader. Another participant cautioned against sharing accountability, and emphasised the importance of individual accountability even in the context of shared leadership.

Interview 1: “So that is why the accountability will lead to empowerment eventually, because that feeling will make [team members] feel ‘we own that topic. We are empowered to actually come up to that [platform] with the whole idea, with the whole concept.’ And that actually will give empowerment to [team members].”

Interview 12: "Giving direct feedback on time. [Team members] do not have to wait to hear it from someone else, but open feedback."

Interview 11: "We can have shared leadership, so we all going to the same direction, but the accountability is something else, and that needs to be clear and cannot be shared. Together we can be leaders in bringing this topic and make it happen. I believe in that, but in the end, I am the accountable person, or you."

Accountability and ownership is linked to the construct of connectedness.

Facilitates participation

Participants discussed several empowering leadership behaviours linked to the facilitation of participation. These behaviours include; balancing facilitation and participation; encouraging ideas sharing; and listening. Participants argued that team members should first get to know each other before they fully participate, and that allowing participation is empowering.

Interview 12: "First of all, we need to learn about each other. And this will not happen in a discussion like 'how are you, introduce yourself, how was kids, work?'. It will not happen in one session. It happens with the interactions that happens naturally. Sometimes at Hilti it happens in a very formal way and this should not happen. So we need to get to know each other first."

Interview 12: "So empowerment is first of all, understanding each other, understanding where we are coming from and giving empathy to each other."

Interview 4: "So I think this part is already there, and this is good to give a chance for transfer between everybody despite the distance. That allow us really to act as a team."

Elements of *participation facilitation* are linked to the constructs of connectedness and participative leadership, while the '*leader must listen*' is linked to leader humility.

5.4.2.2. Task empowerment

Participants discussed several aspects of empowerment by the non-formal leader that are related to tasks or projects undertaken by the non-formal team. These were aggregate into the theme of '*task empowerment*'.

Strengths based ownership

Participants emphasised the importance of assigning ownership of topics to individual team members, and that the leader should know individuals' strengths and weaknesses to assign task ownership based on strengths. Specific reference was made to the satisfaction experienced by team members when task ownership is aligned with strengths and interests. One experienced leader stressed that individual and team competence is a hygiene factor for empowerment to be constructive.

Interview 2: "To use peoples' strengths, because not everyone is strong at everything. So pick the ones that are strong at the most about a certain topic and have [team members] lead that discussion or lead the project. I think those are the things that [the leader] could use to empower [team members]."

Interview 7: "But ultimately, it boils down to that sense of pride of being; 'I have been selected out of the team to drive this initiative, I am the lead market for that'.... because [the team member] feels like the right person to drive this initiative. Typically this is extremely motivating and then [the team members] feel like they can show their competence because everybody has that natural attitude of 'I want to show how good I am'."

Interview 3: "it allows us to work on the strength we have, and that usually is more fun, time passes quicker, usually you feel more accomplished when you are done."

This concept of *strengths-based ownership* has a strong link to *connectedness*.

Freedom of choice

One participant argued that members should be allowed to choose the topics they lead, as this would facilitate closer alignment with strengths and interests.

Interview 3: "There is always going to be something that somebody needs to take, but it cannot be distributed. It needs to be this freedom to choose stuff, because usually people choose the stuff where they feel strong, and that allows even with our current philosophy of developing people, it allows us to work on the strength we have."

Members make decisions

According to participants, team members can be empowered by the leader providing them with information, showing trust, and by giving them authority to make decisions. In addition, one participant noted that the team feels empowered in the organisation if the leader allows the team to take credit for their individual inputs and team outputs.

Interview 10: “I believe that this is the topic for you. I am going to support the decision that you make, and I think that you are the right person. I fully trust you’. So the audible-ising of the trust makes that person jump into the task with the level of intensity and energy.”

Interview 5: “Awareness and information. If [the leader] is able to give us enough information and awareness of what's happening, it is empowering us to take our own decisions too.”

The concept of members being *empowered to make decisions* is linked to *connectedness*.

5.4.2.3. Internal team dynamics

Team is a united front

One participant illustrated the empowering value of the team standing as a *united front* in the organisation, even if they are divided on a topic internally.

Interview 10: “Whatever topic, we work together. We work through and in the end there is always compromise. There is never a situation where all peoples’ viewpoints are captured. There is disagreement. When we go into the open forums, [such as various platforms], we always show complete alignment and solidarity. Whatever disagreements there are, we never show those in front of the [extended community]. We have made the decision and so now, we address our constituency as a unified front.”

5.4.3. Participative leadership

5.4.3.1. Expectation of the leader for participation

During the interviews, participants expressed several expectations that they have of the leader, which they argue will facilitate participation in the non-formal dispersed team.

Participation from strengths

One participant asserted that the leader should draw on the strengths of team members to facilitate participation. Participants argued that the amount of participation expected needs to be realistic (considering their formal responsibilities), and that they want to participate on things that they are familiar with to ensure their inputs add value.

Interview 5: "And I think sometimes when it is a bit too quiet [the leader] might use the strength, because [the leader] knows that I do not mind speaking out."

Interview 3: "What I will do is if I sense that there are topics about to be distributed, I have a quick glance which are the ones I like and I volunteer right away. Because I just hate doing stuff I don't like doing you know? I feel good here, I want to make a difference here. I'm going to volunteer right away before I am even asked."

Interview 11: "[The leader] does it actively and sometimes [the leader] does it so actively that I do not even have the time to answer for all these inputs that is asking for."

This concept links to *connectedness* and *empowering leadership*.

Extracts and synthesises

Participants argued that the leaders' role is to extract and synthesise team inputs. They proposed that the leader should; provide the overall framework within which participation can happen; reserve their opinions for critical situations; and summarise team inputs to facilitate decision-making. One participant discussed how to use the extraction of team inputs to reduce the likelihood of making wrong decisions by the team.

Interview 1: "So the problem in creating that style, if you have someone who has an opinion on that opinion could not be the right opinion, but you have not other strong opinions more than seconds that one. So that's always the piece where you need a little bit to challenge and to encourage people. That is why [the leader] always keep asking any other opinions from the remaining [team members], so [the leader] [encourages] them so that [team members] speak up as well. And that facilitation piece has to happen maybe in a better way."

Interview 1: "I'm going to give opinion whenever I really need to give an opinion because something is not going in the right direction in my perspective."

Interview 2: “let me tell you what I've heard, let me summarize what I've heard and then let's pick the one that makes more sense.”

The concept of *extracting and synthesising* is linked to *connectedness* and *leader humility*.

Participative decision making

Participants emphasised that the leader should create a safe team environment where all members can participate, and that the leader must be a facilitator of collective decision-making. In addition, they argued that subject matter experts should be given the authority to make decisions after obtaining team inputs.

Interview 10: “there are very very few decisions that [the team] do not make together. There is always an alpha in every particular topic, but there are very few decisions that [the team] do not make together.”

5.4.3.2. Team perception of participative leadership

Participants expressed that requests to participate signals that a specific topic is important, and that participation is encouraged by the perception of importance. The majority of participants expressed positive perceptions of participative leadership. However, one participant reasoned that direct appeals to participate from the non-formal leader in certain forums could make certain individuals feel uncomfortable.

Interview 3: “I think it also shows me where the real topics are. Important for [the leader] and important probably for [senior management], and the alignment with general direction.”

Interview 6: “I always feel good about it. It means that [the leader] is asking different parties to share opinions, and hopefully in order to get the best outcome out of it. So for me, again, that will be a positive.”

Interview 8: “I think the other thing is where the discomfort came in was that I actually thought that [the leader] was really trying too hard to be inclusive, wanting to hear my voice but also understanding it from [the leaders’] perspective.”

5.4.3.3. Individual member influence on participation

According to the interviewed teams, different team members have different expectations in order to participate. They commented that individual personality and experience influence team member participation, with extraverted and highly experienced members participating more easily.

Interview 5: "Some of my colleagues are very much more into the quieter zone, where they are very uncomfortable saying their opinion on a bigger scale and rather would do it one to one. So I think again it goes back to the leader understanding who is comfortable doing what."

Interview 6: "I don't think I was ever encouraged. Uh, no, but not because I need it and I am not getting it. I don't need it generally."

Interview 6: "Some people need this push. Some people, maybe there is not enough experience or maybe they are not sure that they should be sharing opinions. But I think it is important then, for [the leader] to step up and try to enforce a little bit."

5.4.3.4. Contextual influence on participation

One participant shared a detailed account of how the specific team context influences the participative behaviour of the members. This participant described that a supportive non-formal team environment resulted in even higher participation than in the members' formal team. It was mentioned that company culture influences participation, with participants arguing that a hierarchical company culture limits the decision-making ability of non-formal teams. According to participants, team members also need to understand their individual role (where they 'fit') in the team before they participate.

Interview 9: "And was reflecting with [formal leader] that my behaviour is completely different from one environment to the other, really completely different. And [the formal leader] said to me, 'look, I don't know what happened, but when you are in the international environment, you are very participative. You are also very straightforward, sometimes you are very direct, and you are not in the [local team]'. And I said, 'well, that is very true' and I was asking myself why? Probably you gave some answer about that."

Interview 8: "I believe that many of us have that tendency when you meet a new group of people, you first check the group out. I tend to check people out. Have a look at the dynamics and see how I would fit in the team and what my contribution would be. So the team dynamics to me was very important to look out for and to understand."

These contextual influences are linked to the constructs of *connectedness* and *empowering leadership*.

5.4.3.5. Outcomes of participative leadership

Feeling of members

The majority of participants expressed that participative leadership results in them feeling valued and respected as important members of the team. In addition, they reason that participative leadership increases commitment to the team, and transcends distance to create a feeling of being a team.

Interview 5: "So utilizing that makes me feel I have something to say, I'm of importance, [the leader] trusts what I do, [the leader] trusts me in the position I am in. So I think that's strong."

Interview 10: "When this type of behaviour is expressed towards me, I would, number one feel that my opinion is valued, and that I am a respected peer in this particular forum."

Interview 8: "In a peer group where I have been continually respected, included, empowered, versus a group where I am not, and then I have to choose where I allocate my time. I choose to not give time perhaps to another topic that is very important and dedicate the time to an area where this type of behaviour has been expressed towards me."

This concept is linked to *connectedness*.

Sharing

Participants proposed that participative leadership supports ideas and information sharing between members. They mentioned that this happens through constructive

discussions where members challenge each other and combine efforts to create quality outcomes.

Interview 2: “Pros are that you let everyone speak, you let everyone really make great inputs. We come up with wonderful ideas.”

Interview 11: “The positives of participation is that each one can share their thoughts and ideas. And I think that is fundamental that you can share your thoughts and ideas and that people can debate.”

Interview 1: “[The team] like it, but actually what [the leader] started liking more is actually when [the team] challenge each other. When [the team] actually add on each other. Along with [the leader].”

The concept of idea *sharing* is linked to *connectedness* and *empowering leadership*.

Inclusion

Participants highlighted that participative leadership result in diverse team members feeling that they are included. They also reasoned that participative leadership facilitates more successful and inclusive team outcomes, and helps the team to reach decisions.

Interview 9: “Also within the community, we are very diverse. But I was reflecting that this diversity is really beautiful, and this is really what gives a lot of contribution to the overall results. So by [the leader] stimulating participation of everybody, [the members] stimulate the participation in each other.”

Interview 12: “But I feel positive and I feel myself. Positive, myself, welcome, included.”

Interview 2: “That works really well, because at the end of the day, you look at the final product, which is both very inclusive, and very successful in terms of inputs and best practices, and I feel like it has a better chance to succeed when being implemented.”

This concept is linked to *connectedness* and *empowerment*.

5.4.3.6. Limitations of participative leadership

Even though participants overwhelmingly supported participative leadership in this context, they challenged the notion of participative leadership as single approach. They stressed the fact that the leader must balance facilitation and participation to prevent

delayed decision-making and action. They further added that there is a need to have boundaries to participation to ensure those with value to add participate, and to manage a safe and supportive team environment.

Interview 2: “However, of course there is a downside. The discussions that are dragging on for too long, people cannot come to a decision.”

Interview 10: “We also have an understanding that if you don’t have an expertise in the subject matter, you should remain silent.”

Interview 5: “You know how some people are more cynical than others. Some people are not very constructive how they say their feedback. It is going to be [the leader’s] job to make sure that [team members] do not get ‘Mocked’ or something like that in a meeting. Otherwise [team members] are not going to speak again. It will kill the whole communication and kill the respect and kill all the trust.”

This concept is linked to *empowerment* and *connectedness*.

5.5. Research question 3: (High quality leader-member exchange)

Research question 3: What type of exchange behaviour will facilitate shared leadership emergence in dispersed non-formal teams?

Participants were asked to provide their perspective on what constitutes a quality exchange between the non-formal leader and a member of the team, and to share their perspectives on what the best means are for having quality exchanges in an internationally dispersed context. The themes within the construct of quality *leader-member exchange* that emerged from the participants’ responses are summarised in table 4 below.

Table 4: *Themes associated with high quality leader-member exchange.*

High quality leader-member exchange			
Themes	# Groups	# Codes	Code frequency
Types of exchanges	1	2	5
Formal exchanges	1	2	4

Informal exchanges	4	17	45
Mix virtual and physical	3	9	22
Boundary conditions for quality exchanges	3	10	24
Trust for quality exchanges	3	11	16
Means of exchange	1	5	12
Process of shaping outcomes	3	14	36
Outcome expectations	3	9	30

5.5.1. Types of exchange

Participants noted a clear distinction between formal, informal, and personal exchanges and proposed that there should be a balanced variety of these types of exchanges.

Interview 5: “There is two kinds of exchanges. One is very business oriented, this is a job and functional oriented exchange, and one is very personal.”

Interview 1: “And I’m not saying let us be best friends, I am saying that a healthy working relationship with a colleague that you at least trust that you have confidence in.”

Interview 11: “So for me quality time is based on these two type of interactions, ad-hoc and blended with clear agenda, clear expected purpose of the meeting, and expected outcome.”

5.5.2. Formal exchanges

The nature of, and the expectations from formal exchanges with the non-formal leader was noted by participants. According to participants, these exchanges should be scheduled at a specific point in time, with pre-defined topics of discussion, and clear objectives that should be achieved.

Interview 11: “And we are talking business only here and for me a qualitative interaction is something that, it is made of two things. It is fixed in time, so we know that there is a frequency, and we know that whenever we are together, following that schedule

appointment, we have topics to debate and talk about. That brings for me a lot of value because I know I will have quality time with that person to talk and go deeper on this topic.”

Interview 12: “I need clarity before I go to a place, not only on time, time is very important, [but also] what do you need? So, the expectation out of this one to one. What is the objective? Why we are here?”

5.5.3. Informal exchanges

Participants discussed several informal aspects of exchanges between the non-formal leader and team members. There are seventeen codes related to informal exchanges, with multiple quotation linked to most codes. The theme of *informal exchanges* have several links with *connectedness*. The concepts identified that are related to informal exchange include; *increase quality, strengthens relationships, informality and frequency combined, and no boundaries*.

Increase quality

Participants argued that exchanges that are less formal in nature, or include informal elements, are of higher quality than pure formal exchanges.

Interview 6: “The better quality will be if, and again it is also something that I believe helps, but not everybody is doing this, I like this warm up part. I generally learned it in Asia and Middle East, where we generally talk about something and anything, and it gives a good feeling. You know, we are not anymore on this super formal stage, and we easily go down to any kind of topic because we are already connected. So most probably that will be for me the better quality.”

Interview 9: “We always try to keep a little bit of fun together. Fun, and also some space for a little bit of decompression. So I think a meeting can be also a place where you have a 10 minutes decompression.”

Less formal exchanges are linked to *connectedness*.

Strengthens relationship

Participants further discussed how informal exchanges help strengthen relationships in the team.

Interview 6: “And especially when it is not your direct report, because you need to build this bond and you cannot build a bond if it is simply professional. It is always about joking a little bit, smiling a little bit, sharing a little bit about this and that, and I think this is really important to make it happen.”

Interview 9: “But there are other types of interactions that we have where the agenda is less structured, as an example, I have a one on one with [the non-formal team] and no subordinates. It is only us. And this is more of check in, so there is not a formal agenda, there is no time limits, but it is a step about relationship building.”

Strengthening of relationships is also linked to connectedness.

Informality and frequency

According to participants, less formal and more frequent exchanges have a positive influence on task execution, perceived distance, relationships, and connectedness.

Interview 11: “The second part of it is the ad-hoc interaction points that can be a fast email, fast chat on teams or something that it will unblock you of a situation that you need a quick answer or something like that, for you to move on or the other way around.”

Interview 8: “I’m typically the person that would say to you, pick up the phone and call me, so it is telephonically. I think that is the best way. And you do not necessarily have to wait for a formalized event to actually reach out to me.”

Interview 1: “So, it is informal and it is frequent, off course not physical because of the distance but, at least you have that opportunity and you will always feel it.”

No boundaries

One participant in particular discussed the value of having ‘free-exchanges’ without any boundaries, that are not associate with any particular topic. This participant reasoned that these types of exchanges facilitate spontaneous sharing and exploration of thoughts, ideas and feelings, which supports individual and team performance.

Interview 3: “What I would look for is a platform where you can exchange directions and ideas, without immediate steps. That are not connected with stuff that you are already doing. This philosophy about, ‘where are we going?’.... I do not come with an agenda, I come with a question, and that question led us to, ‘What do you think about this? I am working on this this vision’.”

Interview 3: “And that is something that I would feel could be good. And that triggers a little bit of this exploration as well. People are looking for solutions here, there, everywhere.”

5.5.4. Mix virtual and physical

During the interviews, participants reflected on a variety of aspects related to physical and virtual exchanges in this context. During these reflections, participants endorsed the notion that there is value in using a variety of physical and virtual exchanges to achieve different benefits. The concepts that are linked to *mixing virtual and physical* exchanges include; *physical interactions, and virtual exchange*.

Physical interaction

Participants affirmed that they prefer physical interactions to digital engagements, as it reduces formality and builds relationships. They emphasised that there is significant value in arranging physical interactions between internationally dispersed team members, asserting that this should be a priority for the non-formal leader.

Interview 6: “Obviously face to face is much better, and that is for me still the most preferable way because even if you do a lot of online discussions and meetings, you still missing this touch and feel that you know you are not getting when you have face to face meetings.”

Interview 9: “But from time to time being physically connected, I think it is personally... very important. Again, this is my problem, my cultural bias again. But for me it is important for all the reasons that we have been discussing before. That is to build a little bit the relationship beyond the professional role.”

Interview 11: "It needs to be these events where we see each other, like once, twice a year. Because it is the face to face thing, it is the social part, that brings not only the business discussion, but that third element."

The concept of *physical interaction* is linked to *connectedness*.

Virtual exchange

In addition to physical interactions, participants acknowledged that virtual exchanges are a powerful means of increasing frequency of engagement between dispersed team members, and that it has become a more personal alternative to written communication in this context.

Interview 9: "Probably a mix. Digitally is hyper powerful. And we are becoming more and more used to that."

Interview 7: "I find it extremely valuable. We would have had enough interactions. So if we had not learned of using Skype, I actually did not like it Personally. I find Microsoft Teams way more, I can breathe, I can see, almost like if you are in the same room. Probably because we got used to it. So I find it really good."

5.5.5. Boundary conditions for quality exchanges

Participants discussed several concepts that relate to conditions that need to be met for high quality exchanges. These were aggregated under the theme of *boundary condition for quality exchanges*, which include; personal interest, clear expectations, and a positive atmosphere. Personal interest and *clear expectation* are also linked to *connectedness*.

Show personal interest

Participants argued that to ensure team engagement, the leader must show personal interest in team members by understanding how they are feeling, and if they are okay.

Interview 4: "It should be always the responsibility to make sure that everybody is engaged and everybody is okay."

Interview 5: "If I am frustrated and I never tell [the leader] that I am frustrated, I am definitely not going to be doing a good job, I might even be destructive, or disruptive to the rest of the team."

Clear expectations

A few participants highlighted that quality exchanges require members to be prepared for the exchange, and for members to know the expectation the leader has of them.

Interview 6: "I think what can be definitely improved is communication. What exactly do we want to discuss? And, what exactly do we want to achieve?"

Interview 6: "[It is] a matter of the approach. If I am using any of those methods and I am still giving you what the topic is I want to discuss and what do we want to achieve, I do not think it really matters what kind of method we are using for the connection."

Interview 6: "I have a feeling that, especially that we are working quite far away, it is really important that people have time to understand and prepare better. I think this is really important, and I think if I would recommend to improve something that will be this."

Positive atmosphere

Finally, participants stressed that there should be a solution oriented mind-set, and a friendly atmosphere to have quality exchanges.

Interview 3: "This gives you this piece of mind that you're in a friendly environment and that you're working together at a bigger thing rather than everybody's pulling in their own direction."

Interview 9: "You need to create this positive attitude.... The people that we have been discussing.... They are always constructive, always listening, maybe thinking differently trying to find the solution. Trying to find a solution attitude is something that is extremely positive. And sometimes key to come to some compromise."

5.5.6. Trust for quality exchange

With participants indicating several aspects of trust that influence the quality of exchanges between the non-formal leader and participants. The concepts associated

with the theme *trust for quality exchanges* include; *trust for authenticity, trust for openness, and trust for vulnerability.*

This theme is linked to *connectedness* and *leader humility.*

Trust for authenticity

Participants argued that high levels of trust, transparency, and respect are required for quality exchanges, and that this will encourage members to be more authentic.

Interview 4: “Today, if you are dating a lady for the first time there is no trust. But then when you are engaged, the level of trust will be different, the topic will be different, the acceptance of each other, feedback, negative and positive will be totally different. And each body will not show his bests, each body will show his normal and he will get the feedback on the normal. Feedback on your best, this is the killing of things. If I want to act, I can act. And you can act. Everybody can act. And this is what we are doing, honestly speaking. Unfortunately we are forced to show our best in the field. We are forced to show our best with team leaders sometimes, but it should not be the case.”

This concept is linked to *leader humility* and *connectedness.*

Trust for openness

Participants commented that trust is required to achieve openness in the team. They claimed that relationships and openness are interdependent, and that the leader can support trust and openness by showing openness to personal feedback from the team.

Interview 11: “And for this particular team we are talking about, I feel very open to do that because I know all of them for many years, we went through many things together and I feel very comfortable doing that. And that brings quality in our interactions as well.”

Interview 5: “So [the leader] needs to build that kind of trust and open communication for [members] to exchange their feelings and it should not be one way. [Members] should be able to feel also if their team leader is happy, frustrated or not.”

This concept is linked to *connectedness.*

Trust for vulnerability

Participants further argued that for the team to be comfortable with showing vulnerability, they should be able to trust the leader to *challenge them* inside the team, but that the leader would *defend the team* in the broader organisation.

Interview 4: “[The leader] can give me hard time in one room, giving me feedback and harsh feedback, that is fine. But we need to be observed in front of others that we are one team. This is the point.”

Interview 4: “You can fight with the team in a closed room, but out of this room [the leader] stands and back up the team.”

This concept is linked to *empowerment*.

5.5.7. Means of exchange

Participants proposed that there are specific appropriate means to have formal and informal exchanges. In addition, they advocated for dedicated one-to-one exchanges with the non-formal leader, where personal connections can be established.

Interview 6: “Thanks to COVID, we learned that there are so many possibilities to connect easy using digitalization and everything which comes with it. Do I think it is generally very easier? You can create WhatsApp Group. You can create teams group. You just invite people and you chat with them just spontaneously.”

Interview 5: “What is very important though is to understand when is this exchange “formal” to an extent where it needs to be written in a formal email with multiple recipients, because that’s the only way that I would say then let us go with an email. Where I am able to send it to many people and they all read each others comments, so if there is multiple people that need to be involved. But if it is ‘informative’, I do not need to send an email saying, ‘By the way, this happened today’. I can either call [the leader] if I want something urgent now and I need an answer, or I text.”

Interview 4: “Talking about myself now individually, [leader and team member] do not have this touchpoint individually and [leader and team member] even do not have discussion beyond business as ‘one to one’. So this is something that needs to be maybe

improved. Because the physical connection between the team leader and team member is really needed, always, you need to catch up with the team.”

5.5.8. Process of shaping outcomes

Participants discussed several elements that relate to the process of shaping outcomes during exchanges in the non-formal team. The concepts that are related to the *process of shaping outcomes* theme include; *personalised exchange, collaboration towards inclusive outcomes, and within-team exchanges.*

Personalised exchange

Participants emphasised that the leader should be adaptive to the cultural needs of the team, considering the high cultural diversity of teams in this context. In addition, they expressed that members expect personal feedback and recognition during exchanges.

Interview 6: “And the last piece which I also learned in Asia and Middle East with all my traveling, is cultural understanding. So not applying same rule to everybody but adjusting to the culture.”

Interview 4: “So two way communications should always recognize the good stuff that you did and I did. Not to be specific and direct to the point. No, we highlight something that you did good. We need to recognize that.”

Interview 8: “The other one is around me personally. Yes, we have the business topics that we discuss. Yes, we have the family topics to discuss. But also in terms of the personal growth.... also for [the leader] to play a coaching role in terms of how do I deal with difficult conversations or difficult situations. Both in terms of work, but also in terms of personal life and creating that balance.”

This concept is linked to *connectedness*.

Collaboration towards an inclusive outcome

The majority of participants stressed that a quality exchange with the leader is a two-way exchange of perspectives, which results in the combination of inputs, and the adaptation of differing views into an inclusive outcome. They argued that both parties

should give and take from the exchange, and asserted that members want to feel heard and understood.

Interview 6: “And then it will be also good if the conversation is two ways directions. So generally we share something, we share feedback, we take feedback and we discuss again.”

Interview 1: “So it has to be something that has an outcome, that was actually agreed upon and built or constructed based on two, maybe not very similar opinions from the beginning. That's what I would call valuable interaction.”

Interview 5: “So the best exchange is knowing that the person in front of me has understood my point and actually giving me feedback or giving me some kind of information back. Even if it is an acknowledgment; 'alright, understood', so it doesn't need to be a decision.”

This concept is linked to *connectedness*.

Within-team exchange

Participants proposed that the leader does not have to facilitate exchanges on topics that are relevant for specific team members, but that the members themselves should facilitate these exchanges. They further pointed out that members should use exchanges initiated within the team to build on their different views and perspectives.

Interview 10: “There is some relationship building there, but it is really now here peer to peer, you know? Perhaps I have the ability to speak a little bit more openly on certain topics. And so one of the key baselines for us is that we have different types of interaction sessions.”

Interview 9: “And then on the other side, quality because the discussion is enriched with different perspective, coming from different dimensions....The difference of the perspective of the business journey, the finance perspective, the sales perspective, trying to always see, discuss and think of the topic from multiple points of view.”

The concept of *within team exchange* is linked to *connectedness* and *leader humility*.

5.5.9. Outcome expectations of exchanges

Participants mentioned a variety of expectations they have of exchanges with the leader. These expectations were grouped into three concepts. The concepts linked to *outcome expectations of exchanges* include; *definitive outcomes*; *relevant knowledge sharing*, and *intangible outcomes*.

Definitive outcomes

Most participants expressed that they expect exchanges to have an outcome that leads to action, and that the outcome needs to have an impact. They added that exchanges should lead to agreement. They further noted that some exchanges could be for creativity, while using others for making decisions.

Interview 7: "If you can structure it with a clear outcome, like I want to decide on 'this'. It gives you a sense of accomplishment. It is experience of everybody that sometimes you go into meetings and you get out and you ask yourself, 'Why on earth was I part of this meeting? I did not get anything. We did not decide on anything, and I did not bring anything back with me.'"

Interview 1: "Let us say we agree on something, you said yes, but in reality after you move away from a meeting you do not act upon that to get to where, or to achieve more or less what the reason was why we actually had that discussion. That means in reality that was not really a valuable conversation or exchange, and that was more less a chit chat and it led to nothing."

Relevant knowledge sharing

According to participants, exchanges should result in all parties gaining on the one hand, while sharing on the other. This gaining and sharing should be focussed on knowledge, ideas, and experiences that are applicable to the reality faced in their day-to-day context.

Interview 4: "If I feel that I am getting more knowledge or more ideas from my team leader, definitely this would be my reaction. I will be super happy to hear some corrections or some area that I did not think about, and more ideas coming from the experience or from different exposure."

Interview 9: "I see a lot of connection with the different real life experience, so connected to the reality, to the markets, to the customer, to the specifier. [Trying] to make the discussion over with the feet on the ground."

Intangible outcomes

Even with the emphasis placed on tangible outcomes, participants acknowledged that not all exchanges have to have tangible outcomes. They argued that intangible outcomes such as getting to know each other, building relationships, and increasing trust could be just as valuable to the team as most other tangible outcomes.

Interview 7: "Because sometimes the outcome is just to get to know each other. I mean, it does not have to be money, it does not have to be an agreement to move forward on a certain topic together. Sometimes it is the very basic things, that we start trusting each other. And it is immense the importance of this aspect. That is why I am saying the outcome does not necessarily need to be return on investment or anything like that."

5.6. Conclusion of results

In this chapter we presented the results of this research study. The findings were presented for each of the research questions, under the key themes identified during the analysis of the interview data. The findings are summarised below:

5.6.1. Conclusion of research question 1

Connectedness in internationally dispersed non-formal teams can be facilitated by considering the following aspects.

- **Leader influences**
 - The leader should be the facilitator of participation
 - The leader should be a development partner for team members
 - The leader should build trust between all members of the team
 - The leader should provide a common goal to pursue
 - The leader should align the objectives of all relevant stakeholders
 - The leader should coordinate strengths of the team members
 - The leader should create networks inside and outside the team
 - The leader should adapt to individual team members needs and cultures

- The leader should hold members accountable for inputs and outcomes
- **Member influence**
 - The members of the team should trust and respect each other
 - Team members should proactively take the lead
 - The team should '*work as one*' to increase organisational influence
- **Contextual influences**
 - Formal team context influence members' commitment to non-formal team
 - Non-formal team internal context determines level of connectedness
 - Commonalities between team members supports connectedness
- **Influence of exchange**
 - Formality does not support personal connectedness
 - Physicality increases connectedness
 - Frequency supports connectedness

5.6.2. Conclusion of research question 2

Non-formal leader humility, empowering leadership, and participative leadership can be applied to facilitate share leadership emergence in the context of internationally dispersed non-formal teams, by considering the below findings.

a) Non-formal leader humility

- **Outcomes**
 - Members co-create as through openness and constructive debate.
 - Removes hierarchies as leader perceived more as a peer.
 - Improves team dynamics by encouraging listening and creativity.
- **Expectations of the humble leader**
 - Leader facilitate inputs of the team members.
 - Leader keeps the team aligned towards a goal.
- **Perception of the humble leader**
 - The leader is perceived as genuine and authentic, increasing trust.
 - The leader is perceived as being 'human', increasing relatability.
 - Humility rationalises unrealistic expectations of the leader.
- **Team response**
 - Team responds overwhelmingly positive to non-formal leader humility.

- **Boundary conditions**
 - Trust is needed for humility to not be exploited.
 - Respect is needed between members to allow leader to remain humble.
 - A competent team is needed to allow the leader to be humble.
 - **Limitations**
 - To manage team dynamics, low humility could be required.
 - Humility could slow decision making if not balanced.
 - Humility could result in too many opinions if humility is not balanced.
- b) Empowering leadership**
- **Leader behaviour**
 - Alignment towards a common goal is empowering.
 - Showing trust in the team and its members' ability is empowering.
 - Expanding the networks of members empowers them.
 - Holding members accountable makes them feel empowered.
 - Facilitating participation empowers members to contribute and influence.
 - **Task empowerment**
 - Strengths based ownership empowers members to add value.
 - Freedom of choice helps align ownership with strengths and interests.
 - Members should make decisions to be empowered.
 - **Team dynamics**
 - If the team act as a united front, they are empowered as a collective.
- c) Participative leadership**
- **Expectation of the leader for participation**
 - Members should be encouraged to participate from their strengths.
 - The leader should extract and synthesise the inputs from the team.
 - The leader should facilitate participative decision-making.
 - **Team perception**
 - Participative leadership is perceived overwhelmingly positive.
 - Request to participate signals importance of topics.
 - Direct appeals makes members feel compelled to participate.
 - **Individual team member influence**
 - Individuals have different expectations in order to participate.

- Personality influences members' propensity to participate.
- Experience influences members' participation.
- **Contextual influences**
 - Participation adds more value if members are competence.
 - Individual member need to know where they fit in the group to participate.
 - Hierarchical company culture hinders non-formal team decision making.
- **Outcomes**
 - Requests to participate makes members feel important, valued, respected, committed, and part of the team.
 - Participative leadership leads to sharing valuable information in the team.
 - Participation make diverse team members feel included.
- **Limitations**
 - Participation must be balanced to maintain team efficiency.

5.6.3. Conclusion of research question 3

The following findings provide insight into the elements that influence the quality of exchanges in the context of internationally dispersed non-formal teams.

- **Types of exchanges**
 - Participants distinguish between formal and non-formal exchanges.
- **Formal exchanges**
 - Formal exchanges should be scheduled in time, with a set agenda, and have a specified objective.
- **Informal exchanges**
 - Quality is higher when there are element of informality.
 - Informal exchanges strengthens relationships.
 - Informality and frequency reduces perceived distance, supports ongoing conversation and execution, increases connectedness, and must be relevant and efficient.
 - Exchanges with no boundaries facilitates exploration of diverse ideas.
- **Mix between virtual and physical exchanges**
 - Physical reduces formality and significantly supports relationship building.
 - Virtual increases frequency and is an effective alternative to other means.

- Combined physical and virtual exploits the benefits of both.
- **Boundary conditions for quality exchanges**
 - The leader should show personal interest in members during exchanges.
 - Members want clear expectations to be able to prepare themselves.
 - Positive atmosphere is needed for quality exchanges.
- **Trust for quality exchanges**
 - Trust is a pre-requisite for member to be authentic during exchanges.
 - Trust is required for members to be open during exchanges.
 - For members to show vulnerability, they must trust the leader.
- **Means of exchange**
 - The various means should be adapted to suit the purpose of exchange.
 - One-to-ones enable higher quality personal engagements.
- **Process of shaping outcomes**
 - Exchanges should be personalised to the member's context and culture, and should include feedback and recognition.
 - Parties must collaborate by combining different views into inclusive outcomes.
 - Within-team exchanges without the leaders' involvement are necessary for effective collaboration in the team.
- **Outcome expectations**
 - Quality exchanges have definitive outcomes that lead to action and impact.
 - In quality exchanges, relevant knowledge is shared between members.
 - Intangible outcomes like relationships and trust are high quality.

Chapter 6

6. Discussion of results

As we argued in chapter one, the shared leadership research has focused largely on formal and co-located teams. As such, this study aims to extend our knowledge to dispersed non-formal teams. The literature reviewed in chapter two thus serves as reference for the discussion of the results presented in chapter five. The discussion that follows highlights how the findings of this study compares to the existing literature on shared leadership. It aims to extend our understanding of how the emergence of shared leadership can be facilitated in the specific context of internationally dispersed non-formal teams. This study explored how this can be achieved by increasing the density and quality of inter-team networks (Wu & Cormican, 2016) through; **connectedness** (Zhu et al., 2018); **non-formal leader behaviour** (participative leadership (Sweeney et al., 2019), non-formal leader humility (Chiu et al., 2016), empowering leadership (Sweeney et al., 2019)); and **high quality exchanges** (Zhu et al., 2018).

6.1. Discussion of research question 1

By answering the research question of **how can connectedness be increased between internationally dispersed non-formal team members**, this study helps us gain understanding of how to facilitate shared leadership emergence in this specific context. It further helps us to understand how to realise the benefits of this leadership approach in the specific context. Connectedness directly influences network density as it increases the number of influence interactions between the members of the team. This question builds on Zhu et al. (2018), who identified that; *team connectedness* moderates the effects of shared leadership on team performance outcomes; *team cohesion* moderates the effects of shared leadership on team performance outcomes; and *team collectivism* is an antecedent of shared leadership.

6.1.1. Leader influence on connectedness.

a) Common goal orientation

The results of this study suggests that non-formal leaders have a core role to play in increasing the connectedness of non-formal internationally dispersed teams. Participants noted that the leader should provide the team with **clear direction**, and a

common goal to pursue, which increases connectedness. The results show that the goal should be align with the objectives and expectations of the members of the team and other related stakeholders such as their formal leaders, and that these expectations should be formalised through contracting between stakeholders. The findings are supported by other studies that identified that *a shared vision* and *common purpose* serve as antecedents of shared leadership (Hoegl & Muethel, 2016; Nordbäck & Espinosa, 2019; Sweeney et al., 2019; Zhu et al., 2018). Wu et al. (2020) identified *understanding of objectives* as antecedent of shared leadership. The notion that the leader should provide the team with a shared vision to pursue, is associated with inspirational leadership that is effective in globally dispersed teams to improve trust (Seshadri & Elangovan, 2019). Nederveen Pieterse et al. (2019) also supports common goal orientation in teams with low authority differentiation.

b) Network creator

The findings indicate that the leader should support the ***creation of networks*** within and beyond the team by creating smaller teams for specific purposes, and by linking members to broader stakeholder groups in the organisation. These finding are supported by Sweeney et al. (2019) who points out that the effectiveness of shared leadership is underpinned by its ability to enable the distribution of power and influence through a leadership network. It was discussed in chapter two that network density as measurement of shared leadership is a greater predictor of shared leadership effectiveness, which further supports the views of participants in this study (D’Innocenzo et al., 2016).

c) Development partner

The participants point out that the leader should act as a ***development partner*** by understanding the goals and ambitions of team members, by providing constructive feedback, and by allowing space for failure and ***learning***. The influence of the leader as a development partner did not emerge from the literature reviewed, suggesting a possible novel area for further exploration. Lyndon et al. (2020) does however underscore the importance of learning for the realisation of creativity through shared leadership.

d) Trust builder

Members of non-formal teams advocate that the non-formal leaders should be ***deliberate about building trust*** by taking structured action, actively displaying trust, and by displaying and encouraging openness. The importance of trust is supported by several authors who identified trust as an antecedent of shared leadership (Klasmeier & Rowold, 2020; Lyndon et al., 2020; Seshadri & Elangovan, 2019; Sweeney et al., 2019; Zhu et al., 2018,). Trust has also been found to increase team performance (Breuer et al., 2016; De Jong et al., 2016), and moderates the impact of shared leadership on performance outcomes (Zhu et al., 2018).

e) Adapt to member needs

The findings suggest that due to the complexities of internationally dispersed teams and culturally diverse team members, the ***leader must be adaptive*** to the different needs and contexts of team members to allow members to feel part of the team. Seshadri and Elangovan (2019), who noted that leader adaptability is important to foster a collective environment in diverse teams, support this view.

f) Facilitate participation

This study found that the leader can influence connectedness by ***encouraging and facilitating team participation***, and by allowing participative decision making towards collective and inclusive outcomes. It was also mentioned by participants that the leader should aim for *majority buy-in* to decisions, as opposed to perfect solutions to support connectedness. The results further suggests that the leader must *balance participation with facilitation* to prevent unconstructive discussion, and members should be held accountable for their inputs to support quality of input. Previous studies identified that participative leadership (Sweeney et al., 2019) and participative decision making (Wu et al., 2020) are antecedents of shared leadership in co-located teams. This study therefore supports the use of participative leadership in dispersed non-formal teams.

g) Coordinate strengths

This study found that the non-formal leader should play the role of ***coordinator of strengths***. The leader is expected to understand the strengths and weaknesses of the different team members, and to use this understanding to assign leadership, ownership,

and decision-making authority for tasks based on strengths. This coordination of strengths supports member confidence and participation. The participants further voiced their expectation that the leader should connect members in smaller groups to match strengths of some with development areas of others to facilitate peer to peer coaching. The results provide deeper insights into what the non-formal leader can do to coordinate the leadership activities in the team to prevent uncontrolled leadership that does not support team outcomes as described by Nordbäck and Espinosa (2019), and further allows the legitimisation of leaders that emerge in the team. These findings further build on Zhu et al. (2018) who identified *coordination of roles* as a mediator between shared leadership and performance.

6.1.2. Members influence on connectedness

a) Trust and respect

This study found that in addition to the non-formal leader, the members of the team have a role to play in increasing team connectedness. Team members should show ***trust and respect*** for each other by getting to know each other, by accommodating cultural differences, and by being transparent about their strengths and weaknesses. This team behaviour will support positive team environment where members can contribute and engage openly without fear. This fear is associated with *risk perception* which will reduce team effectiveness if not overcome through trust (Breuer et al., 2016). These findings are supported by various authors who identified that trust supports shared leadership emergence (Klasmeier & Rowold, 2020; Lyndon et al., 2020), and team performance in dispersed teams (Breuer et al., 2016; De Jong et al., 2016)

b) Proactive engagement

The findings show that members should ***proactively engage with one another*** on topics of mutual interest without the leader's initiation. It further identifies the need for the members of the team to co-create through collaboration and the sharing of learnings and experiences. This type of cooperative engagement supports the emergence of shared leadership as it allows individual team members to share their diverse functional perspectives with the team (Kukenberger & D'Innocenzo, 2020). Seshadri and Elangovan (2019) further found that this type of behaviour supports trust, which supports shared leadership emergence (Klasmeier & Rowold, 2020).

c) Work as one

The findings of this study identified that team members must '*work as one*' to increase the feeling of connectedness and being a collective. Team members commented that members should share the pride and disappointment for each other's successes and failures to support connection. The participants emphasises the importance of team members combining efforts to influence other organisational stakeholders such as formal leaders, and to defend the non-formal team in the broader organisation. Drescher and Garbers (2016) found support for a collective identity supporting collective leadership. Zhu et al. (2018) identified *team collectivism* as antecedent of shared leadership, and *team cohesion* as a mediator between shared leadership and its outcomes in teams, which supports the findings of this study.

6.1.3. Contextual influences

Considering the contextual specificity of the study, it was expected that there would be contextual influences emerging. The study found that the context of the ***formal and non-formal team***, as well as the ***commonalities between team members*** influences the connectedness of the team.

a) Formal team

Participants discussed how their *day-to-day operations* and their *formal team needs*, are prioritised over the non-formal team, which results in reduced commitment and connectedness if the objectives of the two teams are not aligned. Hoegl and Muethel (2016) identified these conflicts of interests as barriers to shared leadership, supporting the finding that objectives between the formal and non-formal teams need to be aligned.

b) Non-formal team

The findings of this study shows that the non-formal team members ***need to have a voice***, be able to ***influence team decisions***, and must ***understand where they fit*** in the team to increase connectedness. This view is supported by Kukenberger and D'Innocenzo (2020) who found that the functional diversity of team members can only be harnessed if the diversity is valued and included. These findings further build on Zhu et al. (2018) who identified team voice to support shared leadership emergence.

c) Commonality

Some of the most significant influencers of connectedness found by this study, is ***commonalities between team members*** in the form of a shared history, shared values, and common interests. The participants of one of the teams interviewed had a shared working history of more than a decade. This team emphasised how their history and shared values create deep connection, and in turn enables active practice of shared leadership. Drescher and Garbers (2016), who highlight that a collective identity in the team supports collective leadership emergence, support this finding. They also found that if team members do not share the same values, participation in team activity will reduce, and thus obstruct shared leadership (Drescher & Garbers, 2016).

6.1.4. Influence of exchange

Due to the contextual impact of international dispersion, the construct of leader-member exchange was studied in detail in research question three. However, aspects of this construct related specifically to connectedness emerged during the analysis of the data. The results show that ***informality, physicality and high frequency*** of exchange support increased connectedness of non-formal dispersed teams.

d) Informality

The influence of informal exchanges on connectedness could not be over emphasised by participants. Less formal exchanges was found to increase connectedness by increasing the frequency of exchange and supporting ongoing conversation. Participants also shared how less formal exchanges help members to get to know each other, build relationships, and increase personal connection. The results further indicated that less formal exchanges help members build support structures and better understand the needs of the team. Informal and unprompted communication between dispersed team members was found in a previous study to increase team effectiveness (Eisenberg et al., 2019).

e) Physicality

The members of non-formal teams unequivocally agree that physicality is a key element for creating connection between team members in non-formal dispersed teams where physical engagements are infrequent. These physical engagements, even if infrequent,

builds trust and relationships that support more rapid dispersed team connectedness. Seshadri and Elangovan (2019) points out that a lack of physical communication increases the time it take to build trust, and Breuer et al., (2016) defines the effects of the high risk perception of virtual communication, thus supporting the value of physical interactions.

f) Frequency

The results from this study identifying that a *high frequency of relevant, efficient, purposeful, and bi-directional exchanges* significantly increase connectedness between non-formal dispersed team members. Using the frequency and quality of influence interactions between individuals in a team, as a measurement of shared leadership, results in an increased correlation between shared leadership and its positive outcomes (D'Innocenzo et al. 2016).

6.1.5. Degree of connectedness and its outcomes

The results from this study shows that connectedness ***evolves over time*** and that there is a distinction between *formal* and *non-formal connectedness* in teams. The findings suggests that ***non-formal connectedness is a deeper*** level of connection than formal connectedness. The members of non-formal dispersed teams explain that connectedness increases ***empathy*** between team members, improves ***internal team dynamics***, increases ***participation***, and support business ***execution***.

6.1.6. Conclusion of research question 1

The findings from research question one is summarised in figure 7 as *a framework for the establishment of connectedness between internationally dispersed non-formal team members*. This framework provides insight into the various elements that influence connectedness in this context, and how to achieve increased connectedness for shared leadership emergence and effectiveness (Zhu et al., 2018).

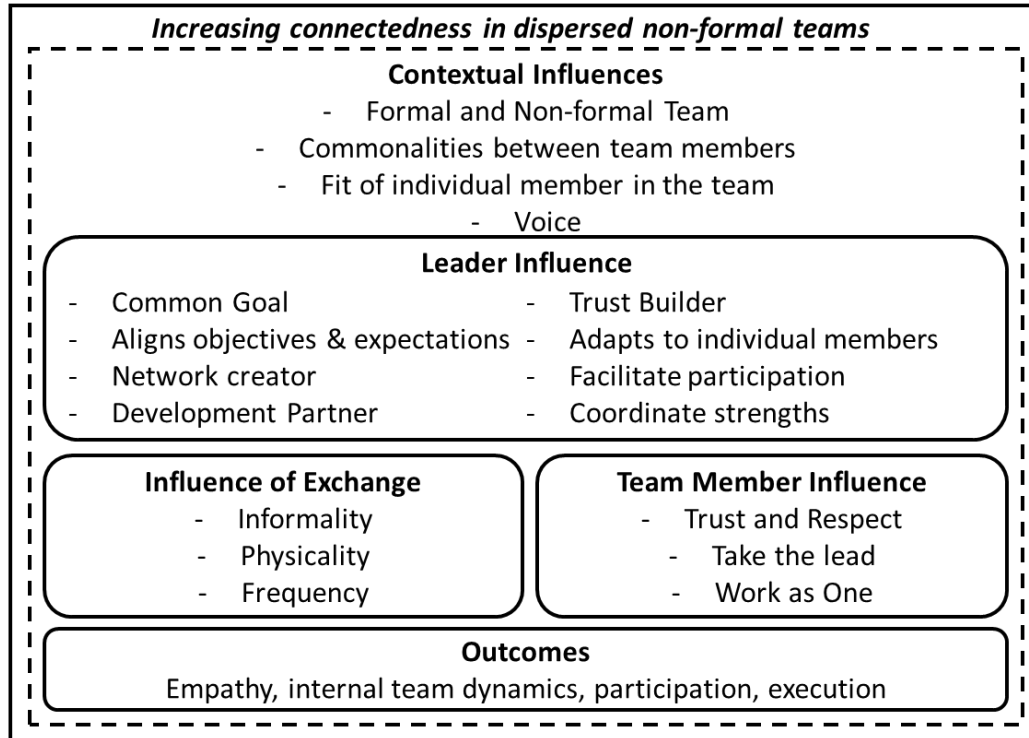


Figure 7: A framework for the establishment of connectedness between internationally dispersed non-formal team members.

6.2. Discussion of research question 2

The significant contextual differences that exist between *co-located formal teams* and *internationally dispersed non-formal teams*, raised the question of whether leadership approaches that are effective in the one context has the same impact in the other. As *Leader humility* (Chiu et al., 2016; Zhu et al., 2018), *empowering leadership*, and *participative leadership* (Fausang et al., 2015; Sweeney et al., 2019; Zhu et al., 2018) has already been identified as antecedents of shared leadership, research question two explored how the members of non-formal dispersed teams perceive *humility*, *empowering behaviour*, and *participative leadership* by the non-formal leader. In so doing, this question provides an understanding of possible effective leadership approaches that can be applied in this context to facilitate shared leadership emergence.

6.2.1. Non-formal leader humility

Members of non-formal dispersed teams consistently describe non-formal leader humility as a highly appreciated leadership trait for a non-formal leader in this context, and responds positively to this kind of behaviour.

1) Perception of the humble leader

Several participants shared the view that non-formal leader humility supports the perception of the leader being ***genuine and human***, which makes the leader more ***relatable*** to the team. Participants commented that there is often unrealistic expectations placed on the leader due to perceived hierarchy, and feel that humility helps to ***rationalise these expectations***. Through humility making the leader more relatable, these findings suggest that humility can improve *leader prototypicality*, and thus support shared leadership in internationally dispersed non-formal teams (Grille et al., 2015). These findings further suggest that humility will reduce *authority differentiation*, and by definition increase the propensity of team members to engage in leadership behaviour (Nederveen Pieterse et al., 2019).

2) Expectations of the humble leader

The responses from participants indicates that there are two over-arching expectations of the humble leader in this context. The first expectation is that the leader should be a ***facilitator of team inputs*** by listening to the team, bringing together the inputs of the team, and not forcing decisions top-down. This construct is linked to the findings of research question one, where it was discussed that the leader should facilitate participation which is an antecedents of shared leadership (Sweeney et al., 2019; Wu et al., 2020).

The second expectation that emerged from the results is that the leader must ***align the team towards a goal*** by sharing the 'big picture' and by helping the team to understand the benefits for them. This finding is also linked to research question one and is supported by several authors who define various iterations of *common goal orientation* that is important for shared leadership in teams. (Hoegl & Muethel, 2016; Nederveen Pieterse et al., 2019; Nordbäck & Espinosa, 2019; Seshadri & Elangovan, 2019; Sweeney et al., 2019; Wu et al., 2020; Zhu et al., 2018).

3) Outcomes of non-formal leader humility

From the responses from participants, three groups of outcomes of non-formal leader humility was identified. The first outcome is that members **co-create**, as humility encourages **openness** and *constructive debate* where members building on each other's perspectives. The second outcome is the **removal of hierarchy**, which makes team members feel like peers instead of subordinates and allows them to influence team outcomes. It further allows others to show **vulnerability**, which supports increased **trust**. A collaborative team environment was found to be conducive for shared leadership emergence (Drescher & Garbers, 2016), and Hoch and Dulebohn (2017) explain that team openness is associated with shared leadership emergence. It was also discussed that when perceived hierarchies are removed, more team members are able to exert influence over team outcomes, supporting shared leadership (Nederveen Pieterse et al., 2019; Oedzes et al., 2019).

Boundary conditions for non-formal leader humility

Even though non-formal leader humility is perceived as a positive leadership trait, it was noted by participants that for this approach to be effective, the team must have a **high level of competence** and that there should be **trust and respect** between team members.

4) Limitations of non-formal leader humility

The majority of the participants interviewed in this study acknowledge that there are certain *limitations to humility* that the non-formal leader should consider. The findings show that the leader is often required to show lower levels of humility to **manage team dynamics** such as unconstructive exchanges, or to *prevent endless discussions* that lead to nowhere. The data collected suggests that there is a risk that humility can be **perceived as weakness** if the leader is unable to identify and adapt to situations where humility is not appropriate. The analysis of the responses of participants shows that non-formal leader humility is overwhelming positive but **must be balanced** to overcome its limitations. These findings can be linked to Nordbäck and Espinosa (2019), who noted that when collective leadership is not explicitly coordinated, it could result in

unconstructive activity by the team, supporting the view that humility should be balanced with facilitation.

5) Conclusion of leader humility

The findings of the questions related to empowering leadership in internationally dispersed non-formal teams are summarised in figure 8 as *a framework of non-formal leader humility in dispersed teams*. This framework gives insight into the application of leader humility to facilitate shared leadership in this context (Chiu et al., 2016; Zhu et al., 2018).

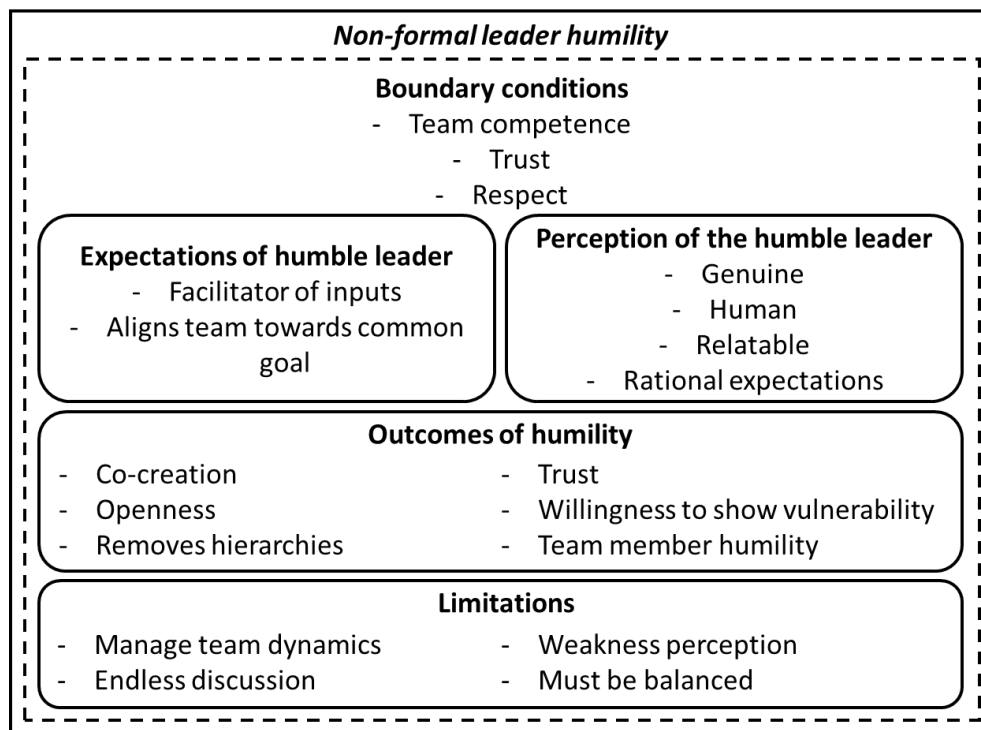


Figure 8: *A framework of non-formal leader humility in dispersed teams.*

6.2.2. Empowering leadership

As previously discussed, *vertical empowering leadership* has been identified as a antecedent of shared leadership in formal and co-located teams (Fausing et al., 2015; Sweeney et al., 2019; Zhu et al., 2018). The results discussed in this section extends the construct of *practicing empowering leadership* to the context of internationally dispersed non-formal teams to support shared leadership emergence.

1) Leader behaviour

It was identified during the analysis of the interviews that there are specific *non-formal leader behaviours* that are perceived as empowering, by internationally dispersed non-formal teams.

a) Align the team towards a common goal

Participant responses show that the leader must empower the team by ***aligning them towards a common goal***. They indicate that this can be achieved by explaining the '*reasons why*', showing members '*what is in it for them*', and by connecting the '*day-to-day*' to the 'big picture'. The results show that members feel un-empowered when they feel their context is different, or when their individual needs are not acknowledged. These findings link back to the concept of the leader providing a *clear direction* and *aligning the team towards a common goal* discussed under the findings of research question one and under *non-formal leader humility*. This places significant emphasis on this re-occurring theme of a *shared vision and common purpose*, which was identified in the literature as antecedent of shared leadership (Hoegl & Muethel, 2016; Nederveen Pieterse et al., 2019; Nordbäck & Espinosa, 2019; Seshadri & Elangovan, 2019; Sweeney et al., 2019; Wu et al., 2020; Zhu et al., 2018).

b) Trust the team

The results established that team members feel empowered when they are ***trusted by the non-formal leader***. One of the participants emphasised that the non-formal leader must be able to "*let go of the reigns*" and trust in the ability of the team for them to be empowered. This concept of trust refers to the trust displayed by the leader towards the team, which is linked to leader humility where trust was identified as an outcome. This trust is related to the concept of the *leader as trust builder* discussed under research question one, which is associated with *trust between members of the team*. The literature supports the importance of trust at different levels of the team (De Jong et al., 2016), to support shared leadership emergence (Klasmeier & Rowold, 2020; Lyndon et al., 2020; Zhu et al., 2018), and improved performance (Breuer et al., 2016; Seshadri & Elangovan, 2019).

c) Expand team members' networks

It was found that **expanding team members' networks** are empowering. Participants feel the leader must help members expand their '*circle of influence*' and help them to '*manage up*' in the organisation. This is supported by studies that found the strength of networks to be a key measurement of shared leadership (Sweeney et al., 2019; D'Innocenzo et al., 2016). High networks density was also found to increase knowledge sharing ability and team creativity (Wu & Cormican, 2016).

d) Hold members accountable

The responses from participants brought to light that **accountability is empowering**. The results show that the leader must hold team members accountable for their contributions to the team and the execution of their assigned responsibilities, for them to be empowered. The leader must also provide direct feedback when the leader feels that something needs to change. The literature reviewed did not reveal much insight into accountability associated with shared leadership, which could be an interesting avenue for future research to explore.

e) Facilitate participation

The final leader behaviour that emerged from the data analysis is that the leader must **facilitate participation** to empower the team. The leader as *participation facilitator* also emerged in research question one. The construct of participative leadership, which was identified as antecedent of share leadership (Sweeney et al. 2019; Zhu et al., 2018), will be discussed in greater detail in the next section.

2) Task empowerment

When participants responded to questions related to being empowered by the non-formal leader, the theme of *task empowerment* emerged very early. The results indicate that there are three core elements of task empowerment in this context, which are; *strengths based ownership*, *freedom of choice*, and *members make decision*.

a) Strengths based ownership

Strengths based ownership requires the leader to understand the strengths and weakness of team members, and then using that understanding to distribute ownership

amongst the members based on their strengths and competencies. This concept is linked to research question one where the leader was identified as a *strengths coordinator* to facilitate connectedness. The distribution of task leadership was found to enable shared leadership (Hoegl & Muethel, 2016). Grille et al., (2015), who identified psychological empowerment as an antecedent of shared leadership, support these findings that the distribution should happen on strengths. The findings further provide insight into how the leadership activities of internationally dispersed non-formal teams can be coordinated by the non-formal leader to support the perception of **personal** and **peer leadership legitimacy** in the team (Nordbäck & Espinosa, 2019), which will encourage mutual leadership and followership in the team.

b) Freedom of choice

It was further found that to empower team members they must be given the **freedom to choose** the tasks or topics they lead or get involved with, which facilitates alignment with strengths and interests supporting greater commitment. This also links directly to the literature on psychological empowerment (Grille et al., 2015) and *personal* and *peer leadership legitimacy* that was just discussed (Nordbäck & Espinosa, 2019).

c) Team members make decisions

The results show that the first two themes go hand in hand with the members being **empowered to make decisions**. The leader should do this by; sharing information, allowing functional experts and topic owners to make decisions, and by not scrutinizing member decisions unless there are fundamental concerns. The leader must allow space for failure and learning, and should allow the team to take credit for team outputs in the broader organisation. The literature supports the view that team members should be given enough autonomy to influence and take decisions, to encourage rather than undermine shared leadership (Hoegl & Muethel, 2016; Oedzes et al., 2019).

3) Internal team dynamics

For the team to be empowered as a collective, the results show that there should not be a 'us and them' mentality. Even if the team might be divided internally on a specific point of contention, the team must act as a **'united front'** when engaging with other stakeholders to increase the team's influence in the organisation. The literature supports

this by identifying that shared leadership emerges through team collectivism (Zhu et al., 2018), a collective team identity (Drescher & Garbers, 2016).

4) Conclusion of empowering leadership

The findings of the questions related to empowering leadership in internationally dispersed non-formal teams are summarised in figure 9 as *a framework of empowering non-formal leadership in dispersed teams*. This framework explains how to facilitate team member empowerment in this context to support shared leadership emergence (Fausing et al., 2015; Sweeney et al., 2019; Zhu et al., 2018).

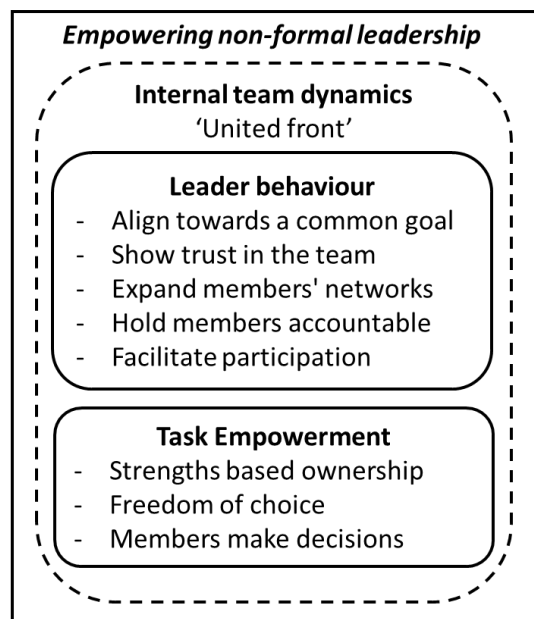


Figure 9: *A framework of empowering non-formal leadership in internationally dispersed teams.*

6.2.3. Participative leadership

It was discussed in chapter two that participative leaderships is an antecedent of shared leadership (Sweeney et al., 2019). The discussion of the results that follows intends to build on this finding by providing a rich description of how to approach participative leadership in internationally dispersed non-formal teams, and the elements that influence team participation in this context.

1) Expectation of the leader for participation

a) Participation from strengths

The results presented in chapter three shows that participation and involvement of team members should be expected in areas where they have **competencies and strengths**. This requires that the leader **understands the strengths of the team** and that ownership should be aligned with strengths. Based on the context of members being in formal and non-formal teams concurrently, it was found that the leader should **adjust participation expectations** to align with what is manageable for members. Seshadri and Elangovan (2019) identified that coordinating the strengths of dispersed team are important and challenging. The literature further reveals that unconstructive participation could result in shared leadership reducing team effectiveness (Nordbäck & Espinosa, 2019), thus supporting the notion that facilitation should happen from a point of strength or expertise.

b) Extracts and syntheses

Participants see the non-formal leader as the one who **extracts and synthesises** the inputs of the team. The leader described as the one who keeps the 'big picture' in mind while extracting inputs from all team members before bringing those inputs together in an inclusive conclusion. The literature supports these findings by identifying that functional diversity could only support shared leadership emergence if the team members' diverse perspectives can be extracted through participation (Kukenberger & D'Innocenzo, 2020).

c) Participative decision making

Based on the findings, the leader is expected to facilitate **participative decision making** and to keep their opinions for when it is critical. The leader is also responsible for moderating a safe team environment where members' are respected and contributions are valued. Literature supports these findings by pointing out that a *collaborative environment* where members can *participate* and have a *voice*, supports shared leadership emergence (Drescher & Garbers, 2016; Hoegl & Muethel, 2016). Participative decision making facilitated by the non-formal leader can help overcome informal hierarchies that could prevent shared leadership (Oedzes et al., 2019).

2) Team perception of being encouraged to participate

The team members that participated in this study unanimously described their perception of participative leadership as positive. They explain that if the non-formal leader encourages them to participate, they feel **compelled to participate**, and that it signals that a specific **topic is important**. The results also indicates that team members are more likely to participate when they feel a topic is important.

3) Individual team member influence

The analysis shows that **personality** and **experience** significantly influences participation with some individuals being more comfortable to participate than others. It was also found that team members have different expectations in order to participate, with some expecting time to prepare and a detailed description of expectations, while others are comfortable to participate without prior notice. Hoch and Dulebohn (2017) highlights the influence of personality on shared leadership emergence and established that the top five personality traits at a team level will support shared leadership emergence.

4) Contextual influences

One leader emphasised the importance of having **competent team members** before participative leadership is applied. **Trust and humility** is believed to support constructive debate between team members and supports participation. Members of the non-formal team want to understand **where they fit and what role they play** in the team before they participate. The last contextual influence identified from the results is an **hierarchical company culture** which hinders non-formal team decision making. These finding are consistent with De Jong et al., (2016), who highlighted the positive effects participation has on performance based on trust in the team. Breuer et al., (2016) support the finding that members want to understand where they fit in the team, as members will have a higher risk perception if they do not know the team dynamics. Oedzes et al. (2019)'s findings support the finding that hierarchy influences decision making in teams.

5) Outcomes

While analysing the responses from participants there were several outcomes of participative leadership that emerged. These outcomes were grouped into three categories; ***feelings of members, sharing, and inclusion***. Respondents described that being encouraged to participate makes them feel as if they are ***important, valued, and respected*** members of the team, which increases their commitment towards the non-formal team. They further indicate that it results in ***sharing of ideas and information***, while it encourages ***constructive discussions*** that ***combines efforts*** through members ***building on each other***. It can be gathered from the interviews that participation results in ***inclusion*** of the perspectives of diverse team members into more inclusive and successful outcomes, customized solutions, and more effective decision making. These findings are consistent with Kukenberger and D’Innocenzo (2020) who found that functional diversity will support shared leadership if the environment is inclusive of the perspectives of all members.

6) Limitations

It was noted by participants that ***participative leadership should be balanced*** to ensure that it does not ***slow down the team*** by having endless discussions that do not lead to agreement and action. Therefor the leader is expected to play a ***facilitating*** role and to stop participation when sufficient input for a decision has been received. These findings are supported by Nordbäck and Espinosa (2019) who explains that the activities of the team needs to be coordinated to ensure they remain constructive and aligned with the desired objectives.

7) Conclusion of participative leadership

The results for the questions related to participative non-formal leadership are summarised in figure 10 as ***a framework for participative leadership in internationally dispersed non-formal teams***. This framework provides insight into how effective participative leadership can be applied in this context to support the emergence of shared leadership (Sweeney et al., 2019).

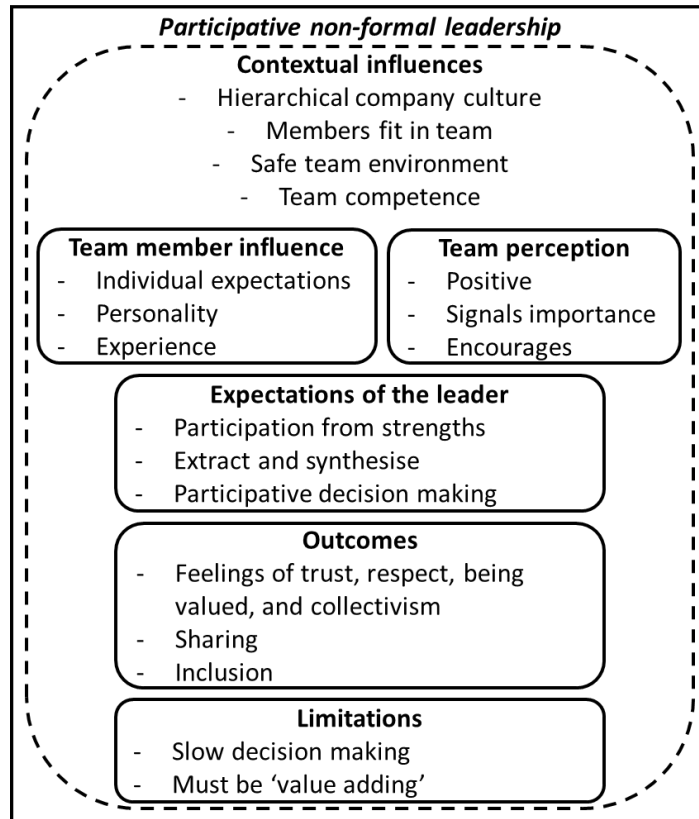


Figure 10: A framework of participative leadership in internationally dispersed non-formal teams.

6.3. Discussion of research question 3

Members of internationally dispersed teams face obvious practical challenges when attempting to engage in quality exchanges with their fellow team members. The literature supports the view that high quality leader-member exchanges become more difficult to facilitate as dispersion increases (Hoch & Kozlowski, 2014; Seshadri & Elangovan, 2019). The discussion of the findings of the third research question builds on the premise that high quality exchanges between the leader and the team members increase members' inclination to engage in leadership behaviour (Zhu et al., 2018). It also builds on notion that the number and quality of leadership exchanges between individuals define shared leadership strength (Wu & Cormican, 2016). It does this by providing a rich account of how the non-formal leader can facilitate high quality exchanges with team members in this dispersed context.

6.3.1. Types of exchanges

When participants were asked about what they experience as a quality leader-member exchange, majority referred to the distinction that needs to be made between **formal and informal exchanges**. Most participants felt that their non-formal dispersed teams predominantly engage in formal exchanges done within a fixed schedule and with set agendas where 'general best practice' for running meetings should apply. Participants add that quality can be increased by introducing a balance between formal and informal exchanges.

6.3.2. Informal exchanges

It can be seen from the results that members of non-formal dispersed teams feel that **less formal exchanges** are generally **higher quality**, and that formal exchanges should have elements of informality to increase the quality. This can be linked to the findings of Eisenberg et al. (2019).

Participants shared how they see less formal exchanges as a means of **strengthening relationships**. Less formal exchanges create opportunities for team members to *get to know each other*, to *understand how individuals in the team are feeling*, to *support openness*, and to *create a feeling of belonging*.

The participants repeatedly made the link between the concept of **informal exchange and high frequency** and defined how this combination increases exchange quality. The results suggest that less formal and frequent exchanges *increases pragmatism by encouraging ongoing conversation* and *increases connectedness by building relationships and reducing perceived distance*. Members do highlight that in the specific context, frequent exchanges should be *relevant and efficient* for it to maintain its value. Eisenberg et al. (2019), who explains that informal unprompted communication supports team effectiveness, support these findings. These findings are further linked to the increase of network density, which is an effective measure of shared leadership (D'Innocenzo et al., 2016; Wu & Cormican, 2016).

A few participants introduced the concept of free exchanges, where there are **no boundaries** and no expectations. These findings show that occasionally having these

types of exchanges, *align team members*, support the *sharing of valuable thoughts and ideas*, and help *explore diverse options*, which might not happen in structured purposeful exchanges. Vandavasi et al. (2020) support these findings by pointing out that knowledge sharing increases team creativity, while Lyndon et al. (2020) identified that without knowledge sharing, shared leadership is less effective.

6.3.3. Mix between virtual and physical

While reflecting on what a quality exchange would be between the non-formal leader and team member, participants made a definitive distinction between physical and virtual exchanges. It is clear from the results that there is consensus that ***physical exchanges are preferred over virtual***, and that there is a strong expectation for the leader to *arrange physical engagements* for non-formal dispersed teams. Physical exchanges emerged as a key element for *building relationships* and for *reducing formality*. Seshadri and Elangovan (2019) who found that a lack of physicality increases the time it takes to create trust in dispersed teams, support these findings. Virtual exchanges are perceived as risky, reducing information exchange and constructive engagement (Breuer et al., 2016).

Irrespective of the preference for physical exchange, participants acknowledge the power of virtual exchanges supported by new technological advancements. Virtual exchange are described as an effective and efficient substitute for some types of written or physical exchange, effectively increasing the frequency of interactions which links to the benefits of frequency discussed earlier. Given the distinct benefits of virtual and physical exchanges, the data shows that the non-formal leader should ***facilitate a mixed approached to physicality*** to exploit the individual qualities of both.

6.3.4. Boundary conditions for quality exchanges

Certain boundary conditions that need to be met for quality exchanges could be identified from the responses from the interviewed teams. A ***positive and solutions oriented*** mind set and a ***friendly atmosphere*** is described as pre-requisites for having quality exchanges with the non-formal leader. The leader must *show personal interest* in how the person *feels*, what their *strengths and weakness* are, and what their

development goals and ambitions are. Several authors describe a supportive internal team environment as antecedent of shared leadership (Drescher & Garbers, 2016; Sweeney et al., 2019; Zhu et al., 2018). The findings emphasises that team members *want to be prepared* for exchanges, underpinning the importance of making sure that team members know what the *expectations and objectives* of a particular exchange are. This can be linked to a personal feeling of leadership legitimacy (Nordbäck & Espinosa, 2019), and psychological empowerment (Grille et al., 2015).

6.3.5. Trust for quality exchanges

The concept of trust emerged repeatedly in all three research questions, accentuating its importance in non-formal dispersed team leadership. Within the context of exchange, trust was found to be a key enabler for high quality engagements.

From the findings it can be seen that trust and respect supports ***team authenticity*** as team members are more inclined to be transparent and display their authentic selves. Achieving this trust is supported by leader humility that was discussed under research question two. Trust was further found to ***increase openness*** in the team, which in turn ***strengthens relationships***. It was mentioned that a leader that displays openness to feedback from team members, encourages openness in the team. Participants further points out that members will not ***show vulnerability*** if the non-formal leader is not trusted to ***challenge the team internally***, while ***defending the team*** in the broader organisation. The view that trust is needed for members to show vulnerability is supported by De Jong et al. (2016), who highlighted that the willingness to be vulnerable helps to use energy exerted by individuals to protect themselves against harm, more constructively to reach team objectives. Previous studies also found that trust allows vulnerability and constructive engagement, which supports sharing of information (Breuer et al., 2016)

6.3.6. Means of quality exchange

The participants interviewed expressed that the means of exchange should be aligned with whether the exchange is seen as formal or informal. For quality formal exchanges, the findings suggest that participants cite 'general known best practice' for conducting

meetings such as fixed in time, a set agenda, clear objectives, and efficiently executed. Other than mentioning a few widely used software, applications, and communication platforms, participants did not elaborate much about the details of specific tools used and their influence on quality. However, participants emphasised that using the incorrect means of exchange could have practical implications like sharing information too late or not getting commitment or accountability for a specific topic. The results suggest a **variety of means** should be used based on the specific situation, context, and individual preferences. The literature on shared leadership does not provide much insight into specific means of exchange to facilitate shared leadership, however it does emphasise the importance of coordinating shared leadership activities. Nordbäck and Espinosa (2019) explain that there are mechanical (processes and management tools) and organic (meetings and information sharing) means of coordinating shared leadership.

6.3.7. Process of shaping outcomes

The majority of participants referred to elements related to the process of shaping outcomes that influence the quality of exchange. The analysis of the findings proposes that quality increases when outcomes are shaped through **personalised engagements** where parties **collaborate** (including within-team exchanges without the non-formal leader), towards **inclusive outcomes**. From the results it can be seen that exchanges should be personalised by adapting to the cultural differences and the individual needs of team members, as well as providing personal feedback or coaching. Eisenberg et al. (2019) also emphasises the barriers to communication and collaboration that are created by different cultures and norms, supporting the concept of personalised exchanges.

It was found during the analysis of the responses that there are several aspects of the process followed during collaboration towards inclusive outcomes that influence the quality of the exchange. It was found that parties do not need to start exchanges with the same point of view or agreement, but rather **build towards agreement** by combining the **different views** into one during the exchange. There is consensus among participants that exchanges must **go two ways**. The members of the team want to have exchanges where they feel that they **contributed** to an outcome that is a **combination of the input from both parties**, while also **gaining value** from the input of the other

party. Even if their views are not included in the conclusion, they want to feel that the leader heard and understood their perspectives. These findings are supported, as the core value that shared leadership provides to teams is its ability to harness the collective knowledge of the team (Sweeney et al., 2019; Zhu et al., 2018), which is also the core purpose of most internationally dispersed teams (Hoegl & Muethel, 2016).

A key element of the process of shaping outcomes in internationally dispersed teams identified from the findings are ***within-team exchanges***. Within the context described, the leader cannot effectively play the 'middle man' between all the exchanges of the team. The results show that the leader should *create smaller teams* to collaborate on specific tasks. It further indicates that members should *individually engage* with each other on topics of mutual interest, which will help members *build on each other's perspectives*. The concept of creating smaller teams is associated with task leadership distribution, which supports shared leadership emergence (Hoegl & Muethel, 2016). Seshadri and Elangovan (2019) supports the value of within team exchanges without the leader's involvements, while Eisenberg et al., (2019) suggests that unprompted informal exchanges increases effectiveness.

6.3.8. Outcome expectations

From the analysed responses of participants, a variety of outcome expectations of quality exchanges is identified. The first type of outcome that was unanimously associated with a quality exchange is ***definitive outcomes***. These include; agreement between parties, decisions are made, actions are taken, and outcome has an impact. The second type of outcome identified from the results is ***relevant knowledge sharing***. These outcomes include the sharing of ideas, experience, and knowledge that can be used to address the reality experienced by the team members in the day-to-day context of their work. The importance of knowledge sharing is supported by (Kukenberger & D'Innocenzo, 2020; Sweeney et al., 2019; Wu & Cormican, 2016). The final type of outcome that emerged from the responses is ***intangible outcomes***. Participants emphasised that not all outcomes of exchanges need to be tangible, and that intangible outcomes such as getting to know each other, building stronger relationships, and increasing trust could also be an outcome of a quality exchange.

6.3.9. Conclusion of research question 3

The results for research question three are summarised in figure 11 as a *framework for quality exchange in internationally dispersed non-formal teams*. It is expected that this framework will support the realisation and exploitation of shared leadership by increasing the quality and quantity of influence exchanges in this context (Wu & Cormican, 2016).

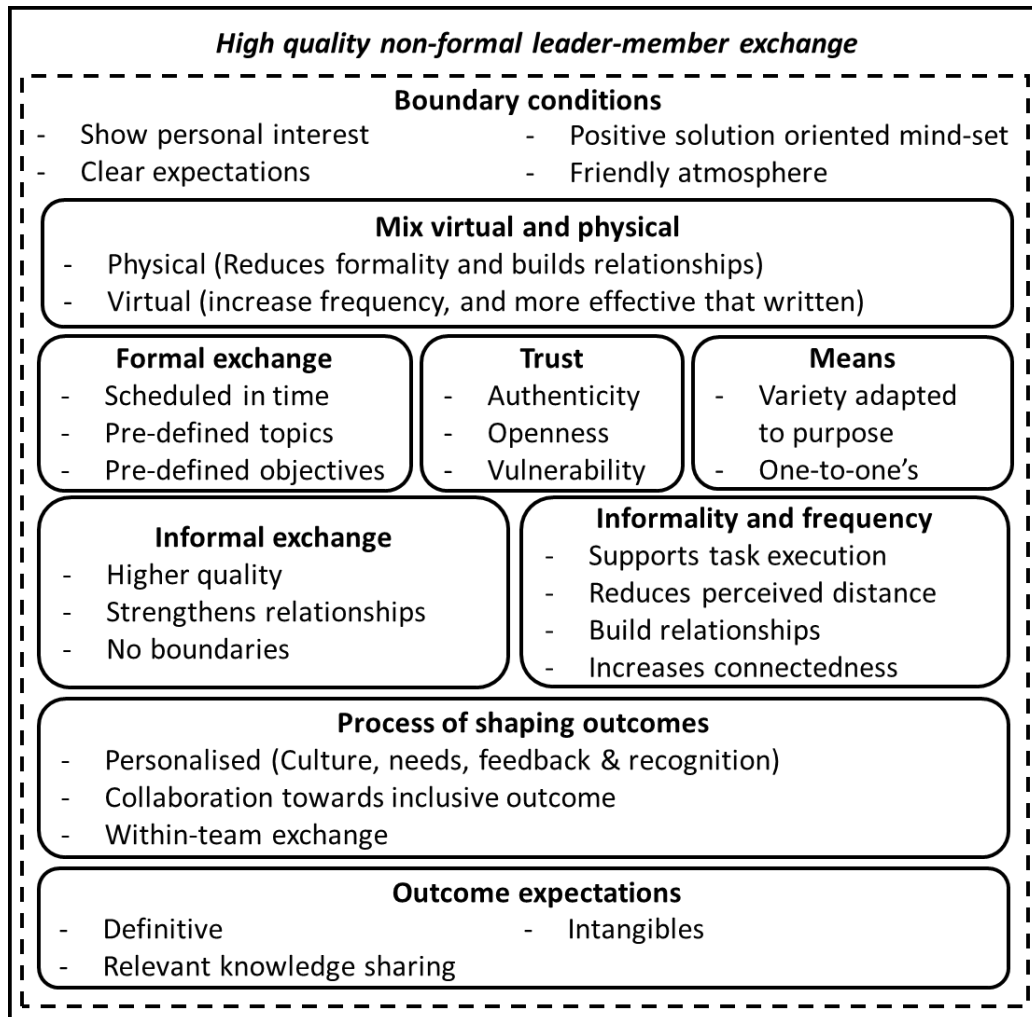


Figure 11: A framework of quality exchange in internationally dispersed non-formal teams.

6.4. Conclusion of discussion of result

This study explored four overarching constructs that were previously identified to support the emergence and effectiveness of shared leadership in formal and co-located teams. As was pointed out in the preceding discussion, the results show that *team connectedness, leader humility, participative leadership, empowering leadership* and *high quality exchanges* will support shared leadership emergence in internationally dispersed teams. Thus extending our understanding of shared leadership emergence in this context. In addition, this explorative study concluded each of the four constructs with a framework that provides an in-depth understanding of the various elements associated the their individual effectiveness.

Chapter 7

7. Conclusion and recommendations

7.1. Principal conclusions

This study addressed the call to action from Sweeney et al. (2019) and various other authors, who advocated for the study of the antecedents of shared leadership in a variety of organisational contexts to expand our knowledge of how to facilitate this form of leadership in commercial organisations. We discuss the principle findings of this study under the headings of the three research questions.

7.1.1. Research question 1 – Connectedness

In this study, we positioned connectedness between team members as a key enabler of increased network density in internationally dispersed non-formal teams, as connectedness beyond the non-formal leader will lead to network de-centralization and will increase the number and strength of influence interactions between the members of the team (Wu & Cormican, 2016). This will lead to shared leadership based on the finding that network density is a more reliable measurement of shared leadership (D’Innocenzo et al., 2016; Zhu et al., 2018). This study found that to influence connectedness in this context, leaders should consider four overarching influencing factors. These factors are; *the non-formal leader*, *the members of the non-formal team*; *the influence of exchange*, and *the context*. The study also found that increased connectedness results in improved team dynamics, empathy, participation, and business execution, which would support these teams to achieve their objectives. The study also found direct links between connectedness and the other four constructs explored in this study. These links are facilitated through several mutual concepts between connectedness and the other four constructs, which include; *the facilitation of participation*, *the influence of exchange*, *a common goal orientation*, *the building of trust*, *coordination of strengths*, and *the creation of networks*. This study concluded research question one with *a framework for the establishment of connectedness between internationally dispersed non-formal team members*, which is illustrated in chapter six figure 7.

7.1.2. Research question 2 – Leadership approach

Due to the contextual specificity of internationally dispersed non-formal teams, this study explored the applicability of three leadership approaches that were found to facilitate shared leadership in other contexts. Studies found that as teams become more dispersed, several traditional leadership approaches become less effective (Eisenberg et al., 2019; Hoch & Kozlowski, 2014). In addition, the removal of formal reporting lines to the leader brought in question the applicability of these approaches in this context. As such, this study explored how *leader humility* (Chiu et al., 2016; Zhu et al., 2018), *empowering leadership* (Sweeney et al., 2019; Zhu et al., 2018) and *participative leadership* (Sweeney et al., 2019), are perceived in internationally dispersed non-formal teams, and how these approaches can be applied successfully in this specific context to facilitate shared leadership. It was found that all three leadership approaches are positively perceived and encouraged by the members of these teams, and it encourages them to ‘step up’ and share in the leadership of the team.

Non-formal leader humility

This study found that there are clear expectations that team members have of the *humble leader*, which would support their willingness to share in the leadership of the team. These expectations are to *facilitate the inputs of the team* while ensuring the team remains *oriented towards a common goal*. The study found that there is an overwhelmingly positive perception of non-formal leader humility, but that there are boundary conditions to its effectiveness such as *trust, respect, and a competent team*. It was further found that leader humility results in several positive team outcomes, which improves team dynamics and team effectiveness, however, the findings highlight that humility has limitations if not-applied in a balanced manner. The findings established links between several of the concepts associated with humility, and the four other constructs explored in this study. This study concluded the exploration of leader humility with a framework of non-formal leader humility in dispersed teams, illustrated in chapter six figure 8.

Empowering non-formal leadership

This study answered the question of what the empowering behaviours are of non-formal leaders in this specific context, which encourages members to share in the leadership of the team. Team members are empowered in this context through specific *leader behaviours*, *task empowerment* and the *internal team environment*. They are empowered with a clear picture of the goal they are working towards, to ensure they can apply their efforts in an efficient and focussed manner. Facilitation of participation of all the members empowers members to contribute towards goal achievement, and supports empowerment through increased knowledge sharing. The leader must be explicit about showing that the team is trusted to increase psychological empowerment, but also hold members accountable for their contributions to create a sense of ownership. The leader should further support team members with expanding their networks in the team as well as in the broader organisation. Members should be empowered on tasks through close alignment of ownership with strengths, while making decisions within their areas of expertise. Empowerment has direct links to the other four constructs studied, which further highlights the interconnected nature of the constructs explored in this study. The exploration of this construct concluded with *a framework of non-formal empowering leadership*, illustrated in chapter six figure 9.

Participative non-formal leadership

Even though participative leadership is a core construct explored in this study, the concept of member participation emerged spontaneously from the findings on connectedness, humility and empowerment. Thus, this study found overwhelming support for the use of participative leadership in the context of internationally dispersed non-formal teams. The *perception that team members have* of participation, the *individual characteristics* of members, the *expectations that members have* of the leader, and the *team context* influences participative leadership in this context. The outcomes of participative leadership include sharing of valuable information in addition to feelings of *trust*, *respect*, being *valued*, being a *collective*, and *inclusion of diversity*. Contextual factors influencing participation include; company *culture*; the *team environment*; individual *competence*, and *non-formal hierarchies*. Participative leadership also links to all other core constructs, emphasising the interdependence of these constructs as

antecedents of shared leadership. The findings of this construct concluded in a framework of *participative leadership in internationally dispersed non-formal teams*, illustrated in chapter six figure 10.

7.1.3. Research question 3 – Exchange

Considering the dispersed nature of the teams studied, it is evident that the core of their influence exchanges are through predominantly virtual engagements. These engagements are the key ‘vehicles’ that facilitate the exchange of influence and leadership between team members, which are at the core of shared leadership (Song et al., 2020). As such, this study explored the nature and means of facilitating high quality exchanges between the members of these teams, to understand how to increase its quality and effectiveness. This study found that *virtual* and *physical* exchanges provide different but complimentary benefits to teams in this context. Furthermore, *non-formal exchanges* was found to significantly increase the ability of team members to engage in leadership and influence behaviours, an outcome which is strengthened by its ability to increase the frequency of exchange. Formal structured exchanges are effective for engaging deeply and focuses on a topic, while it is less effective for exploring creative and novel ideas. Quality exchanges are *individualised to participants*, and allows *collaboration* towards outcomes that are inclusive of the views of the different participants. The levels of trust between individuals who engages in an exchange will influence the participants’ authenticity, and thus the quality. Quality exchanges can have both *tangible* and *intangible* outcomes, dependent on the objective of the exchanges, both of which are valuable to teams in this context. Overall, expectations of *exchanges should be clear*, participants must show *personal interest* in each other, and there must be a *friendly solution oriented mind-set*. Exchanges are the ‘vehicles’ through which leaders show humility, encourage participation, empower members, and connect individuals. It connects thus with all other constructs explored, and concludes the complete interdependence of the five core constructs explored in this study. We conclude the findings of research question three in a framework of quality exchange in internationally dispersed non-formal teams, illustrated in chapter six figure 11.

7.1.4. Conclusion of principle findings

Organisations can achieve shared leadership in internationally dispersed non-formal teams through a holistic leadership approach that harnesses the strengths of *leader humility*, *empowering leadership*, and *participative leadership*. The application of this approach happens through *high quality exchanges*, and through the *increased connectedness* of the team. This study found that these five constructs are intricately interconnected, which increases our understanding of leadership in complex contexts beyond the traditional vertical and co-located structures. Figure 12 illustrates the *combined framework of leadership in internationally dispersed non-formal teams*, to facilitate shared leadership emergence (Refer to construct framework figures 7-11 in chapter six for easier reading of detail).

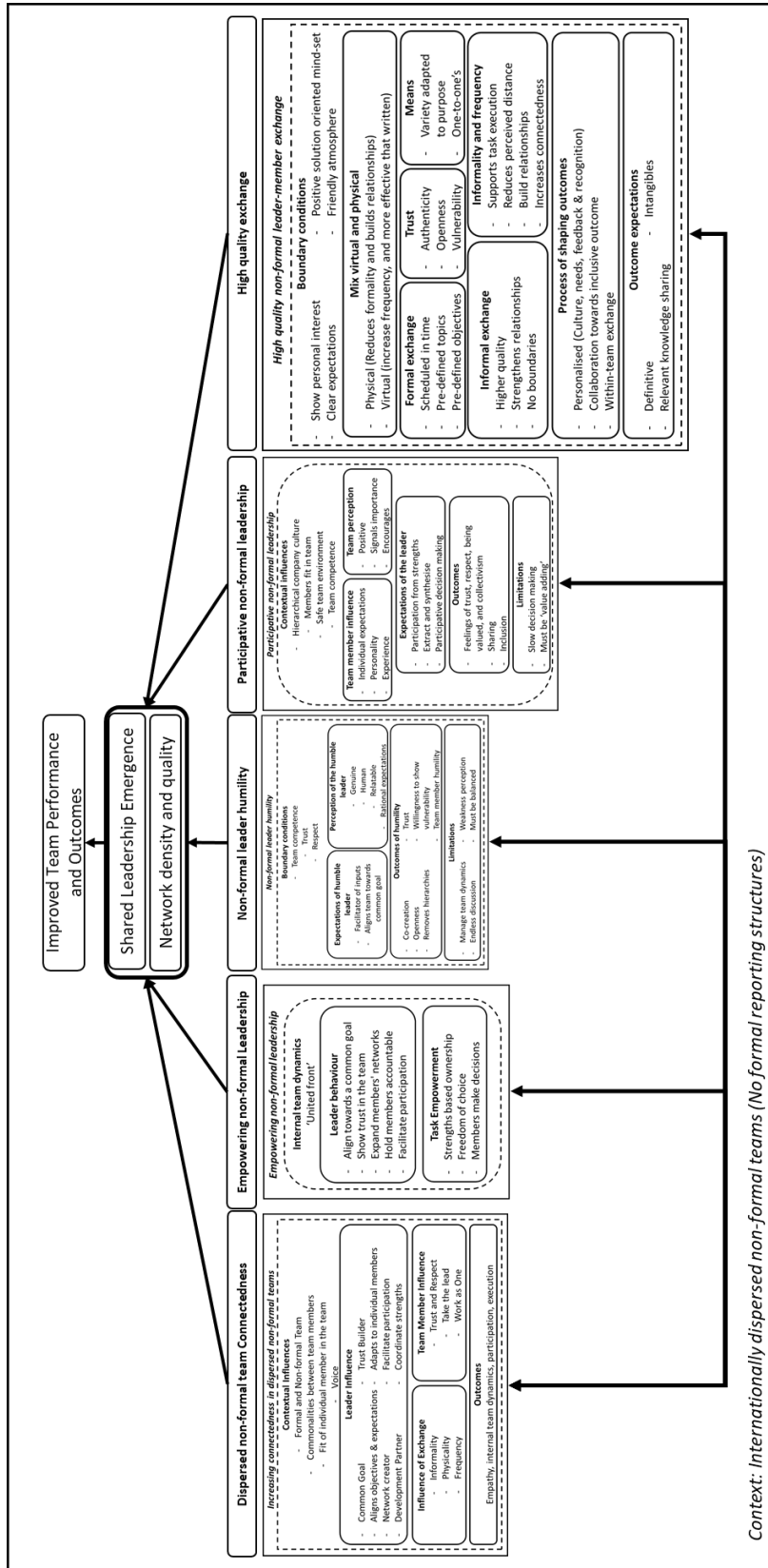


Figure 12: Framework of leadership in internationally dispersed non-formal teams.

7.2. Implications for management and other relevant stakeholders

It is evident that organisations are increasing in complexity and that globalisation is challenging organisations' to explore alternative leadership approaches to harness their collective intellectual capital to remain competitive. The findings of this study has several implications for leaders of internationally dispersed non-formal teams, as well as for organisations that seek to effectively deploy these types of team structures to exploit the potential commercial benefits. The findings of this study provides practical guidance to leaders on how they can facilitate shared leadership, and as a result effectively harness the collective knowledge and experience that rests within their teams. The findings further provide guidance to human resource practitioners and organisational leaders who seek to employ or develop leaders or team members that would be more likely to be effective in this context. The findings also give organisations guidance towards possible areas to address through training interventions, that can help existing teams (both leaders and team members) to increase their effectiveness. The findings suggest that organisations should consider moderately humble, participative and empowering leaders for these roles, as opposed to the 'great individual leaders' who see themselves as the core of the team. It further suggests that organisations should invest in the strengthening of connections through prioritising physical engagements of these dispersed teams, and to support them with the necessary tools and resources to have quality exchanges.

7.3. Limitations of the research

- Even though the sample of this study included team members from three different functional business areas that do different types of work, it was conducted in one large multinational organisation that operates in the construction and industrial sectors. This could reduce its generalisability to other functional areas, organisation types, and industries.
- It was demonstrated that the data gathered in this study was nearing saturation by the twelfth interview, supporting the validity of the findings. However, due to the time constraints within which this study was conducted, this relatively small sample size can be seen as a limitation. A larger sample size would enable deeper exploration of greater nuanced data within the identified themes, even if

the number of new themes identified is not increased substantially (Guest et al., 2006).

- As this is a cross-sectional study, the inferences made about the interventions that would support various outcomes are based on the subjective views of participants.
- All participants interviewed were already senior leaders in the organisation, which could influence their propensity to engage in leadership behaviours without the influence of the non-formal leader. This could limit the applicability of the findings to more junior teams with members that do not fulfil formal leadership functions.
- The sampled participants were all between the age of 35 and 55, which could limit the generalisability to other generational demographics.
- The participants of this study were highly diverse in terms of nationalities, which resulted in most participants not responding to interview questions in their first language. Even though all participants were proficient in business level English, it is possible that the language barrier could have influenced their ability to express their thoughts, and could have influence the researchers' ability to interpret the meaning of their responses accurately.
- The researcher is an employee of the organisation in which the study was conducted and is also a non-formal leader of internationally dispersed teams. Even though this provides the researcher with personal knowledge and experience of the topic under study, it could have influence the objectivity of the data gathering and interpretation.
- This study aimed at exploring a holistic approach to shared leadership emergence in internationally dispersed teams by studying five core constructs, which could have potentially limited the depth of exploration of each construct.

7.4. Suggestions for future research

This study found links and interdependencies between the five constructs explored, however the scope of the study did not allow for further investigation into the nature of these interdependencies. Future empirical research can study these interdependencies in greater detail to further build our understanding of shared leadership in this context.

Future research can take a longitudinal approach to studying the impact of these specific leadership interventions over time, to further build our understanding of shared leadership emergence in this context.

This study identified a number of boundary conditions that influence the effectiveness of the core constructs, which relate to the team dynamics, member 'fit' in the team, competence, company culture. Future studies can test these constructs empirically as mediators or moderators in the context of internationally dispersed non-formal teams.

Considering that this study was done in one multi-national organisation, and in a specific industry, future studies can be done in different industries and in different commercial organisations to understand to what extent the findings are congruent across industries and organisational cultures.

There were several concepts identified during this explorative study that are not prevalent in the shared leadership literature, which are recommended as potentially new areas of research in the context of shared leadership, which are mentioned below:

- This study found that accountability influences empowerment, which support shared leadership. Yet the literature reviewed, did not reveal much about the role of accountability in the context of shared leadership, even though accountability is a key construct in responsible leadership. The role of accountability on shared leadership is proposed as an avenue for future research.
- Even though exchange is at the core of shared leadership, there are surprising few studies that focusses on the means of exchange that facilitates shared leadership. Considering the rapid pace of technological advancement and the reality of a 'post-pandemic' world, it is proposed that more research is done into means of exchange for effective shared leadership.

8. Reference List

- Avolio, B. J., Kahai, S., & Dodge, G. E. (2000). E-leadership: Implications for theory, research, and practice. *The leadership quarterly*, 11(4), 615-668.
- Bhattacharjee, A. (2012). *Social science research: principles, methods, and practices* (2nd ed.). Florida, USA: University of South Florida.
- Breuer, C., Hüffmeier, J., & Hertel, G. (2016). Does trust matter more in virtual teams? A meta-analysis of trust and team effectiveness considering virtuality and documentation as moderators. *Journal of Applied Psychology*, 101(8), 1151-1177.
- Chiu, C. Y. C., Owens, B. P., & Tesluk, P. E. (2016). Initiating and utilizing shared leadership in teams: The role of leader humility, team proactive personality, and team performance capability. *Journal of Applied Psychology*, 101(12), 1705-1720.
- Corley, K. G., & Gioia, D. A. (2004). Identity ambiguity and change in the wake of a corporate spin-off. *Administrative science quarterly*, 49(2), 173-208.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The counseling psychologist*, 35(2), 236-264.
- De Jong, B. A., Dirks, K. T., & Gillespie, N. (2016). Trust and team performance: A meta-analysis of main effects, moderators, and covariates. *Journal of Applied Psychology*, 101(8), 1134–1150.
- D’Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2016). A meta-analysis of different forms of shared leadership–team performance relations. *Journal of Management*, 42(7), 1964-1991.

- Drescher, G., & Garbers, Y. (2016). Shared leadership and commonality: A policy-capturing study. *The Leadership Quarterly*, 27(2), 200-217.
- Eisenberg, J., Post, C., & DiTomaso, N. (2019). Team dispersion and performance: The role of team communication and transformational leadership. *Small Group Research*, 50(3), 348-380.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Eva, N., Cox, J. W., Tse, H. H. M., & Lowe, K. B. (2019). From competency to conversation: A multi-perspective approach to collective leadership development. *The Leadership Quarterly*. <https://doi-org.uplib.idm.oclc.org/10.1016/j.leaqua.2019.101346>
- Fausing, M. S., Joensson, T. S., Lewandowski, J., & Bligh, M. (2015). Antecedents of shared leadership: Empowering leadership and interdependence. *Leadership & Organisation Development Journal*. 36(3), 271-291.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organisational research methods*, 16(1), 15-31.
- Grille, A., Schulte, E. M., & Kauffeld, S. (2015). Promoting shared leadership: A multilevel analysis investigating the role of prototypical team leader behavior, psychological empowerment, and fair rewards. *Journal of Leadership & Organisational Studies*, 22(3), 324-339.

- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), 59-82.
- Hill, N. S., & Bartol, K. M. (2016). Empowering leadership and effective collaboration in geographically dispersed teams. *Personnel Psychology*, 69(1), 159–198.
- Hoch, J. E., & Dulebohn, J. H. (2017). Team personality composition, emergent leadership and shared leadership in virtual teams: A theoretical framework. *Human Resource Management Review*, 27(4), 678-693.
- Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of applied psychology*, 99(3), 390-403.
- Hodkinson, P., & Hodkinson, H. (2001, December). The strengths and limitations of case study research. In *Learning and Skills Development Agency conference, making an impact on policy and practice* (pp. 1-13). Cambridge, UK. Retrieved from http://education.exeter.ac.uk/tlc/docs/publications/LE_PH_PUB_05.12.01.rtf
- Hoegl, M., & Muethel, M. (2007, August). Shared leadership in dispersed innovation teams: Mutual influence and proactive followership. *Academy of Management Annual Meeting Proceedings*. Briarcliff Manor, NY: Academy of Management.
- Hoegl, M., & Muethel, M. (2016). Enabling shared leadership in virtual project teams: A practitioners' guide. *Project Management Journal*, 47(1), 7-12.
- Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report*, 17(6), 1-10.

- Kelliher, F. (2011). Interpretivism and the pursuit of research legitimisation: an integrated approach to single case design. *Leading issues in business research methods*, 1(2), 123-131.
- Klasmeier, K. N., & Rowold, J. (2020). A multilevel investigation of predictors and outcomes of shared leadership. *Journal of Organisational Behavior*, 41(9), 915-930.
- Kukenberger, M. R., & D'Innocenzo, L. (2020). The building blocks of shared leadership: The interactive effects of diversity types, team climate, and time. *Personnel Psychology*, 73(1), 125–150.
- Lawrence, J. (2011). The factors that influence adoption and usage decision in SMEs: Evaluating interpretive case study research in information systems. *Leading Issues in Business Research Methods*, 8(1), 141-160.
- Lyndon, S., Pandey, A., & Navare, A. (2020). Shared leadership and team creativity: Investigating the role of cognitive trust and team learning through mixed method approach. *Personnel Review*, 49(9), 1805–1822.
- Muethel, M., Gehrlein, S., & Hoegl, M. (2012). Socio-demographic factors and shared leadership behaviors in dispersed teams: Implications for human resource management. *Human Resource Management*, 51(4), 525-548.
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of counseling psychology*, 52(2), 250-260.
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International journal of qualitative methods*, 1(2), 13-22.
- Nederveen Pieterse, A., Hollenbeck, J. R., van Knippenberg, D., Spitzmüller, M., Dimotakis, N., Karam, E. P., & Slesman, D. J. (2019). Hierarchical leadership

versus self-management in teams: Goal orientation diversity as moderator of their relative effectiveness. *The Leadership Quarterly*, 30(6). <https://doi-org.uplib.idm.oclc.org/10.1016/j.leaqua.2019.101343>

Nicolaidis, V. C., LaPort, K. A., Chen, T. R., Tomassetti, A. J., Weis, E. J., Zaccaro, S. J., & Cortina, J. M. (2014). The shared leadership of teams: A meta-analysis of proximal, distal, and moderating relationships. *The Leadership Quarterly*, 25(5), 923-942.

Nordbäck, E. S., & Espinosa, J. A. (2019). Effective coordination of shared leadership in global virtual teams. *Journal of Management Information Systems*, 36(1), 321-350.

Oedzes, J. J., Rink, F. A., Walter, F., & Van Der Vegt, G. S. (2019). Informal hierarchy and team creativity: The moderating role of empowering leadership. *Applied Psychology*, 68(1), 3–25.

Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative research*, 10(2), 199-228.

Serban, A., & Roberts, A. J. (2016). Exploring antecedents and outcomes of shared leadership in a creative context: A mixed-methods approach. *The Leadership Quarterly*, 27(2), 181-199.

Seshadri, V., & Elangovan N, D. (2019). Role of manager in geographically distributed team; a review. *Journal of Management*, 6(1), 122-129.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for information*, 22(2), 63-75.

- Smith, S. M., Zhang, Y., Jenkinson, M., Chen, J., Matthews, P. M., Federico, A., & De Stefano, N. (2002). Accurate, robust, and automated longitudinal and cross-sectional brain change analysis. *Neuroimage*, *17*(1), 479-489.
- Song, Z., Gu, Q., & Cooke, F. L. (2020). The effects of high-involvement work systems and shared leadership on team creativity: A multilevel investigation. *Human Resource Management*, *59*(2), 201-213.
- Sweeney, A., Clarke, N., & Higgs, M. (2019). Shared leadership in commercial organisations: A systematic review of definitions, theoretical frameworks and organisational outcomes. *International Journal of Management Reviews*, *21*(1), 115-136.
- Vandavasi, R. K. K., McConville, D. C., Uen, J. F., & Yepuru, P. (2020). Knowledge sharing, shared leadership and innovative behaviour: a cross-level analysis. *International Journal of Manpower*, *44*(8), 1221-1233.
- Wu, Q., & Cormican, K. (2016). Shared leadership and team creativity: A social network analysis in engineering design teams. *Journal of Technology Management & Innovation*, *11*(2), 2-12.
- Wu, Q., Cormican, K., & Chen, G. (2020). A meta-analysis of shared leadership: Antecedents, consequences, and moderators. *Journal of Leadership & Organisational Studies*, *27*(1), 49-64.
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The qualitative report*, *20*(2), 134-152.
- Zhu, J., Liao, Z., Yam, K. C., & Johnson, R. E. (2018). Shared leadership: A state-of-the-art review and future research agenda. *Journal of Organisational Behavior*, *39*(7), 834-852.

9. Appendices

Appendix 1 – Ethical clearance

**Gordon Institute
of Business Science**
University of Pretoria

**Ethical Clearance
Approved**

Dear Jandre Van Zyl,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

[Ethical Clearance Form](#)

Kind Regards

Appendix 2 – Consistency matrix

Questions?	Literature Review	Data Collection Tool	Analysis
<i>Research question 1: What non-formal leader behaviours support increased connectedness between dispersed non-formal team members?</i>	Zhu, Liao, Yam and Johnson (2018) Sweeney, Clarke and Higgs (2019)	Interview questions 1, 2 & 3	Subjective analysis (Bhattacharjee, 2012). Direct interpretation, thematic analysis, categorical aggregation (Corley & Gioia, 2004; Yazan, 2015).
<i>Research question 2: How do team members of dispersed non-formal teams perceive humility, empowering behaviour and participative leadership by the non-formal leader?</i>	Chiu, Owens and Tesluk (2016) Zhu, Liao, Yam and Johnson (2018) Fausing et al, (2015) Sweeney, Clarke and Higgs (2019)	Interview questions 4, 5 & 6	Subjective analysis (Bhattacharjee, 2012). Direct interpretation, thematic analysis, categorical aggregation (Corley & Gioia, 2004; Yazan, 2015).
<i>Research question 3: What type of exchange behaviour will facilitate shared leadership in dispersed non-formal teams?</i>	Zhu, Liao, Yam and Johnson (2018) Hoch and Kozlowski (2014)	Interview questions 7 & 8	Subjective analysis (Bhattacharjee, 2012). Direct interpretation, thematic analysis, categorical aggregation (Corley & Gioia, 2004; Yazan, 2015).

Appendix 3 – Interview guide

Semi-structured interview guide (Jacob & Furgerson, 2012).

Opening script:

Thank you for agreeing to this interview, your time and participation is highly appreciated. Before we start I would like to reiterate that your participation is entirely voluntary, and you are welcome to stop the interview at any time or to not answer any question if you do not feel comfortable. Your responses to these questions will be used only for the purpose of this research study, and the research document will not contain any identifying information about any of the interviewees.

I would like to provide you with a very brief overview of the nature and the purpose of the study that I am conducting. In the context of this study, you are a non-formal leader (or member of non-formal team) of an internationally dispersed non-formal team. The team is the one you form with the (*Insert team description*). The study aims to gain an understanding of how a leader in this context can make all the members of this team share in the leadership function/role, towards achieving the objectives of the team.

A simple way to think about shared leadership is that it is when you and your fellow team members are both followers and leaders in the team at different times, to achieve the team's goal. It suggests that the leadership is not top down, but rather shared between all the members of the team.

Previous research found that “shared leadership” as I described it, could help dispersed teams to better achieve their goals, but past research does not give enough guidance on how to achieve this shared leadership. Therefore my study aims to help us understand this better. Please feel free to ask clarifying questions, and feel free to answer the way you feel fit, from your own perspective, as there are no right or wrong answers to any of the questions.

Clarification 1: You form part of one of multiple cases that will be studied. Within the case you are the leader (or member) of an internationally dispersed non-formal (No formal reporting lines) team. The team members of this team is the (*insert description of the team*). Even though each of these team members are formal leaders in their

organisations, the study specifically focusses on understanding how to facilitate their leadership within the non-formal team.

Research question 1: (Not asked to respondents)

What non-formal leader behaviours support increased connectedness between dispersed non-formal team members?

Interview questions for respondents (Open ended and probing questions):

1. How connected you feel with the rest of the members in your team?
 - “Can you elaborate?”
 - “Can you clarify what you mean by...?”
 - “What are the reasons for being this connected/disconnected?”
2. In your opinion, what role does *your non-formal leader (insert name)* play in connecting the team?
 - “Can you please elaborate on that point...?”
 - “Can you clarify what you mean by...?”
 - “What makes you feel that way...?”
 - “How would this help connect the team...?”
3. What would make you want to be the connector of the team?
 - “Can you please elaborate on that point...?”
 - “Can you clarify what you mean by...?”
 - “What makes you feel that way...?”

Research question 2: (Not asked to respondents)

How do team members of dispersed non-formal teams perceive humility, empowering behaviour and participative leadership by the non-formal leader?

Interview questions for respondents (Open ended and probing questions):

4. How do you feel about a non-formal leader that openly shows a lot of humility?
(For leaders - *How have you experienced the behaviour of the team when you act in a humble manner?*)
 - “Why do you feel this way...?”
 - “How does this influence your work in the team?”

5. In your opinion, what do you believe is *the non-formal leaders' (insert name)* responsibility toward empowering you? (For leaders - What do you believe is your responsibility towards empowering the rest of the team?)
 - "Why do you feel that way...?"
 - "Can you please elaborate on that...?"
 - "Can you please clarify what you mean by...?"
6. How do you feel about being encouraged to participate? (For leaders - How have you experienced the behaviour of the team when you perform participative leadership?)
 - "Why do you feel that way...?"
 - "Can you please elaborate on that...?"

Research question 3: (Not asked to respondents)

What type of exchange behaviour will facilitate shared leadership in dispersed non-formal teams?

Interview questions (Open ended and probing questions):

7. In your opinion, what is a **quality** interaction between you and *the non-formal leader (Insert name)*? (For leaders - In your opinion, what is a quality interaction between you and one of the team members?)
 - "Why do you feel that way...?"
 - "Can you please elaborate on that...?"
8. In your opinion, what is the **best means** of having a quality interaction in this dispersed context?
 - "Why do you feel that way...?"
 - "Can you please elaborate on that...?"

Final Closing Question 4:

9. Is there anything else that you feel is important to add that will help us understand how to get all the members of non-formal dispersed teams to be leaders in the team?

Closing script:

Thank you for your time and for your contribution to this study. I would like explain to you what is going to happen from now on. I will be completing my interviews after which all the data collected will be analysed for me to write the final research report.

Can I please ask that I can reach out to you if there are any points that I might need to gain some additional clarity on at a later stage?

Thank you.

Appendix 4 – Code report

Frequency shows number of times codes emerged under each construct (c-connectedness, p-participative leadership, h-humility, e-empowerment, ex-exchange). Several code emerged under multiple constructs.

CONNECTEDNESS CODES		FREQUENCY
1	· Evolves over time	3
2	· Members distinguish between formal and non-formal connection	5
3	· Informal connections is stronger connection than formal	5
4	· Trusts comes in different levels	2c+1ex
5	· Personal connectedness increase empathy between members	2
6	· Connectedness improves internal team dynamics	4
7	· Connectedness increases participation	2
8	· Informal connectedness makes business execution easier	1
9	· Participative leadership is perceived positive	1c+7p
10	· Requests to participate signals important topics	1c+3p
11	· Leader is facilitator	5c+2p+1h+2e
12	· Hierarchy creates power	1c+2h
13	· True participative leadership requires that leader acknowledge and consider the input of members	3
14	· Encourage members to share	3c+1e
15	· Leader brings together the inputs of the team	1c+2h+1p
16	· Leader involves people into discussions	1
17	· Leader suspending opinions leads to members taking the lead	1
18	· Leader connects by treating members as partners	1
19	· Leader must be able to let go of the reigns to connect the team	2c+6e
20	· Participative leadership improves connectedness	5
21	· Participative leadership encourage ideas sharing	1c+1e+8p
22	· Participative leadership makes members feel important/valued/respected	1c+7p
23	· Participative leadership facilitates customised solutions	1c+1e+1p
24	· Decisions not made top down	3c+2h
25	· Participative decision making	1c+1p
26	· Majority buy in over perfect solution	2
27	· Participation must lead to agreement and action	1c+2p
28	· Members should receive feedback when inputs are not included I final outcome	1
29	· If leader's challenge is valid, the team will accept	1
30	· Too much participation creates endless discussion/slow down the team	1c+2p

31	· Participation is less valuable when topic is unknown	2c+1p
32	· Do one-on-ones with the team	5c+3ex
33	· Members expect personal feedback/coaching about their actions during exchanges	1c+3ex
34	· Non-formal leader must take part in members development	5c+1ex
35	· Non-formal leader must understand team members future career aspirations	1
36	· Understand the objectives of team members	2
37	· Leader allows space for failure and learning	1c+1e
38	· Non formal team member's development is given less priority than formal team	1
39	· Invest time into relationships	6
40	· Formal team building	1
41	· Arrange physical interactions	3c+9ex
42	· Leader chooses team members	2
43	· Trust is team's ability	1
44	· Trust team members	2c+2e
45	· Members trust others cautiously	1
46	· Trust and respect for connectedness takes time to build	1
47	· Trust takes long to build and quick to lose	1
48	· Trust and Humility supports strong debate and openness to challenge	1c+1h+1p
49	· Team members reacts positively to humility	2c+6h
50	· Leader to not scrutinise decision unless there are fundamental issues	1c+1e
51	· Leader must empower by allowing topic owners to make decisions	1c+3e
52	· Openness builds relationships – relationships increase openness	2c+1ex
53	· Openness inspires openness	2
54	· Encourage openness	2
55	· Leader defines the direction/goal for the team to work towards	4c+1h+6e
56	· Members must have a common goal/direction/strategy/objective that connects them	9
57	· Leader has the 'big picture'	4c+1p+2h
58	· Over communicate the direction/goal/objective	3
59	· Connect the day-to-day with the big picture	2c+1e
60	· Members can have problem they are not aware of	2
61	· Leader sharing information is empowering	2c+2e
62	· Roles and responsibilities in the team must be defined to support connectedness	3
63	· Leader defines the boundaries and members define the realised internal culture	2
64	· Involve team members in defining team agenda	1

65	· Team agenda aligned with team members needs	2
66	· Formal contracting around objectives and priorities	2c+1ex
67	· Assign KPI's to agreed priorities	1
68	· Alignment of KPI's non formal leader is not always there	3
69	· Non-formal team must have at least one mutual formal target	2
70	· KPI's of formal team must be considered by non-formal leader	1
71	· Involve formal leaders	2
72	· Alignment with formal leaders	14
73	· Connection with formal leaders	2
74	· Common cause between formal and non-formal teams	1
75	· Understanding the strengths and weaknesses of each team member	6c+1ex+1p+3e
76	· Leverage individual experiences	1
77	· Respect and appreciation of competence supports connectedness	5
78	· Connect members by peers to coach each other from their strengths	2
79	· Connect members by mixing strengths in project groups	4
80	· Assigning tasks on strengths increases members confidence and participation	1
81	· Assign task ownership/leadership based on experience/strengths	7c+6e
82	· Subject matter experts should take decisions considering team inputs	1c+1p
83	· Distribute ownership of topics	2c+4e
84	· Team members can present	1
85	· Create networks	2
86	· Connecting the team is a key responsibility of the leader	3
87	· Connect members by creating smaller teams	6c+1ex
88	· Non-formal leader linking different team members together	1
89	· Alignment and connection beyond non-formal team	6
90	· Leader must change perspective when situations changes to create connectedness	2
91	· Leader adapts to situation	1c+1e
92	· Understanding individual team members needs	2
93	· Members have different local needs	1c+1e
94	· Align with team members objectives	1
95	· Leader balances the needs to team members	1
96	· Leader must adapt to cultural difference between members	2c+2ex
97	· Need to touch head, heart and hands to influence	1
98	· Multiple countries are more complex	1
99	· Leader must respect the different realities of team members	4
100	· Feeling your context is different reduces connectedness	1c+1e

10	1	· There are more commonalities than differences	1c+1e
10	2	· Accountability and ownership in empowering	2c+2e
10	3	· Empowering members increase connectedness	2
10	4	· Must be accountable for their input	2c+3e
10	5	· Shared leadership requires trust	3
10	6	· Team members to trust and respect each other	7c+1ex
10	7	· To trust you need to know the person	1
10	8	· Team must understand and accommodate the cultural difference in the team	7
10	9	· Be open about strengths and weaknesses	3
11	0	· Transparency about what does and does not work	1
11	1	· It is not only the leaders' responsibility to connect the team	1
11	2	· Members should individually engage with each other on topics of mutual interest	2c+1ex
11	3	· Exchanges without the leader should come from inside the team	1
11	4	· Members should be proactive without the leaders' involvement	1
11	5	· Interactions should not only be triggered by members' problems	2
11	6	· Members should share learning and experiences spontaneously	4
11	7	· Leading both ways	1
11	8	· Share experiences	5
11	9	· Members to co-create	1
12	0	· Alignment to happen inside the team	1
12	1	· Leadership from within supports progress	1
12	2	· Natural leaders emerge	1
12	3	· Leadership comes more naturally for some	1
12	4	· Leadership is encouraged by wanting to control the outcome	3

12	· Members must show that they are proud of the successes of other team members	1
5		
12	· Team members to defend the non-formal team decisions with formal leaders	1c+2e
6		
12		
7	· Need to works as a team to increase connectedness	2
12		
8	· Non-formal team to align to influence formal leaders	1
12		
9	· Members must share successes	1
13		
0	· 'Nice-to-haves' vs 'must-do's'	1
13		
1	· Team members immersed in day to day	4
13		
2	· You are not my boss	1
13		
3	· Non formal team not first priority	6
13		
4	· Competition between team members	1
13	· Members need to understand the group and where they fit in the team before the participate/feel empowered	5c+1p+2e
5		
13	· Members feeling that they can influence the team decisions/they have a voice increases connectedness	4
6		
13		
7	· All members must be entitled to speak out	4
13		
8	· Connection does not come naturally	1
13		
9	· Share values (Values congruence) increases connectedness	2
14	· Prior shared history between team members improves connectedness	6
0		
14	· Mutual interests/commonalities between members increase connectedness	1
1		
14		
2	· Less formal	3c+3ex
14		
3	· Formal and informal engagements are different	1
14		
4	· Informal exchanges require specific means of exchange	5ex+2c
14		
5	· Value of informal connection is underestimated	1
14		
6	· Connection is less natural when non-formal leader is present	1
14	· The effort into creating informal connection with team members differs between leaders	1+2ex
7		
14	· Leader should create opportunities for informal exchanges/connection	1
8		

14		
9	· Less formal and frequent encourages ongoing conversation	2c+2ex
15		
0	· Less formal helps ideas and experiences to be shared	4
15		
1	· Relationship beyond work improves connectedness	3
15		
2	· Less formal help create support systems	3c+2ex
15		
3	· Informal exchanges builds relationships	1
15		
4	· Less formal helps understand members needs	1
15		
5	· Balance between business and personal connection	2
15		
6	· Less formal allows people to get to know each other	1
15		
7	· Physical interactions build relationships	4c+4ex
15		
8	· Physical over digital	2c+6ex
15		
9	· Physical connection supports trust	3
16		
0	· Physical and virtual connections are different	1
16	· Frequent exchanges must be relevant and efficient for members	1c+2ex
16		
2	· Frequency and informality builds relationships	1c+3ex
16		
3	· High frequency increases connectedness	13c+3ex
16		
4	· Less formal increases frequency	1c+1ex
16		
5	· Exchanges must have a cause	2
16		
6	· Exchanges must go two ways	2c+9ex
16	· members build a formal perception of each other during formal business discussions	1

EMPOWERING LEADERSHIP CODES

FREQUENCY

1	· Having a common goal/direction/strategy is empowering	2
2	· Members have different local needs	1e+1c
3	· There are more commonalities than differences	1
4	· Leaders must acknowledge differences but build on commonalities	1
5	· Feeling your context is different reduces connectedness	1e+1c
6	· Leader defines the direction/goal for the team to work towards	1h+4c+6e

7	· Connect the day to day with the big picture	1e+2c
8	· Understanding 'what is in it for me' is empowering	1
9	· Explain the reasons why Aligning expectations between leader and members is empowering	1
10	· Trusting members is empowering	2
11	· Leader must be able to let go of the reigns/take a back seat to connect/empower the team	6e+2c
12	· Trust team members	4
13	· Leader is a facilitator	2e+2c
14	· Leader adapts to situation	2e+5c+2p+1h
15	· Empower by expanding the member's 'circle of influence' within the organisation	3
16	· Treat formal leaders as sounding boards	1
17	· Non-formal leader helps members manage up	1
18	· Accountability and ownership is empowering	2e+2c
19	· Getting direct feedback is empowering	1
20	· Must be accountable for their input	3e+2c
21	· Accountability is empowering	3e
22	· Shared accountability	1
23	· Members need to understand the group and where they fit in the team before the participate/are empowered	2e+1p+5c
24	· Participative leadership transcends distance to create a feeling of belonging	1e+1p
25	· Leader must balance participation and facilitation of decisions	1e+1p
26	· Participative leadership encourage idea sharing	1e+1c+8p
27	· Allowing participation is empowering	2
28	· Encourage members to share	1e+3c
29	· Leader must listen	1e+1h
30	· Understand the strengths and weaknesses of each team member	3e+1p+6c+1e
31	· Topics assigned on strengths increases employee satisfaction	x
32	· Distribute ownership of topics	4
33	· Assign task ownership/leadership based on expertise/strengths	4e+2c
34	· Competence is a hygiene factor for empowerment	6e+7c
35	· Freedom of choice of topics allows alignment with strengths	1
36	· Allow members to choose topics to lead	1
37	· Freedom of choice of topics to lead allows alignment with interests	1
38	· Tasks must have a goal and a purpose	2
39	· Leader must empower by allowing topic owners to make decisions	3e+1c
40	· Leader allows space for failure and learning	1e+1c

41	· Leader to not scrutinise team decisions unless fundamental issues	1e+1c
42	· It is empowering if leader allows members to take credit for team outputs	1
43	· Leader sharing information is empowering	2e+2c
44	· Team member to defend non-formal team decisions with formal leaders	2e+1c
45	· Share only relevant information with formal leaders	1
46	· Hierarchical company culture hinders non-formal team decision making	1e+1p
47	· Decision making ability is influence by personality	1
48	· Team can be divided internally but must speak as one externally	3e+1ex
49	· Remove the 'us and them' mentality	1

PARTICIPATIVE LEADERSHIP CODES

FREQUENC Y

1	· Understand the strengths and weaknesses of each team member	1p+6c+1ex+3e
2	· Topics assigned on strengths increase employee satisfaction	4
3	· Do not expect too much participation from members/consider members workload	1
4	· Leader should expect participation on topics known to team/strengths of the team	2
5	· Leader has the 'big picture'	1p+2h+4c
6	· Leader to draw opinions from silent members	2
7	· Leader keeps opinions for when critical	3
8	· Leader brings together the inputs of the team	1p+1c+2h
9	· Leader is a facilitator	2p+5c+1h+2e
10	· Participative decision making	1p+1c
11	· Subject experts should take decisions considering team input	1p+1c
12	· Leader must facilitate/moderate a safe team environment	3
13	· Request to participates signals important topics	3p+1c
14	· Participative leadership is perceived positive	7p+1c
15	· Direct appeals to participate compels members	3
16	· Members participate when they see topic as important	1
17	· Members have different expectations in order to participate	3
18	· Personality influences participation	5
19	· Some members participate less	2
20	· Experienced employees have stronger opinions	1
21	· Trust and humility supports strong debate and openness to challenge	1p+1h+1c
22	· Participative leadership requires competent team members	1
23	· Members need to understand the group and where they fit in the team before they participate/are empowered	2e+1p+5c
24	· Hierarchical company culture hinders non-formal team decision making	1p+1e

25	· Participative leadership makes members feel important/valued/respected	7p+1c
26	· Participative leadership transcends distance to create a feeling of being a team	1e+1p
27	· Participative leadership creates commitment towards the non-formal team	1
28	· Participative leadership encourages ideas sharing	8p+1c+1e
29	· Participation results in sharing information	1
30	· Participation combines efforts	1
31	· Participative leadership facilitates discussion	2
32	· Team members challenge each other	1
33	· Participative leadership allows inclusion of diversity	5
34	· Facilitation leads to inclusive and successful outcomes	1
35	· Participative leadership facilitates customised solutions	1p+1e+1c
36	· Participation is needed to reach decisions	1
37	· Leader must balance participation and facilitation	1p+1e
38	· Participation must lead to agreement and action	2p+1c
39	· Too much participation create endless discussion/slow the team down	2p+1c

HUMILITY CODES

FREQUENCY

1	· Trust and humility supports strong debate and openness to challenge	1h+1c+1p
2	· Humility encourages openness and sharing	7
3	· Team member feedback creates full picture	1
4	· Members building on each other's views and combining perspectives	1h+4ex
5	· Humility allows other to show vulnerability	4
6	· Humility helps build trust	6h+1ex
7	· Humility make others feel like a peer instead of a subordinate	4
8	· Humility allows leadership from within the team to emerge	1
9	· Humility empowers members to influence outcomes	3
10	· Hierarchy creates power	2h+1c
11	· Humility make people listen	2
12	· Humility makes other act	1
13	· Humility is powerful	2
14	· Humility helps facilitate	1
15	· Humility supports team creativity	2
16	· Leader is a facilitator	1h+5c+2p+2e
17	· Leader must listen	1h+1e
18	· Leader brings together the inputs of the team	2h+1c+1p
19	· Decisions not made top down	2h+3c
20	· Leader defines the direction/goal for the team to work towards	1h+4c+6e
21	· Leader has the 'big picture'	2h+4c+1p

22	· Leader must show 'what is in it for me'	1
23	· Humility signals being genuine	1
24	· Unrealistic expectations from high level leaders	2
25	· Humility shows that you are human	2
26	· Formal team responds positively to humility	1
27	· Team members reacts positively to humility	6h+2c
28	· Reactions to humility varies	1
29	· Respect and trust is a pre-requisite for humility to be effective	1
30	· The effects of humility depends of the quality of the team · Directive (Low humility) could be needed to manage team	3
31	dynamics	1
32	· Too much humility creates endless discussion · Directive (Low humility) leads to 'conformance' and lower	2
33	commitment	2
34	· Humility and the perception of weakness	4
35	· Humility should be balanced	14
36	· Humility has down sides	1

EXCHANGE CODES		FREQUENC
		Y

1	· Exchanges can be formal or informal	4
2	· Healthy balance between formal and informal exchange	1
3	· Schedules digital meetings are too formal · Formal exchanges must be fixed in time and have a set	1
4	agenda to allow depth	3
5	· Less formal	3ex+3c
6	· Quality exchanges starts informal before going formal	3
7	· Informal exchanges builds relationships	5ex+2c
8	· Less formal allows people to get to know each other	2ex+3c
9	· Informal exchanges create a feeling of belonging	1
10	· Informal /personal exchanges supports openness · Less formal exchanges helps to understand how members	1
11	are feeling	1
12	· Less formal increase frequency	1ex+1c
13	· Less formal and frequent introduces pragmatism	4
14	· Less formal and frequent reduces perceived distance	1
15	· Less formal and frequent encourage ongoing conversation	2ex+2c
16	· Frequency and informality builds relationships	3ex+1x
17	· Frequent exchanges must be relevant/efficient for members	3ex+1c
18	· High frequency increases connectedness · Free exchanges where general ideas and thoughts are	3ex+13c
19	shared	7
	· Free exchanges where general ideas and thoughts are	
20	shared help align team members	4
21	· Free exchanges help explore diverse option	1

22	· Physical interactions builds relationships	4ex+4c
23	· Physical over digital	6ex+2c
24	· Physical reduces formality	2
25	· Arrange physical interactions	9ex+3c
26	· Virtual exchanges as substitute for physical or written communication	3
27	· Digital exchanges are powerful	1
28	· Virtual and digital exchanges increase frequency	1
29	· Mix between digital/virtual and physical	1
30	· Large variety of interactions support trust	1
31	· Leader must make sure members are okay	1
32	· How members feel influences how they work in the team	1
33	· Understand the strengths and weaknesses of each team member	1ex+6c+1p+3e
34	· Non-formal leader must take part in team members development	1ex+5c
35	· Members want to understand the expectations/objectives of exchange	8
36	· Team members want to be prepared for exchange	7
37	· Formal contracting around objectives and priorities	1ex+3c
38	· Too much structure hinders creativity	1
39	· Exchanges where there is a positive/solution oriented mind set	1
40	· Friendly atmosphere increase quality	2
41	· Need trust and transparency for quality exchanges	2
42	· Team members to trust and respect each other	1ex+7c
43	· Without trust, members will not be themselves	2
44	· Humility helps build trust	1ex+6h
45	· Trust comes in different levels	1ex+2c
46	· Trust helps members be their authentic self	1
47	· Openness build relationship – relationships increase openness	1ex+1c
48	· Openness requires trust	3
49	· Leader that is open to feedback creates trust and openness	1
50	· Team can be divided internally but speak as one externally	1ex+3e
51	· Leader should be trusted to challenge inside the team but defend outside the team	2
52	· Do one-on-ones with team members	3ex+5c
53	· Informal exchanges has specific means of exchange	2ex+1c
54	· Formal exchanges has specific appropriate means of exchange	4
55	· General known best practice about conducting meetings	1
56	· Implications of wrong means of exchange	2
57	· Leader must adapt to cultural differences between team members	2ex+2c

58	· Members need recognition during exchanges	2
	· Members expect personal feedback/coaching about their	
59	actions during exchanges	3ex+1c
60	· Exchange must go two ways	9ex+2c
61	· Start with different views	1
62	· Agreement from the start is not necessarily quality	1
63	· Exchanges should be holistic/'360' in scope	1
64	· Members want to both give and take during exchanges	2
	· Member want to feel they were understood /hear in an	
65	exchange	3
66	· Agreement created by adapting two view into one	3
	· Exchanges where conclusion is a combination of input from	
67	both parties	3
	· Members should individually engage with each other on	
68	topics of mutual interest	1ex+2c
69	· Connect members by creating smaller teams	1ex+6c
70	· Members building on each other's view/combine perspectives	4ex+1h
71	· Reach agreement	1
72	· Exchange has a definitive outcome	14
73	· Outcome has an impact	1
74	· Leads to action	1
	· Some exchanges should support creativity others should be	
75	for decisions	1
76	· Members gain knowledge or ideas from exchange	2
	· Exchanges that address the reality experienced by	
77	members/real life	1
	· Experience/ideas are shared during personal/social	
78	exchanges	2
79	· Exchanges without a definitive outcome is also valuable	7