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UNIVERSITY OF WESTMINSTER

**THE EFFECTS OF CONFLICT IN DRIVING FORWARD INNOVATION
IN SHARED LEADERSHIP MANAGEMENT CONSULTANT TEAMS**

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Abstract

It is argued in this study that current investigations of the role of conflict in shared leadership teams and, thus, teams in which all members have the opportunity to participate in its decision-making process are insufficient as they have focused on the downsides of these conflicts. This study demonstrates that task conflict is beneficial in that it can have positive effects on innovation in teams. It shows that particularly in shared leadership management consultant teams task conflict can stimulate innovation. Therefore, this research investigates the relationships among shared leadership, conflict and innovation.

The research develops and empirically tests a conceptual model which demonstrates the relationships between these concepts and for which the inclusion of multiple research methods was essential. The sequential explanatory approach included a combination of quantitative and qualitative methods, the order of which can be adapted for other domains of application. The conceptual model was first tested with a sample of 329 management consultants. This was followed by 25, in-depth, face-to-face interviews conducted with individual survey respondents. In addition, weekly meetings of a management consultant team in action were video recorded over several months. This allowed for an in-depth explanation of the findings from the survey by providing an understanding of the underlying processes. The inclusion of observational methods provided a validating role and explained how and why conflicts contributed to the development of team innovation, through the analysis of subtleties and fleeting disagreements in a real-life management consultant team.

The results deliver an assessment of the theoretical model and demonstrate that task conflict can allow for additional innovation in management consultant teams operating under a shared leadership structure. A practical model and guidelines for management consultant teams wanting to enhance their innovatory capacities are provided. In addition, a novel-user methodology which includes video observations is developed, with recommendations and steps aiding researchers aiming to employ a similar combination of methods. An original contribution to knowledge is made regarding the positive effects that task conflict can have towards innovation in shared leadership teams. Collaboration and trust are identified as important mediators between shared leadership and task conflict and significant regarding the development of innovation. The effectiveness of shared leadership in reducing negative relationship conflict and the benefits of both shared leadership and task conflict in enhancing innovation are demonstrated.

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Declaration

I declare that all the material contained in this thesis is my own work.

Vasilii Pablo Penny

List of Acronyms

AB	-	Abstract
DV	-	Dependent Variable
I	-	Interview
IC	-	Institute of Consulting
IN	-	Innovation
IV	-	Independent Variable
KW	-	Keyword
MC	-	Management Consultant
MRA	-	Multiple Regression Analysis
OB	-	Observation
PC	-	Process Conflict
RC	-	Relationship Conflict
RQ	-	Research Question
SL	-	Shared Leadership
SMT	-	Self-Managed Team
TC	-	Task Conflict
TI	-	Title
UK	-	United Kingdom

Chapter 1 - Introduction to the Study

1.1 Research Background

Working environments for the organisations of today are undergoing significant change in terms of their management structures. This is particularly important with regard to the widespread use of teams in organisations. The changing working environments are reflected in novel approaches toward the study of leadership in groups or teams (e.g. Kessler and Wong-Mingji 2009; Pearce and Sims 2000; Shamir et al. 2007). Given the importance of teams for organisations, research has focused on ways of increasing team performance (Boies et al. 2010). The focus on how effective leadership can increase team performance in terms of innovation, one of the centre-pieces of the increasingly complex knowledge economy of today, is of especial relevance.

This study focuses on bringing the concepts of shared leadership, conflict and innovation together. In particular, the positive effects that conflict can have towards innovation, specifically in shared leadership teams of management consultants, are examined. Investigating this relationship is important due to the positive effects that both shared leadership (e.g. Gu et al. 2016; Peter et al. 2015) and conflict (e.g. De Wit et al. 2012; O'Neill et al. 2013) can have in fostering innovation.

Alternatives to traditional team leadership, and thus top-down approaches, are currently debated in terms of whether they can increase team innovation (Hoch 2013). In particular, approaches that offer additional empowerment of team members have become more prevalent (Pearce and Sims 2000). This is important in offering teams of highly-skilled knowledge workers, often put together on a project-basis with members of different organisations, an active role in the leadership process (Pearce and Manz 2005). Shared leadership provides an alternative to traditional leadership models and has been increasingly related to more effective team performance such as innovation (D'Innocenzo et al. 2014; Nordback and Espinosa 2015; Wang et al. 2014). In addition, the prospect of conflict having positive effects regarding the outcomes of a team, has been much debated in management research (De Dreu and Weingart 2003; De Wit et al. 2012; O'Neill et al. 2013).

This chapter introduces the research carried out in this study. It starts by presenting the main areas of study and follows by establishing the research aim and objectives and then the research methods employed. Following that, a brief summary of the contents of each chapter is provided.

1.2 Innovation

Innovation has been highlighted as crucial for achieving economic growth and organisational effectiveness in today's rapidly changing and challenging environments (e.g., Nijstad et al. 2012; Rietzschel et al. 2009; Somech et al. 2009; West and Anderson 1996). The widely used definition of West and Farr (1990, p. 9) refers to innovation as

'the intentional introduction and application within a job, work team or organization of ideas, processes, products or procedures which are new to that job, work team and organization and which are designed to benefit the job, the work team or the organization.'

Since innovation is important for organisational success, management teams are seen as key to implementing or preventing innovation (Nijstad et al. 2012; West and Anderson 1996). Innovation, at the team level, is related to creativity, which is widely defined as the generation of ideas that are both novel and useful (Amabile 1983; Rietzschel et al. 2009). It is recognised that creativity represents the first thinking and idea generation stage, and innovation the second implementation of new ideas stage (West and Rickards 1999). Thus, innovation, at a team level, requires the sub-process of creativity. Regarding the innovation process, Kaur (2013) differentiates between the three stages of divergence (idea generation), convergence (idea selection), and implementation. It is important to note that innovations need only to be new to the unit of adoption, thus for a team or organisation, something that may be new for one team might already be common practice in another (Anderson et al. 2004; Nijstad et al. 2012).

Hülshager et al. (2009) in their meta-analysis of team-level innovation emphasise the importance of antecedents to team innovation such as team cohesion, vision, task orientation and conflict. Much of the research focusing on the relationship between conflict and innovation, has focused on determining whether team conflict can lead to higher levels of team innovation (De Dreu 2006; Desivilya et al. 2010; Nijstad et al. 2012). Troyer and Younggreen (2009), for instance, find that 'idea-targeted negative evaluations' lead to higher creativity in teams. This is confirmed by recent research (Yong et al. 2014) that finds certain positive types of conflict stimulate creativity, whereas negative types of conflict should be kept at low levels.

1.3 Conflict

Interpersonal conflict or disagreements in teams have in early research been found to be detrimental towards team or organisational outcomes, with the main focus being on the negative aspects of conflict (Pondy 1967; Derr 1978; Rahim 1983). However, over the past two decades there has been a rediscovered interest in the role that conflict plays in teamwork (e.g. Jehn 1995; De Dreu and Weingart 2003; De Wit et al. 2012). De Dreu and Weingart (2003, p. 741) define conflict as 'the process resulting from the tension between team members because of real or perceived differences'. This definition does not solely focus on the negative aspects of conflict, as a shift in organisations is found towards viewing conflict as functional and stimulating rather than stressful or disruptive (Tjosvold 2008). This can partly be attributed to Jehn (1995), who found that teams engaging in task-related arguments were more successful in assessing information. The research was mainly based on the distinction between relationship conflict and task conflict, the content of each conflict type and their positive or negative effects on team outcomes. The potential positive effects of task conflict have been demonstrated in past research, while relationship conflict has clearly been found to affect a team negatively (Amason 1996; Bradley et al. 2012; Ensley et al. 2002; Jehn 1995).

Task conflict, and thus disagreements among team members about the content of the task being performed (Jehn 1995), has been shown to stimulate critical thinking and, with it, to improve decision-making (Boyle et al. 2012; De Wit et al. 2012), while positively relating to group commitment (Behfar et al. 2011). Furthermore, although not without controversy (O'Neill et al. 2013), task conflict has been related to team creativity and team innovation (Anderson et al. 2004; Chen 2006; Farh et al. 2010). This effect was particularly found at moderate rather than high levels of task conflict (Anderson et al. 2004, p. 166) and further related to the project phase of the team (Farh et al. 2010). However, the positive implications of conflict in terms of creativity and innovation require further investigation as regards teams with shared leadership structures and thus teams with high empowerment and autonomy (Thorpe et al. 2011). This is due to the significance that shared leadership might have regarding the reduction of relationship conflict and the usefulness of task conflict.

1.4 Shared Leadership

Traditional approaches to leadership have tended to be focused on top down approaches, leadership being a process of influencing others and focusing on goal fulfilment. An example can be provided in the definition of Stogdill (1950, p. 4), who defines leadership as 'the process (act) of influencing the activities of an organized group in its efforts toward goal setting and goal

achievement'. However, as further pointed out by Stogdill (1974), there are almost as many definitions of leadership as persons who have attempted to define the concept. Central to leadership, Northouse (2015) finds that leadership is a process, it involves influence, occurs in groups, and involves common goals.

Many theories and definitions focus on the distinction between leaders, who engage in leadership, and followers, towards whom leadership is directed, while goal achievement is of central importance (e.g. Alimo-Metcalfe and Alban-Metcalfe 2001; Bass 1997; Bryman 1992). Nevertheless, the increasing importance of teamwork within organisations over the past decades, with the team being a central unit of work in organisations, has provided approaches to leadership which are neither leader nor follower centred (e.g. Day et al. 2004; Manz and Sims 1991; Pearce and Sims 2000). Although teams may have a formally appointed leader, they lack hierarchical authority in that the leader may have little authority over team members outside the team (Pearce and Conger 2003b). Leader-centred approaches to leadership can be criticised for neglecting the potential of different individuals of a group (Pearce and Manz 2005). The emergence of multiple leaders in teams has received an increasing amount of interest over the past two decades (Bergman et al. 2012; Carson et al. 2007; Contractor et al. 2012; Ensley et al. 2003; Friedrich et al. 2009; Kramer and Crespy 2011; Paunova 2015; Pearce and Sims 2002; Small and Rentsch 2010; Yammarino et al. 2012; Yang and Shao 1996). Such perspectives on leadership advocate the participation of individuals in the leadership process rather than merely following or leading. Rather than being seen as a role, leadership is seen as a function which different members of a team can exercise (Jackson and Parry 2011).

Pearce (2004) name interdependence, creativity and complexity as characteristics of knowledge work that require shared leadership. The efficiency and effectiveness of the shared leadership approach has been shown in various studies (e.g. Bergman et al. 2012; Gupta et al. 2010; Pearce and Sims 2002; Solansky 2008). By enabling different individuals to take on leadership roles, teams are thought to be more innovative, more effective, as well as team members more engaging and satisfied (Acar 2010; Gupta et al. 2010; Kotlyar et al. 2011).

1.5 Management Consultants

Management consultants play a significant role in modern organisations, being involved in many major management decisions (Kipping and Clark 2012). The International Council of Management Consulting Institutes (2002, p. 5), refers to management consultants as individuals who provide 'independent advice and assistance about the process of management to clients'.

Similarly, the UK Institute of Consulting, defines a consultant as someone who 'provides external advice for organisations that require specialist expertise or an objective outside perspective on their business' (Institute of Consulting 2014a). However, as pointed out by Kipping and Clark (2012), various definitions of management consultants exist, often from industry bodies, this being partly due to the continuing shift in the boundaries of the industry. What most definitions have in common is that experts draw on professional knowledge to help solve client problems.

A large proportion of management consultant project work is conducted in teams which are assembled temporarily and ad hoc. Team members may not have worked together before and are brought together for a specific project (O'Mahoney and Markham 2013). The work can range from 'pure' strategy consultancy such as project management, change management, human resources or marketing, to IT consulting and financial consulting (O'Mahoney and Markham 2013). Management consultants are effectively knowledge workers, often from diverse and specialist areas of expertise. Bligh et al. (2006) emphasise that knowledge work requires integration of ideas and abilities of different skilled individuals, and management consultants also display high levels of interdependence (McKenna et al. 2003; Sturdy et al. 2009).

Pearce and Manz (2005) argue for the importance of shared leadership in enhancing the creative processes of such team-based knowledge work. Management consultant teamwork is often co-operational, with several team members engaging in the leadership of the team, rather than being directed by a sole leader. This can be the case despite one consultant acting as project manager, as individuals in such teams are regarded as peers (Pearce and Conger 2003b). Additionally, the creative, interdependent, and complex knowledge work of management consultants requires input from multiple individuals. Thus, several prerequisites of shared leadership are fulfilled. Management consultants' reliance on each other's expert knowledge and the problem solving nature of their work increases the likeliness of conflicts arising in their teams. It therefore argued that management consultants are highly relevant for investigating the role of task conflict in shared leadership teams.

1.6 Research Aim and Objectives

The literature background showed that there is a paucity of research regarding the interrelatedness of shared leadership, task conflict and innovation in teams. In this current research task conflict and innovation will be researched from the perspective of shared leadership teams. These non-hierarchical teams demonstrate significant differences compared to teams that adhere to a more traditional approach to leadership. The rationale for this

research is based on findings from the literature that task conflict in teams can lead to an increase in the overall performance of teams. The potential benefits that task conflict can have for a team are of particular relevance due to the increasing importance of identifying new ways of enhancing innovation.

There is a need to identify the role that task conflict plays regarding the innovative performance of teams implementing a shared leadership approach. Thus, the aim of this study is:

**To investigate the role of conflict in driving forward innovation
in shared leadership management consultant teams.**

This research provides an original contribution to knowledge and extends existing theory by investigating the benefits of task conflict in the context of shared leadership management consultant teams. In particular, the importance of task conflict in terms of its usefulness toward the innovative outcomes of a team is assessed. Furthermore, it is important to demonstrate the benefit of additional research techniques, such as observation and interviews in researching task conflict in teams. Such techniques can demonstrate the subtleties of task conflicts through dynamic, minute-by-minute conversations and interactions during team meetings. Both the theoretical and methodological contributions of this research assist in the development of a framework of how task conflict can effectively be utilised in shared leadership management consultant teams. The research has several objectives:

1. To analyse the role that task conflict plays in developing innovation in shared leadership management consultant teams;
2. To develop a model and guidelines that can be used by shared leadership management consultant teams to enhance their innovatory capacities; and
3. To demonstrate the benefit of using additional research techniques such as interviews and video observation in discovering subtle innovation development.

1.7 Research Methods

The study employs a sequential mixed methods approach, consisting of three distinct but integrated elements. Importantly, the innovation in data integration also lies in putting together different methods, consequently moving methods from merely being a resource to being a topic in their own right (Fielding 2012). The inclusion of several methods of data collection and data analysis is essential for achieving the aim and objectives of this current research and adds to the

robustness of the findings. The methodology assists not only in reaching the research aim, but further provides a significant contribution to the future use of research methods in similar areas of research.

The research sets out with a quantitative survey completed by management consultants. This allows for uncovering the relationships between the main concepts of shared leadership, conflict and innovation as laid out in a theoretical framework. Further methods are required to deliver both an explanation and exploration of the quantitative findings. Qualitative interview data brings an in-depth understanding of the perceptions of individual survey participants regarding their teamwork. The causal mapping of interviews provides insight regarding the belief patterns and action tendencies of management consultants. Additionally, occurrences and relationships are studied in real-life through the video observation of a management consultant team. The ethnographic analysis of these data allow for learning whether and how behavioural events occur in the team. This is important in terms of discovering subtle team occurrences, which management consultants themselves may not observe.

1.8 Chapter Contents

The report is structured as follows. This first chapter provided the foundations of this research by introducing the topic and providing a background to the topic and its relevance. The concepts of innovation, conflict and shared leadership were introduced as well as the importance of examining the interrelatedness of these concepts in management consultant teams. The aims and objectives of the research were presented and the research methods outlined.

Chapter 2 provides a critical discussion of the literature relevant to this study. A systematic literature review is conducted for the three different concepts of shared leadership, conflict and innovation. The chapter starts by providing a background to shared leadership. Theories important to this leadership approach are reviewed and its development is outlined. Following that, characteristics of shared leadership, as well as different definitions and understandings of the concepts are discussed. The chapter considers literature relevant to the theories of conflict and innovation in teams, and conflict and shared leadership. Past research methods and the importance of including additional methods into the study of shared leadership, conflict and innovation are discussed.

Chapter 3 discusses the interrelatedness of the concepts of shared leadership, conflict and innovation. On the basis of relevant literature, a conceptual model is developed which provides

a theoretical basis for examining the relationships between the three concepts. The discussion starts by examining the relationship between shared leadership and task and relationship conflict and moves on to discussing the relationship between shared leadership and innovation as well as all three concepts. Furthermore, moderating variables are discussed, a conceptual model is graphically depicted and the main hypotheses are outlined.

Chapter 4 outlines the methodology of this study. Starting with the philosophical approach, critical realism as a relevant research paradigm is discussed. The research design section outlines the importance of both quantitative and qualitative methods for the study and justifies the use of a mixed methods approach. Three different research elements are outlined as regards issues such as sampling, data collection and data analysis. A first quantitative element entails the collection of survey data from management consultants. A second qualitative element includes the collection of interview data from individual survey participants. A third and final qualitative element concerns the collection of video data from a management consultant team.

Chapter 5 presents and analyses the empirical data collected in the three elements of the study. The chapter first provides an analysis of the survey responses provided by management consultants, including descriptive statistics as well as correlation and regression analysis for analysing relationships between the concepts. Following that, an analysis of the interviews is presented which includes the development of causal maps for each individual interview as well as the development of an aggregate map which is discussed in detail. The third section presents an ethnographic analysis of the video data collected from a management consultant team.

Chapter 6 discusses the findings from the data analysis chapter by setting them into context with relevant literature. The chapter is divided into three sections, each of which addresses one of the objectives of the study. Firstly, based on the empirical data collected, conclusions are made with regard to the conceptual model and hypotheses of this study. Secondly, a novel model and guidelines are provided for management consultants to enhance their innovatory capacities. Thirdly, the benefit of the research techniques employed is evaluated and a recommended approach for employing these methods is provided.

Chapter 7 summarises the previous six chapters and provides conclusions from the research. Research implications, as well as theoretical, practical and methodological contributions are outlined and it is demonstrated that the objectives of the study have been achieved. The chapter concludes with limitations of the research and suggested directions of future research.

Chapter 2 - Shared Leadership, Conflict and Innovation

2.1 Introduction

The previous chapter provided an introduction to the topic, discussed the aims and objectives of the research and presented an overview of the chapter contents. This chapter provides a background to the relevant literature on shared leadership, conflict and innovation. The chapter follows the steps displayed in the road-map of **Figure 2.1**. Starting with a systematic and bibliometric approach, and searching through the main literature databases, relevant literature on shared leadership is extracted. A discussion of the background to the team leadership literature is followed by a debate of relevant definitions, providing a conceptualisation of shared leadership. Following that, a systematic analysis of the literature on team conflict and team innovation is conducted and the relationships among the different concepts are considered. This will lead to the construction of a conceptual framework in Chapter 3. Finally, this chapter considers limitations of previous approaches and the benefits of implementing a wider range of research methods.

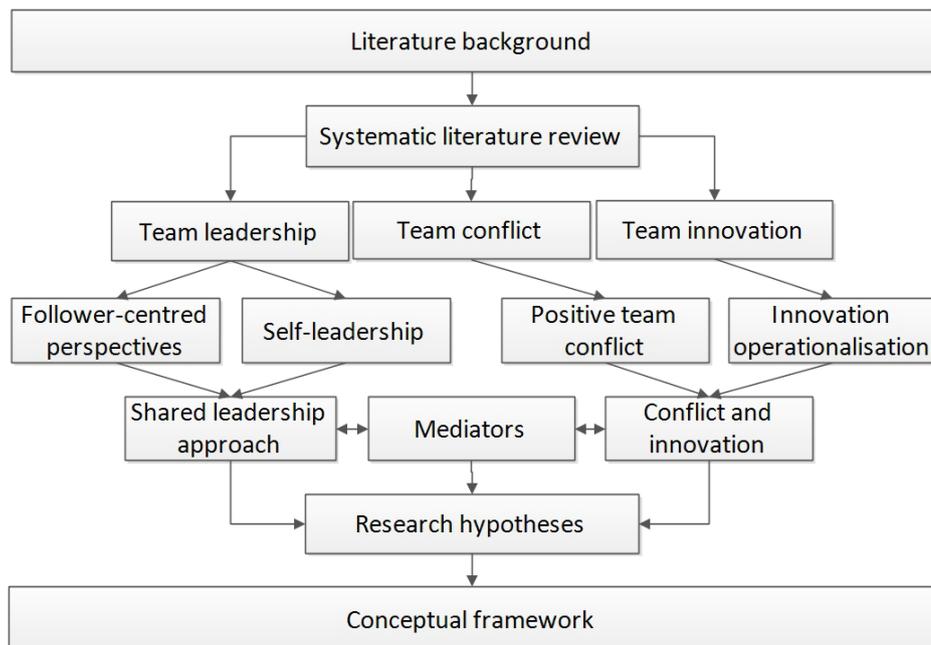


Figure 2.1: Literature review chapter roadmap, leading to the development of a conceptual framework in Chapter 3

2.2 Shared Leadership in Teams

Barry (1991) first developed a model to assist self-managed teams in work settings termed ‘the distributed leadership model’. The model focuses on the possibility of leadership being a collection of roles and behaviours which can be split apart, shared, rotated and used both sequentially and concomitantly. Barry (1991) emphasises that each team member possesses certain leadership skills which will be required at a certain stage of the teamwork. However, importantly, this early model of distributed leadership differs from the concept of shared leadership. It not only emphasises the possibility of using a person’s leadership skills at a given time but also focuses on the interrelatedness and availability of leader behaviours (Barry 1991). This provides an example of how the discussion of shared leadership involves several overlapping definitions and concepts. The following sections commence with a search and bibliometric analysis of the shared leadership literature, providing a background to the theory and an overview of the most relevant definitions.

2.2.1 Systematic Literature Search

A search for the term “shar* leadership” in the EBSCO Host, Web of Science (WoS), ProQuest and ScienceDirect databases resulted in 873 scholarly (peer reviewed) articles (see **Table 2.1**). In this search, the term was specifically used separately from other team leadership terms to keep the different concepts apart. The reason these databases were selected is that they are most readily available to the Management and Organisation Studies (MOS) community (Fitzsimons et al. 2011). Furthermore, ScienceDirect publishes ‘The Leadership Quarterly’, the journal which has published the largest amount of articles related to shared leadership. In order to have the ability of capturing keywords, Web of Science rather than Web of Knowledge was searched. As discussed and justified in detail in Appendix A, the search strategy was limited to peer-reviewed journal articles. Duplicates were deleted and articles were individually checked for their relevance. Following this strategy, 173 original articles were retrieved.

Table 2.1: Database search procedure

Database	Searched in	Scholarly journals	Frequency
EBSCO Host (All)	Title (TI) OR Abstract (AB)	400	46%
Web of Science	Topic (TI,AB,KW)	180	21%
ABI ProQuest	TI, AB, Keyword (KW)	252	29%
ScienceDirect	TI, AB, KW	41	5%
Total		873 —> Duplicates excluded, relevance considered 173 articles	100%

As can be seen in Appendix A, the articles identified as relevant were categorised and three distinct fields emerged: Health, education and team literature. This is consistent with the Fitzsimons et al. (2011) analysis of the shared leadership literature. A vast majority of articles in the team literature were published in the past 15 years and the USA and the UK accounted for about 70% of author affiliation. Regarding their epistemological orientation, a majority of 48% of articles were conceptual, 26% predictive, 14% exploratory, 6% instrumental, 4% descriptive and 2% normative in nature. Furthermore, regarding the research methods employed, 70% of articles were quantitative, 25% were qualitative and 5% were mixed in nature.

2.2.2 Background to Shared Leadership

The idea that individuals share leadership when working together can be seen as going back far in human history, indeed as far as the republican Rome (Sally 2002). However, the concept of shared leadership in organisational research can be traced back to the mid-20th century. Regarding the background of shared leadership, Gibb (1954, p. 215), one of the first to conceptualise leadership as a group activity, states that 'leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group'. The idea of Gibb (1954) regarding leadership being exerted by multiple individuals in a group constituted a move away from the traditional heroic models of leadership. Although Gibb (1954, p. 215) uses the term 'distributed leadership' rather than 'shared leadership' to distinguish between 'focused', the exertion of leadership by an individual and 'distributed leadership', the two concepts were not distinguished more clearly until the 1990s. Furthermore, although less related to the concept of shared leadership used in this study, Gibb (1954, p. 259) refers to 'democratic leadership' as the 'direct antithesis of the authoritarian pattern' where highest levels of involvement are sought and hierarchical group structures are avoided.

This can further be seen as a precursor to shared leadership that does not generally deny the persistence of a leader in a group, but offers the possibility of changing the leadership role within a group. Pearce and Conger (2003b, p. 7-9) find six theoretical contributions adding to the understanding of the shared leadership concept:

- (a) Human relations and social systems perspectives;
- (b) Role differentiation in groups;
- (c) Co-leadership;
- (d) Social exchange theory;
- (e) Management by objectives and participative goal setting; and
- (f) Emergent leadership theory.

Following these early conceptualisations of the leadership phenomenon, Pearce and Conger (2003b) further emphasise that academic interest in the phenomenon did not re-emerge until the 1970s. However, at least ten conceptual foundations related to the conceptualisation of shared leadership emerged (Pearce and Conger 2003b, p. 10-13):

- (a) Expectation states theory and team member exchange;
- (b) Participative decision making;
- (c) Vertical dyad linkage/Leader-member exchange;
- (d) Substitutes for leadership;
- (e) Self-leadership;
- (f) Self-managing work teams;
- (g) Followership;
- (h) Empowerment;
- (i) Shared cognition; and
- (j) Connective leadership.

As mentioned, although the concept of 'shared leadership' was not fully developed until the 1990s, the term 'shared leadership' can be identified as going back further in the literature. Berkowitz (1953), rather than using the term 'shared leadership' refers to 'sharing leadership in small, decision-making groups'. Berkowitz (1953) studies conference participants' reactions when leadership was shared by the chairman with other members in groups consisting of five to 17 members. The data were collected through coding the remarks of the participants during the group meetings and by giving the participants surveys to fill out. The Berkowitz (1953) results indicate that group members reacted negatively to what he terms 'democratic leadership'. According to Berkowitz (1953), group satisfaction was highest when the chairman controlled the process of the group. Furthermore, group cohesiveness and productivity were found to be higher when the chairman controlled the process. Although the study uses the idea of sharing leadership in a broader sense, with fewer specifications than more recent studies, its relevance can be seen in terms of the novel approach in acknowledging that shared leadership could lead to positive outcomes within a group. Interestingly, its results do not regard shared leadership in groups as useful due to a decrease in group cohesiveness and satisfaction.

Moving further down the historical line, the term 'shared leadership' has been used extensively both in the health and education literature. Although the work on team-based shared leadership developed in the 1990s, the term was already used in earlier studies in these fields. In the health

literature the term 'shared leadership' has mainly been used when writing about the nursing profession. Shared leadership is referred to when considering the most effective type of nursing such as the notion of 'no head nurse' (Mealy et al. 1976).

In the education domain, shared leadership is mainly referred to when leadership is exercised not only hierarchically by individuals such as a school principal at the top, but at different levels in the school. The shared leadership concept has gained high popularity in this domain. Early work mainly refers to the sharing of leadership between teachers, administrators and the board of education (Weingast 1980). This was taken further by focusing on interaction-based teaching and thus the sharing of leadership between students and teachers (Peters and Scoville 1984), followed by considering shared leadership at all different organisational school levels (Hallinger and Richardson 1988; McClure 1988; Meadows 1990; White-Hood 1991).

Fitzsimons et al. (2011) emphasise the differences regarding the issue of shared leadership addressed both in the education literature and the team-based literature. The team-based literature focuses on developing teams which work without a leader towards teams in which everyone is a potential leader. The education literature on the other hand focuses on moving from hierarchical leadership towards developing leadership throughout the organisation (Fitzsimons et al. 2011). In their historical review of the shared and distributed leadership literature, they further emphasise that the two streams of shared leadership research within the education and team-based literature were unrelated streams of research until Gronn (2002) linked them. Gronn (2002) uses the overall term 'distributed leadership' rather than 'shared leadership' to outline what he sees as an alternative to 'heroic' forms of leadership. Nevertheless, he includes 'shared or dispersed leadership' in his argument that leadership research should focus much less on the study of followership.

Moving back to the team-based leadership literature, Avolio et al. (1996) shaped the field with their study of the shared leadership process in highly developed teams. In their opinion, the concept had not been researched extensively enough in the context of self-managed teams. Their longitudinal study focuses directly on shared leadership in teams of undergraduate students and their results find shared leadership to be positively related to team effectiveness.

2.2.3 Follower-centred Leadership

Shamir (2007) emphasises the importance of followers on the leadership process, who in the past were merely seen as recipients of the leader's influence. Nevertheless, according to Shamir

(2007) this leader-centred perspective on leadership has been increasingly criticised due to its overemphasis of the impact of leaders on followers and organisations. Shamir (2007) thus argues for a balanced perspective of leadership in which leaders and followers construct the leadership process together. This is re-emphasised by Jackson and Parry (2011), who do not believe that groups can function without a formal leader, but highlight that team leadership can reduce the pressure on the formal leader to produce all the leadership.

Ladkin (2010) emphasises the difficulty of capturing leadership and the importance of leadership not simply being reduced to the leader. Looking at the concept of shared leadership, the distinction between leaders and followers can be seen as almost having been eliminated. In shared leadership everyone is equipped with the ability to act as a leader or as a follower. However, due to its criticism of the traditional, hierarchical leadership concepts, shared leadership can be seen as being closer to a follower-centred than to a leader-centred perspective of leadership (Shamir 2007). Indeed Jackson and Parry (2011, p. 61) describe shared leadership as 'followers as leaders', although technically, they believe the approach to be neither leader nor follower-centred. Furthermore, according to Shamir (2007, p. xvii) shared, distributed or dispersed leadership suggest that rather than being a role, leadership is 'a function or an activity that can be shared among members of a group or organisation'.

Nevertheless, Shamir (2007) adheres to a quite traditional view of leadership since he believes that leadership exists only when an individual (the leader) exerts influence on others. From this view leadership cannot be fully shared as it is in democratic or distributed leadership, where leadership is distributed equally among team members of a group. However, research has shown that multiple individuals can exert influence at a given time (Ensley et al. 2003; Bligh et al. 2006; Pearce and Sims 2002; Perry et al. 1999). Furthermore, the concept of shared leadership does not necessarily imply that there are no leaders or followers but also that leadership can rotate amongst the members of a group.

Viewing leadership as a process towards accomplishing objectives, rather than a vertical position within the organisation, is particularly relevant when considering that leadership can be shared within teams (Offermann and Scuderi 2007). Uhl-Bien and Ospira (2012, p. 427) in their work on 'relational leadership' also emphasise the possibility of people being both leaders and followers. In their view, approaches to leadership that 'foster relationships' instead of being based merely on dominance, hierarchy or authority are essential for forming 'new leadership approaches for the age of knowledge work'. Uhl-Bien and Ospira (2012) also emphasise the recent move from

focusing merely on the hierarchical leader to including the occurrences around the leaders, followers and their interactions. They use the term 'relational' to focus on the social processes of leadership and highlight that the phenomenon is characterised and constituted by relations and thus aspects that connect two or more things as being, belonging or working (Uhl-Bien and Ospira 2012, p. xix). Such a relational view also applies to shared leadership in which the focus lies on the interactions of individuals in teams who work towards common goals.

To sum up, the notion of shared leadership can be seen as encompassing both leader-centred and follower-centred perspectives of leadership. The approach aims to integrate these notions to enable increased interaction between leaders and followers, often not distinguishing between the two. Similarly to Leader-Member-Exchange (LMX) theory it focuses on relationships between leaders and followers. However, in shared leadership a set of team members can exercise leadership functions and not only a designated leader.

2.2.4 Self-leadership

Manz and Sims (1980, p. 361) criticise traditional definitions of leadership in organisations and emphasise the importance of employees managing themselves due to supervisors being unable to control many aspects of an organisation. This should be seen as an important step toward more autonomy for people in organisations, although not exclusive to these, as self-management can also take place within other settings. Self-management or self-control are described as 'a process whereby a person is faced with immediate response alternatives involving different consequences and the person chooses an apparent low-probability response' (Manz and Sims 1980, p. 362). The concept has gained popularity in particular as it has been identified as a driver for innovative behaviour at work (Carmeli et al. 2006; Manz and Sims 1980). Furthermore, direct benefits of self-management for organisations lie in employees taking responsibility for their actions, reduced cost for organisations and providing managers with more time (Manz and Sims 1980).

Although self-management was first described as 'a substitute for leadership', it was further expanded as a new, 'purposeful leadership of self' commonly described as 'self-leadership' (Manz 1986). In particular, the self-leadership view distinguishes itself from self-management in that it focuses not only on rewards received for the completion of a task but explicitly emphasises 'natural rewards' that result from performing activities, and thus free will as an issue of why behaviour is performed (Manz 1986).

More specifically, Houghton et al. (2003, p. 126) define self-leadership as a process through which people influence themselves to achieve the self-direction and self-motivation needed to perform. In addition, its unique characteristics include that it:

- (a) allows for addressing a wider range (higher level) of standards for self-influence;
- (b) more fully incorporates the role of intrinsic work motivation; and
- (c) suggests some additional strategies for employee self-control.

(Manz 1986, pp. 589-590)

The idea of more freedom and autonomy for employees is not new. However, the theory of self-leadership is one of the most important precursors of shared leadership in particular due to its focus on the individual taking responsibility. In addition, self-leadership strategies focus on enhancing perceptions of self-efficacy, and thus the belief of a person in their capability in performing a task, which is said to lead to higher performance (Houghton et al. 2003). Thus, Houghton et al. (2003) emphasise the positive relationship of self-leadership with self-efficacy and performance, which they link to increasing people's beliefs and thus positive attitudes for sharing leadership roles. In order to facilitate self-leadership of individuals in teams, leading to shared leadership, so-called 'SuperLeadership' and thus 'leading workers to lead themselves' is seen as a necessity (Manz and Sims 1987). Houghton et al. (2003, p. 133) emphasise the importance of a vertical leader to facilitate the sharing of leadership as 'SuperLeader' in a team, to develop self-leadership skills in followers and empowering them to 'effectively use these skills to lead themselves and others'.

Carmeli et al. (2006, p. 78) focus on the importance of self-leadership in developing innovative behaviour of employees, which is defined as 'an individual recognising a problem for which she or he generates new (novel or adopted) ideas and solutions (...)'. The results of their study of employee behaviour in several organisations show that self-leadership skills, divided into behaviour-focused, natural reward-focused and constructive thought-focused strategies, are overall significantly and positively related to employees' self-rating and supervisor rating of innovative behaviour. Nevertheless, the study and self-leadership in itself does not provide insight into the role that employee interactions play in innovation but merely focuses on personal strategies. This gives further justification for the integration of the self-leadership approach into the concepts of team leadership.

Self-leadership, and with it 'SuperLeadership' to facilitate self-leadership, can provide an effective way of facilitating increased empowerment of individuals in teams. However, the

'SuperLeadership' approach can be criticised as a hierarchical approach to driving empowerment in teams which is not necessarily a solution that less hierarchical forms of team leadership endorse. Shared leadership, as a form of team leadership does not necessarily exclude the presence of a formal leader in a team, but provides all team members with the possibility of engaging in the leadership of the team. Houghton et al. (2003) admit that the leader could only be interested in follower compliance, particularly in urgent situations, which would require a different leadership style. Nevertheless, the view of 'SuperLeadership' as playing an important role in developing self-leading capabilities of team members in the long run is maintained.

2.2.5 Self-managed Teams

According to Mohrman et al. (1995, p. 39) a team is 'a group of individuals who work together to produce products or deliver services for which they are mutually accountable'. As noted by Webber and Donahue (2001), many researchers use the terms 'team' and 'group' interchangeably to refer to a collection of two or more interdependent individuals sharing responsibility for outcomes. This current research follows this approach although mostly using the term 'team'. King and Anderson (2002) emphasise the importance of distinguishing between membership and reference groups. Membership groups can be identified as groups which a person belongs to by some verifiable criterion, and reference groups are those with whom a person identifies (King and Anderson 2002). Although people may or may not identify with groups of which they are or are not members, King and Anderson (2002) stress that people in organisations are likely to identify with many reference groups in organisations and this is linked to how they perform as innovators themselves.

The theory of self-managed teams which Seers et al. (2003, p. 96) describe as 'one of the most prominent features of post-industrial era organisations' is closely related to that of shared leadership. The concepts of self-leadership, self-managing teams (SMTs) and followership have been identified as particularly relevant regarding the emergence of shared leadership. Yang and Shao (1996) describe self-managed teams (SMTs) as organisational units consisting of five to 30 members who are empowered to work with little or no supervision. However, it is generally agreed that teams can consist of just two members and need not be part of an organisation (Breugst et al. 2012; Korsgaard et al. 2008; Salas et al. 1992). Appelbaum et al. (1999) emphasise the influence of self-managed teams on organisations with traditional structures and top-down authority as they provide employees with day-to-day responsibility for managing themselves and their work through collaborative teamwork. The concept thus gained popularity over the

past decades due to increases in flexibility, quicker decision-making, reduced cost and cycle time and increased innovation (Moravec and Johannessen 1997). Nevertheless, self-managed teams have received criticism. Langfred (2007), for instance, finds that the very structural flexibility that makes self-managing teams effective, may complicate conflict-management.

Zárraga and Bonache (2005, p. 663) describe self-managed teams as 'non-hierarchical groups of individuals with different and complementary skills and perspectives, responsible and accountable for the organization outcomes'. The term 'self-managed' relates to the extent to which the team is managed by an authority and delegates its own tasks and responsibilities including making decisions and dealing with conflicts (Behfar et al. 2011). Manz and Sims (1987, p. 107) emphasise that autonomous or self-managed teams are 'characterized by the attempt to create a high degree of decision-making autonomy and behavioural control at the work group level'. Similarly, Yang and Shao (1996) note that these teams usually do not require the permission of management to make a decision and are themselves responsible for their activities. Furthermore, they suggest that more traditional and hierarchical forms of leadership would not be as effective in self-managed teams as these require even more leadership than traditional work units. Self-managing teams 'perform independent tasks, have responsibilities for many aspects of their work, and make binding decisions', while team members feel freer to disagree with each other in such teams and to 'display their emotions in the absence of power' (Yang and Mossholder 2004, p. 600). These types of teams are particularly prevalent among teams with complex or multiple tasks, requiring multiple exchange relationships among team members, as well as task interdependencies requiring complementary skills and abilities among team members (Seers et al. 2003).

The relevance of self-managed teams for shared leadership can be seen in the importance of a dispersion of power and influence for shared leadership to occur. Bergman et al. (2012) suggest that shared leadership is most likely to exist in self-managed teams, which according to Small and Rentsch (2010) are most likely to benefit from shared leadership if they are cross-functional in nature. Conflict management can be successfully investigated in self-managed teams, due to the decision-making power and the ability to resolve conflicts lying directly in the hands of team members rather than with a manager, enabling these teams to adapt and respond to changes in the environment (Behfar et al. 2008). Barry (1991) names project teams, problem solving teams, and policy making teams as types of self-managed teams to which the distributed leadership model applies. According to Barry (1991), envisioning, organising, spanning and socialising are the leadership roles and behaviours required for an SMT to function properly.

Nevertheless, Yang and Shao (1996) emphasise the limitations of this model as they believe that SMTs require a mentor role to facilitate the development of human resources and propose a more dynamic model which they name the 'competing values framework'. Solansky (2008) argues that teams with shared leadership have motivational and cognitive advantages over teams with the traditional 'single' leader, which again demonstrates the importance of further researching this approach. In a meta-analysis, D'Innocenzo et al. (2014) find shared leadership overall positively related to team performance and further underline the relevance of studying its outcomes as regards, for instance, creativity. Team members engaging in leadership can provide higher participation and information sharing, as well as higher team commitment and overall team functioning (D'Innocenzo et al. 2014).

2.2.6 Defining Shared Leadership

Although there are similarities between the different concepts of team leadership, they may vary. Some authors see shared leadership as a distinct concept, while even more use the term interchangeably. Yammarino et al. (2012) view leadership as a 'we' phenomenon, involving multiple individuals in leadership roles in both formal and informal relationships. They use the term 'collectivistic leadership approaches' to describe team, network, shared, complexity, and collective leadership. Nevertheless, this does not include all of the terms commonly associated with shared leadership. However, although they may refer to very particular or special forms of leadership, these all have in common that the 'we' is at the centre of their approach. To a large extent, the similarities in the different types of team leadership approaches come from their similar historical background as different streams of researching leadership in teams emerged. Bolden (2011, p. 252) emphasises that these accounts have in common that leadership is not 'the monopoly or responsibility of one person', which is why he suggests the need for a more 'collective and systemic understanding of leadership as a social process'.

Despite the term 'shared leadership' describing a relatively unique concept, as will be shown, it has been interpreted in different ways (Fitzsimons et al. 2011; Pearce and Conger 2003b; Yammarino et al. 2012). The term is often used interchangeably with concepts such as collaborative leadership, distributed leadership, dispersed leadership, collective leadership, co-leadership and democratic leadership. Distributed leadership in particular has been used to label all different forms of shared leadership activity (Harris et al. 2007, p. 338). Nevertheless, there have been attempts at distinguishing between these terms (Day et al. 2004, p. 873; Fitzsimons et al. 2011). **Table 2.2** displays the different constructs used to describe the notion

of more than one person enacting leadership functions and sharing responsibility within a team. The level of analysis used most commonly is displayed further. Importantly, the focus lies on leadership within teams and not within schools, hospitals or international politics. Keywords such as devolved, delegated and rotated leadership which are scarcely used in the team-based literature have been excluded.

Table 2.2: Leadership processes at the team level involving more than one leader

Construct	Key descriptions	Level of analysis
Shared leadership (also: shared team leadership)	<p>- <i>'The serial emergence of multiple leaders over the lifespan of the team.'</i> (Pearce and Sims 2002, p. 176)</p> <p>- <i>'The notion that the responsibility for guiding a group can rotate among its members, depending on the demands of the situation and the particular skills and resources required at that moment. Any member can lead the group for a certain period, during a key phase in a project, and then leadership can be passed on to someone else.'</i> (Jackson and Parry 2011, p. 61)</p> <p>- <i>'Leadership is a shared responsibility among team members. (...) Leadership might be distributed around the team equally, unilaterally, or in any number of ways. Decisions and actions made by the team are not the result of a single leader acting toward the team.'</i> (Yammarino et al. 2012, p. 390)</p>	Leader, team member and team*
Distributed leadership (also: distributive leadership)	<p>- <i>'A group activity that works through and within relationships, rather than individual action.'</i> (Bennett et al. 2003, p. 3)</p> <p>- <i>'When two or more individuals share the roles, responsibilities, and functions of leadership.'</i> (Carson et al. 2007, p. 1218)</p> <p>- <i>Collectively leading the work of a team by creating norms of behaviour, contribution and performance, and by supporting each other and maintaining the morale of the group.</i> (Day et al. 2004)</p>	Leader, team member and team
Collective leadership (also: collectivistic leadership)	<p>- <i>'A dynamic leadership process in which a defined or focal leader, or set of leaders, selectively utilise skills and expertise within a network, and across levels of analysis and hierarchical levels, effectively distributing elements of the leadership role as the situation or problem requires.'</i> (Yammarino et al. 2012, p. 393)</p>	Leader, team, network, multi-level and cross-level*
Co-leadership	<p>- <i>'Co-leaders are a uniquely structured team of two people, and co-leadership is a much shorter and more natural step away from shared (but usually unequal) team leadership than it is from a hierarchical single commander.'</i> (Sally 2002, p. 85)</p>	Team and two leaders
Collaborative leadership	<p>- <i>'While collaborative leadership is by definition distributed, all distributed leadership is not necessarily collaborative.'</i> (Spillane 2006, p. xx)</p>	Leader, team member and team

	- <i>'How all members of the team collectively influence each other toward accomplishing its goals.'</i> (Avolio et al. 2003, p. 145)	
Co-operative leadership (cooperative leadership)	<i>'A leadership team characterised by group cohesion, which includes openness of the team members, mutual trust and communication.'</i> (Hulpia and Devos 2009, p. 155)	Team member and team
Dispersed leadership	- <i>The team leader can develop leadership potential in other team members.</i> (Bryman 1996) - <i>'The distribution or sharing of leadership skills and responsibilities throughout an organisation.'</i> (Gordon 2010, p. 262)	Leader, team member and organisational teams
Democratic leadership	- <i>Distinction between democratic leadership (participative) and autocratic leadership.</i> (Foels et al. 2000)	Team member and team
Team leadership	- <i>'Measures leadership as a group-level construct and looks at leadership "by" the team rather than "of" the team or "in" the team.'</i> (Jackson and Parry 2011, p. 108)	Leader, team, multi-team system, multi-level and cross-level*

* adapted from Yammarino et al. (2012, p. 393)

Some authors have emphasised the danger of using these terms interchangeably due to important theoretical differences discovered in some conceptual studies (Bolden 2011; Fitzsimons et al. 2011). Nevertheless, studies distinguishing between different terms often focus on fields of literature employing each term. The term distributed leadership has for instance been used to a large extent in the leadership literature on education, whereas the term shared leadership has been used considerably more in the team-based literature. **Table 2.3** presents a distinction between the two terms which according to Fitzsimons et al. (2011, p. 325) are 'philosophically diverse'. Indeed, the terms can be traced back as having developed differently in the literature.

As discussed, shared leadership can be traced back to having developed from notions of self-leadership. This concept was first conceptualised as

'a comprehensive self-influence perspective that concerns leading oneself toward performance of naturally motivating tasks as well as managing oneself to do work that must be done but is not naturally motivating' (Manz 1986, p. 589).

In short, self-leadership can be seen as a self-influence process in which teams and individuals influence themselves to achieve the self-direction and self-motivation required to perform (Neck and Houghton 2006; Stewart et al. 2011).

Table 2.3: Characteristics of shared and distributed leadership (Fitzsimons et al. 2011, p.319)

Shared leadership	Distributed leadership
Leadership often emanates from the designated leader plus other group members who share leadership roles (e.g. Strongman, Transactor, Visionary hero and Super-leader).	Leadership is not solely held by those with designated, formal leadership roles but is enacted by multiple individuals in the organisation.
Leadership involves several individuals leading themselves and allowing others to lead them through a reciprocal influence process.	Leadership practice is constituted and shaped by the interactions between leaders and followers and the organisational context.
Cognition is shared by members of the group.	Cognition is 'stretched over' both human actors and aspects of the context they are in.
Advantage is offered through the aggregate of attributed influence in a group (collective influence).	Advantage is offered by developing a capacity to act by means of 'concertive action', 'co-performance' or 'conjoint agency'.

The distributed leadership literature on the other hand, mainly developed in the educational sector, focuses on the school as the unit of analysis rather than the team (Fitzsimons et al. 2011). However, Spillane (2006) use the terms collaborative, collective and coordinated leadership to refer to the level of distribution in distributed leadership. Leithwood (2009) acknowledges that there are many competing interpretations of distributed leadership and 'shared', 'democratic' and 'dispersed' leadership are used interchangeably. Similarly, as shown in **Table 2.2** much of the team-based literature uses 'collaborative' and 'collective leadership' interchangeably when referring to shared or distributed leadership, whereas the term 'shared leadership' is mostly used in medical settings. Although much of the distributed leadership uses the school as the level of analysis rather than the team, the term distributed leadership is increasingly used in the team-based literature (e.g. Barry 1991; Day et al. 2004; Ensley et al. 2006; Mehra et al. 2006).

Although authors may opt for a specific term in their research, it is difficult to establish a clear differentiation. Even more, Bolden (2011) believes that distinguishing between the terms associated with distributed leadership would be unhelpful, and they are often used interchangeably and are difficult to differentiate. The main difference which has been recognised is the prevalence of using the shared or distributed leadership concepts across countries or academic disciplines. Bolden (2011) questions why distributed leadership seems to have been picked up within the UK education literature and practice, from where a majority of publications come, whereas shared leadership has mainly been published in the health and particularly the team literature (see bibliometric analysis). Nevertheless, regarding the increasing popularity of the use of the term 'distributed leadership' within the business, management and leadership literature, Bolden (2011) speculates that this may be related to its popularity within the education literature.

Offermann and Scuderi (2007) attempt to provide clarification regarding the research published under the terms collective leadership, shared leadership, distributed leadership, team leadership, co-leadership, emergent leadership, and self-managed teams. They describe this domain as ‘any leadership process that involves more than one person assuming leadership responsibilities’ (Offermann and Scuderi 2007, p. 72). However, in their view distributed leadership implies that leadership is unequally shared across team members and that some team members may not lead at all. Nevertheless, such a differentiation is uncommon in the leadership literature. Although (Offermann and Scuderi 2007) acknowledge the common reference to teams with more than one leader as shared leadership literature, they provide a framework to distinguish between the different terms.

Their framework, depicted in **Figure 2.2**, is helpful since it uses the different existent terms to enable nuances for the extent to which leadership is shared within teams. The term ‘shared leadership’ is used to describe the overall phenomenon. To the left of the continuum few leaders engage in leadership in the group (co-leadership usually refers to two leaders). Distributed leadership refers to not all team members engaging in leadership, whereas collective leadership to the right implies that all team members engage in leadership functions. Offermann and Scuderi (2007, p. 77) refer to ‘team leadership’ as ‘cases where groups function truly interdependently on shared tasks’. The conceptualisation of Offermann and Scuderi (2007) is useful in that it could potentially provide more clarification in the team-based leadership literature regarding the use of the various terms. However, it could also add to the confusion amongst researchers since it is questionable why certain terms, for example shared leadership, receive preference over others.

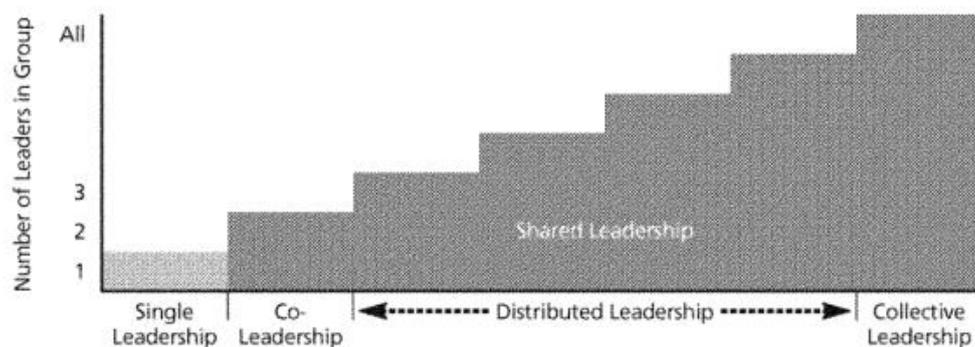


Figure 2.2: Continuum of single and shared leadership (Offermann and Scuderi 2007)

The discussion on distinguishing between the different terms for these leadership approaches has mainly focused on shared and distributed leadership (Day et al. 2004, p. 873; Fitzsimons et al. 2011). These terms have been used interchangeably due to their similarities and they are the

most widely used (Day et al. 2004, p. 873). **Table 2.4** shows that many definitions of shared leadership have in common that multiple team members participate in the leadership of the team. An important feature of a shared leadership team can be identified in the responsibility for leading the group being shared among team members, and rotating or being distributed in other ways (Jackson and Parry 2011; Yammarino et al. 2012). Additionally, decisions are often made collectively, through collaboration and not by a single leader (Kramer and Crespy 2011; Yammarino et al. 2012).

Table 2.4: Distinguishing between leadership concepts involving more than one leader, in the team-based leadership literature

Conceptualisation	Constructs included	Author	Conceptual definition
Distributed and shared leadership	-	(Ensley et al. 2006, p. 220)	<i>'Those with relevant knowledge, skills or abilities offer their views within specific situations, which are then digested and acted upon by the group as a unit. (...) A team process where leadership is carried out by the team as a whole, rather than solely by a single designated individual.'</i>
		(Mehra et al. 2006, p. 233)	<i>'Leadership is not just a top-down process between the formal leader and team members; and there can be multiple leaders within a group.'</i>
		(D'Innocenzo et al. 2014, p. 5)	<i>'An emergent and dynamic team phenomenon whereby leadership roles and influence are distributed among team members.'</i>
Distinct definition shared leadership	-	(Carson et al. 2007, p. 1218)	<i>'When two or more individuals share the roles, responsibilities, and functions of leadership.'</i>
		(Ensley et al. 2006, p. 220)	<i>'A team process where leadership is carried out by the team as a whole, rather than solely by a single designated individual'.</i>
		(Pearce and Conger 2003b, p. 1)	<i>'Leadership is broadly distributed among a set of individuals instead of centralised in hands of a single individual who acts in the role of a superior.'</i>
		(Perry et al. 1999, p. 38)	<i>'The team as a whole must be empowered, or provided the power and authority, to collectively share leadership of the team.'</i>
		(Fitzsimons et al. 2011, p. 319)	<i>'Leadership often emanates from the designated leader plus other group members who share leadership roles (...) and involves several individuals leading themselves and allowing others to lead them through a reciprocal influence process.'</i>
Distinct definition distributed leadership	-	(Bolden 2011, p. 251)	<i>'A group activity that works through and within relationships, rather than individual action.'</i> (cited from Bennett et al. 2003, p. 3)
		(Cope et al. 2011, p. 272)	<i>'A sense of leading and following - a relationship that is not restricted to a specific person, identity or role, but more to processes undertaken by people.'</i>

Shared leadership overall term	- Distributed leadership	(Yammarino et al. 2012, p. 390)	<i>'A shared responsibility among team members. Leadership might be distributed around the team equally, unilaterally, or in any number of ways. Decisions and actions made by the team are not the result of a single leader acting toward the team.'</i>
	- Distributed leadership; - Collective leadership;	(Avolio et al. 2009, p. 431)	<i>'A process versus a person engaging multiple members of a team.'</i>
	- Co-leadership	(O'Toole et al. 2002, p. 65)	<i>'Activity of leadership as a shared effort.'</i>
Distributed leadership overall term	- Shared leadership	(Gibb 1954, p. 215)	<i>'A group quality, a set of group functions carried out by the group.'</i>
	- Shared leadership	(Fitzsimons et al. 2011, p. 319)	<i>'Leadership is enacted by multiple individuals in the organisation. (...) Leadership practice is constituted and shaped by the interactions between leaders and followers.'</i>
	- Shared leadership; - Co-leadership	(Thorpe et al. 2011, p. 239)	<i>'The very antithesis to the preoccupation of most Western writers about leadership, with the position reified in single individuals (...).'</i>
Team leadership overall term	- Collective leadership; - Shared leadership; - Distributed leadership; - Dispersed leadership	(Gupta et al. 2010, p. 346)	<i>'Non-hierarchical models of leadership.'</i>
	- Shared leadership; - Co-leadership; - Collective leadership; - Distributed leadership	(Avolio et al. 2003, p. 145)	<i>'How all members of the team collectively influence each other toward accomplishing its goals.'</i>
	- Collective leadership	(Sivasubramaniam et al. 2002, p. 68)	<i>'How members of a group evaluate the influence of the group as opposed to one individual within or external to the group.'</i>
Collective leadership overall term	- Shared leadership; - Distributed leadership; - Rotated leadership	(Contractor et al. 2012, p. 995, p. 994)	<i>'Emergent, informal, and dynamic leadership brought about by the members of the collective itself.'</i>
	- Shared leadership; - Distributed leadership	(Friedrich et al. 2009, p. 934)	<i>'A dynamic leadership process in which a defined leader, or set of leaders, selectively utilise skills and expertise within a network, effectively distributing elements of the leadership role as the situation or problem at hand requires.'</i>
Dispersed leadership overall term	- Shared leadership - Distributed leadership	(Gordon 2010, p. 262)	<i>'The distribution or sharing of leadership skills and responsibilities throughout an organisation.'</i>
Collaborative leadership overall term	- Shared leadership	(Kramer and Crespy 2011, p. 1025)	<i>'A shared process in which leaders and participants collaborate in leading and decision making.'</i>

The review of a wide variety of concepts in the literature on more than one leader engaging in teams has shown that the term shared leadership is most common. However, this term is often used interrelatedly, particularly with the term distributed and collective leadership. Due to the divisiveness of the literature, trying to distinguish the different terms would result in the exclusion of a large amount of articles that use several terms interrelatedly (e.g. Bolden 2011; Day et al. 2004; Gupta et al. 2010). Nevertheless, the term 'shared leadership' has been widely used in the team-based leadership literature and is adequate to be used as overall term.

Therefore, this current research uses the term 'shared leadership' when referring to leadership that is enacted by multiple individuals in a team. If required, the terms distributed and collective leadership will be used interchangeably with shared leadership as they are also commonly used. As shown in **Table 2.4** a majority of authors use these terms interrelatedly and many opt to solely use the term 'shared leadership'. Furthermore, significant similarities between the different terms can be identified, providing a rationale for this research opting to use shared leadership as the main term, interrelatedly with distributed leadership and collective leadership.

Carson et al. (2007) identify several antecedent conditions required for shared leadership to emerge. An internal team environment is required consisting of the dimensions of shared purpose, social support and voice, also referred to as participation and input. Shared purpose refers to team members having common primary objectives and collective goals, as this makes team members more likely to feel motivated, empowered and committed to their teamwork. Such a focus on collective goals has been seen as increasing the likelihood of team members sharing leadership responsibilities (Avolio et al. 1996; Carson et al. 2007; Kramer and Crespy 2011). Social support is defined by Carson et al. (2007, p. 1222) as 'team members' efforts to provide emotional and psychological strength to one another'. Team members supporting and encouraging each other as well as accomplishments being recognised, creates an environment in which team members feel their input is valued and appreciated (Carson et al. 2007). This increases the likelihood of cooperation and shared responsibility for team outcomes. Voice, or participation and input refers to constructive change-oriented communication, participation in decision-making and involvement and is defined as 'the degree to which a team's members have input into how the team carries out its purpose' (Carson et al. 2007, p. 1222). It is related to participation in decision-making and constructive discussion, which can increase engagement of team members in leadership (Day et al. 2004; Ensley et al. 2006; O'Toole et al. 2002). According

to Carson et al. (2007) the three dimensions and precursors for shared leadership of shared purpose, social support and voice are mutually reinforcing and complementary.

The benefits of shared leadership toward team performance and team outcomes have been emphasised in various studies (e.g., Bligh et al. 2006; Contractor et al. 2012; Perry et al. 1999; Small and Rentsch 2010). Moreover, a meta-analysis has found substantial empirical support regarding a positive relationship between shared leadership and team effectiveness (Wang et al. 2014). Shared leadership, for instance, has been argued to increase trust, potency and commitment of team members and has been shown to increase team effectiveness due to greater amounts of collaboration, coordination and cooperation (Bligh et al. 2006; Ensley et al. 2003). Furthermore, shared leadership has been shown to be an important predictor of new venture performance and growth (Ensley et al. 2003; Ensley et al. 2006) and has been proposed as critical in deterring executive corruption (Pearce et al. 2008). In addition, Mehra et al. (2006), find that the increased information sharing and participation among team members in shared leadership teams is positively related to team performance.

As regards the important aspect of team innovation, Gu et al. (2016) find shared leadership positively related to both individual and team creativity. Contractor et al. (2012) propose that greater power dispersion as practised in shared leadership teams provides teams with greater access to ideas and information which may translate to higher creativity and innovation. Hoch (2013) similarly suggests that team members are more likely to contribute ideas and to make information accessible under high levels of shared leadership. The importance of collaboration and bringing together different skills in the context of generating innovative responses is also highlighted by Clarke (2012a). Furthermore, Hooker and Csikszentmihalyi (2003) emphasise that shared leadership makes teamwork more enjoyable, empowering and meaningful, through which team creativity and innovative potential may be increased.

2.3 Conflict and Innovation in Teams

While the background to shared leadership was discussed in the previous section, this section provides an overview of conflict and innovation, both important for this study. According to De Dreu and Weingart (2003), there has been a shift in organisations from viewing conflict as stressful or disruptive toward being more optimistic about conflict, which can be functional and stimulating. They define conflict as ‘the process resulting from the tension between team members because of real or perceived differences’ (De Dreu and Weingart 2003, p. 741). As noted by Ayoko et al. (2012, p. 159) ‘subjective feeling states that include basic emotions such as love, joy, shame, guilt and jealousy’ play an important role regarding conflict. Due to a majority of studies in the past supporting the notion that team conflict negatively affects team performance, Jehn (1994) provided the differentiation between relationship and task conflict. Jehn (1995) found relationship conflict to be detrimental and negatively related to group satisfaction, while task conflict could have beneficial effects on team performance.

2.3.1 Systematic Literature Search

An online literature search was conducted in the most common management literature databases. Due to the large amount of minor studies on the topic, which were identified by searching through document abstracts (Web of Science about 51,000) with the most common terms, the search was restricted to document titles (see **Table 2.5**). Nevertheless, using a combination of different terms, it was ensured that the variety of results would be large enough.

Table 2.5: Search terms in literature databases

Literature database	Search strategy	No of results
EBSCOHost (All subjects)	TI (*team* OR *group*) AND TI (*conflict OR *disagree* OR *dissent OR *tension OR *climate) AND TI (*satisfaction OR *innovat* OR *creativ* OR *effective* OR *decision* OR *product* OR *outcome* OR *benefit* OR *perform*)	282 scholarly articles
ABI Proquest	ti(*team* OR *group*) AND ti(*conflict OR *disagree* OR *dissent OR *tension OR *climate) AND ti(*satisfaction OR *innovat* OR *creativ* OR product* OR performance)	126 scholarly articles
Web of Science	Title=((*team* OR *group*) AND (*conflict OR *disagree* OR *dissent OR *tension OR *climate) AND (*satisfaction OR *innovat* OR *creativ* OR *effective* OR *decision* OR *product* OR *outcome* OR *benefit* OR *perform*))	239 articles
		Total: 647 articles No duplicates: 341 articles

Following the removal of any duplicates, 341 original articles were retrieved from the databases. In their meta-analysis of conflict De Wit et al. (2012, p. 365) included studies if they (a) measured relationship conflict, task conflict, and/or process conflict; (b) included a measure of proximal and/or distal group outcomes; and (c) gave sufficient statistical information to compute effect sizes. Similarly, since this current research aims to investigate the role of conflict in driving forward innovation in shared leadership management consultant teams, the potential positive outcomes of conflict in teams are of importance. Thus, studies with the following criteria were included in the analysis (final sample 86 studies):

- (1) measuring task, relationship or process conflict;
- (2) including outcomes of conflict such as innovation, performance or effectiveness; and
- (3) focusing on team/group-work.

Table 2.6: Meta-analyses of task and relationship conflict in teams

Authors	Method	Inclusion criteria	Results	Conflict	Limitations and future research
O'Neill et al. (2013)	Meta-analysis at team-level	Task conflict, relationship conflict, process conflict, cognitive conflict, affective conflict; - With team performance, innovation, potency, cooperative, competitive and avoidance behaviour	- 89 articles	- TC positively related to performance in decision-making teams; - No correlation between TC and innovation (conflict possibly related to certain innovation dimensions)	- Conflict occurring at different points of a team's life cycle has different implications for team effectiveness
De Wit et al. (2012)	Meta-analysis at team level	A) Measured RC, TC, and/or PC B) Included a measure of proximal and/or distal group outcomes C) Gave sufficient statistical information to compute effect sizes	- 116 studies	- Negative relationship between RC and group outcomes; - Negative association between PC and group performance; - TC positively related to group performance	- In studies where TC and RC are highly correlated, TC is negatively related to team performance; - Identify factors that determine whether groups are able to separate TC from RC.
De Dreu and Weingart (2003)	Meta-analysis at team level	A) Measured relationship conflict, task conflict, or both B) Included a measure of team performance, team member satisfaction, or both, and C) Provided the necessary statistical information to compute effect sizes	- 26 studies	- Both TC and RC negatively related to team performance; - No difference detected between TC and RC	- In some tasks, conflict interferes less than in other tasks; - Emphasis should be placed on how team members manage the conflict; - Conflict positive under specific circumstances

Three of these studies, displayed in **Table 2.6**, conducted a meta-analysis of studies researching task and relationship conflict in teams. Importantly, O'Neill et al. (2013) find in their meta-analysis that all three types of conflict do not correlate with innovation. However, they suggest that conflict may only relate to certain dimensions of innovation such as creativity. This stands in contrast to the results of De Dreu and Weingart (2003) who merely identify negative effects of conflict on team performance. However, De Wit et al. (2012) and O'Neill et al. (2013) both include a larger number of studies in their analysis and both identify positive effects of conflict on team performance.

A total of 10% of the relevant studies identified had a conceptual, 5% an exploratory and 85% a predictive epistemological classification. **Table 2.7** displays the research methods employed in empirical articles on conflict. A majority of studies employed quantitative methods (90%) and a minority qualitative (5%) or mixed (5%) methods. The different methods of data collection are displayed further.

Table 2.7: Research methods of empirical articles retrieved

	Quantitative				Qualitative			Mixed method	
No of articles	69				4			4	
%	90%				5%			5%	
Data collection technique	SU	EX	SU & EX	SU & VR	OB	OB & I	V	QU & I	QU, I & OB
No of articles	60	4	4	1	1	2	1	3	1
%	77.9%	5.2%	5.2%	1.3%	1.3%	2.6%	1.3%	3.9%	1.3%

SU = Survey, EX = Experiment, VR = Video Rating, OB = Observation, V = Video recording, QU = Questionnaire, I = Interviews

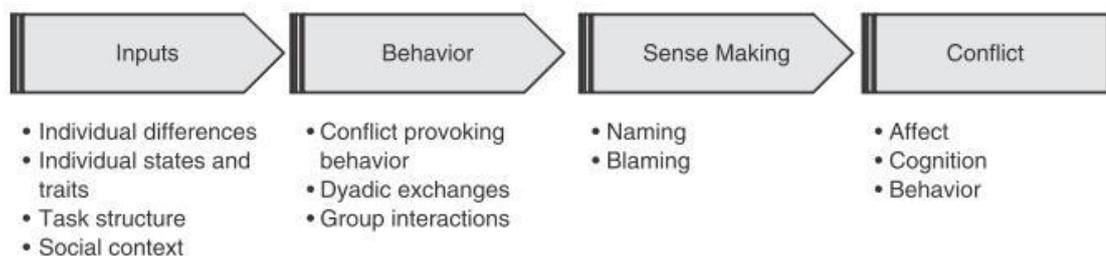
Table 2.8 demonstrates that a majority of articles researching the possibility of positive team outcomes discovered that conflict could have positive outcomes regarding team performance. Most studies provided a differentiation between task and relationship conflict and some further included process conflict. Several studies identified positive effects of conflict on creativity and/or innovation. Furthermore, a few studies included leadership behaviours, however mostly focusing on transformational leadership. Due to the importance of potential positive effects, this research mainly focuses on potential positive outcomes of conflict in teams, rather than focusing on negative aspects and how to solve conflicts.

Table 2.8: Conflict categorisation of articles retrieved

Type of conflict	Competitive, cooperative	Conflict general	Dissent/ minority dissent	Task, relationship, process conflict (+ cognitive and affective)	Other (e.g. negative evaluations, constructive conflict)	Total
No of articles	4	9	5	56	3	77
Percentage	5%	12%	6%	73%	4%	100%
Positive team outcomes	3	5	3	35	3	65%
Negative team outcomes	0	3	0	16	0	25%
Dependent on other variables	1	0	1	3	0	7%
N/A	0	1	1	0	0	3%
Creativity/ Innovation increased	1	2	3	9	2	21%
Include Leadership	1 transformat. leadership	1 structuring leadership	0	1 pragmatic leader behaviour, charismatic leadership 1 transformat. leadership	0	5%

2.3.2 Team Conflict

De Dreu and Weingart (2003, p. 741) emphasise that people in conflict ‘confront issues, learn to take different perspectives, and need to be creative’. Furthermore, De Dreu (2008, p. 6) find that team conflict emerges when ‘one party (...) perceives its goals, values, or opinions being thwarted by an independent counterpart.’ Furthermore, conflict in teams can be described as the opposite to team cohesion. Gupta et al. (2010) emphasise conflict involving a lack of cooperation with strong animosity leading to negative team outcomes. **Figure 2.3** displays a model of factors that include inputs, behaviour and sense making, which lead to conflict.

**Figure 2.3:** Precursors of conflict (Korsgaard et al. 2008, p. 1227)

Considering the role of conflict within management consulting teams exhibiting levels of shared leadership, much of the previous research has used the term conflict in a negative sense, assuming that conflicts lead to negative outcomes when disagreements within teams occur (Greer and van Kleef 2010; Gupta et al. 2010; Solansky 2008).

Jehn (1995; 1997) conceptualised intra-group conflict by distinguishing between task, relationship and later process conflict (see **Table 2.9**). This differentiation has been adopted by a majority of conflict researchers. However, differing effects of each conflict type have been found (e.g. De Dreu and West 2001; De Wit et al. 2012; Jehn and Mannix 2001; Tekleab et al. 2009). According to the definition of Jehn (1995), relationship conflict occurs when interpersonal incompatibilities among group members arise. Task conflict on the other hand relates to group members disagreeing about the content of the tasks being performed (Jehn 1995).

Table 2.9: Distinction between task, relationship and process conflict

Types of conflict	Definition	Content	Outcome
Task	<i>'An awareness of differences in viewpoints and opinions about the group's task.'</i> (Behfar et al. 2011, p. 128)	<i>'Conflict is specifically about the science, engineering, etc. data and interpreting the data. Conflict is about planning what the task should be/are doing; e.g. when and how to deploy instruments etc.'</i> (Paletz et al. 2011, p. 349)	Mostly Positive (Behfar et al. 2011); (Boyle et al. 2012); (De Dreu 2006); (De Wit et al. 2012); (Farh et al. 2010); (Jehn 1995); (O'Neill et al. 2013); (Tekleab et al. 2009) Negative (De Dreu and Weingart 2003)
Relationship	<i>'Interpersonal animosity, tension, or annoyance among members.'</i> (Behfar et al. 2011, p. 128)	<i>'Conflict is about personal relationships, personal values, dislike of people, personal attacks or things that someone responds to as if it was a personal attack, etc. Utterances where the meaning is essentially 'think you are stupid' are relationship conflict.'</i> (Paletz et al. 2011, p. 349)	Negative (e.g. De Dreu and Weingart 2003; De Wit et al. 2012; Tekleab et al. 2009)
Process	<i>'Conflict about how task accomplishment should proceed in the work unit.'</i> (Jehn 1997, p. 540)	<i>'Conflict is about work processes: how to allocate human/ person resources; who should be on what task; human prioritisation, scheduling, communication, disagreements as to what decisions were made (e.g., we decided X, no, we decided Y).'</i> (Paletz et al. 2011, p. 349)	Mostly Negative (e.g. Behfar et al. 2011; De Dreu and Weingart 2003; De Wit et al. 2012; Tekleab et al. 2009) Few Positive (e.g. Jehn and Mannix 2001; Jehn and Bendersky 2003)

Behfar et al. (2011, p. 128) cite task conflict as 'an awareness of differences in viewpoints and opinions about the group's task' and relationship conflict as 'interpersonal animosity, tension,

or annoyance among members'. Furthermore, according to Jehn (1997, p. 540) process conflict 'includes disagreements about assignments of duties or resources'. However, process conflict is often omitted in studies of conflict as it can be difficult to distinguish from relationship conflict (Jehn and Mannix 2001; Korsgaard et al. 2008; Tekleab et al. 2009). Authors further use the term 'cognitive conflict' which is about ideas in the team and relates to the team's task and 'affective conflict'. This, in turn, relates to 'disagreement based on personal and social issues such as dislike and a poor relationship' (Ayoko et al. 2012, p. 159).

In past research, relationship conflict and process conflict have been shown to be negatively related to group performance (e.g. De Dreu and Weingart 2003; De Wit et al. 2012; Tekleab et al. 2009). However, there has been disagreement regarding the role of task conflict in teams. As one of the first, Jehn (1995) found that task-related arguments in groups enabled members to assess information better in a critical way. Nevertheless, this effect only became apparent when levels of conflict were not high, which affected group performance negatively. Further research has found that task conflict not only affects group outcomes, thus innovation, productivity, and effectiveness, positively, but may prevent premature decision making and stimulate more critical thinking (De Wit et al. 2012). Indeed, conflict management has been shown to decrease the positive influence of task conflict on team cohesion (Tekleab et al. 2009). Furthermore, task conflict has been linked to team innovation (De Dreu 2006).

A large amount of research has examined potential benefits of task conflict regarding team outcomes (e.g. Behfar et al. 2011; Boyle et al. 2012; Jehn 1997; Jehn and Bendersky 2003). This type of conflict is sometimes termed 'constructive controversy' which exists 'when one person's ideas, information, conclusion, theories, and opinions are incompatible with those of another, and the two try to reach an agreement' (Johnson and Johnson 2003, p. 80). Constructive controversy even relates to assigning team members with opposing views to stimulate discussion and problem solving within teams. Boyle et al. (2012) emphasise that very low levels of conflict can 'foster complacency and inactivity' and that 'complex non-routine decisions are more likely to benefit from a variety of perspectives and their critical evaluation'. Behfar et al. (2011) for instance find that task conflict is positively related to group commitment. Furthermore, they believe that self-managing teams will experience different types of conflict and that some level of conflict is inevitable, especially in autonomous teams (Behfar et al. 2011). Thus, the interrelation between shared leadership and task conflict in management consultant teams should be considered.

As can be seen in **Table 2.10**, a large amount of literature has examined the effect that conflict or minority dissent in teams has on team performance (De Dreu and West 2001; De Dreu 2002; De Dreu 2007; Schulz-Hardt et al. 2006; Tjosvold et al. 2003). Overall, diverse effects have been found. However, the potential positive effects of task conflict as well as the always negative effects of relationship and process conflict stand out.

Table 2.10: Positive and negative effects of conflict

	Task conflict	Relationship conflict	Process Conflict
Positive effects	<ul style="list-style-type: none"> - Performance increase; - Increased task understanding; - Critical evaluation of ideas; - Increased job satisfaction; - Increased task commitment; - Increased decision making quality; - Increased innovation; - Increased effectiveness (Jehn and Bendersky 2003); - More diversity; and - More innovative ideas and solutions (Badke-Schaub et al. 2010). 	-	-
Negative effects	<ul style="list-style-type: none"> - Dissatisfaction of group members; - Cause of distractions; - Decreased effectiveness; - Decreased creativity; - Decreased decision making; - Multiple points of view; and - Turns into affective conflicts (Badke-Schaub et al. 2010). 	<ul style="list-style-type: none"> - Negative effects on group decision-making; - Reduced creativity; - Reduced innovation; - Reduced satisfaction; - Reduced effectiveness (De Dreu 2008; De Dreu and Weingart 2003); - Decreased productivity; and - Low content quality (Badke-Schaub et al. 2010). 	<ul style="list-style-type: none"> - Highly personal; - Decreased productivity; and - Low content quality (Badke-Schaub et al. 2010).

According to De Dreu (2008) the positive aspects of conflicts need to be considered at different levels such as the organisational, group and individual level while the positive outcomes of conflict on one level can coexist with negative outcomes on another level (see **Table 2.11**).

Table 2.11: Positive conflict functions at different levels (adapted from De Dreu (2008, p. 7))

Level	Outcomes
Individual level	<ul style="list-style-type: none"> - Job satisfaction; - Turnover intentions; and - Well-being.
Group level	<ul style="list-style-type: none"> - Group processes; and - Group outcomes.
Organisational level	<ul style="list-style-type: none"> - Stability; - Profitability; and - Reputation.

Studies on conflict in teams have often used laboratory settings and teams of students rather than real-life management teams (e.g. Boyle et al. 2012), which is why further research is required. Research has examined task conflict in non-Western cultural context, providing more evidence that task conflict is positively related to team performance in teams that demonstrate high learning orientation, even in different cultural settings (Huang 2012). Additionally, Bradley et al. (2013) emphasise that conflict can only improve team performance under certain conditions such as openness of team members. This is in line with previous empirical research by Chen et al. (2012, p. 174) who emphasise cognition and ‘a type of motivation to process new information’ as well as ‘openness to experience’ as important factors in gaining a cooperative response or seeing the value in task conflict. This is related to the development of team innovation. As shown in **Figure 2.4**, Badke-Schaub et al. (2010) who term task conflict as ‘cognitive conflict’, distinguish between five different behaviour styles of task conflict, following the classification scheme of Thomas and Kilman (1974). This is important as task conflict can for instance be handled competitively rather than collaboratively which may have an effect on the outcome being positive or negative.

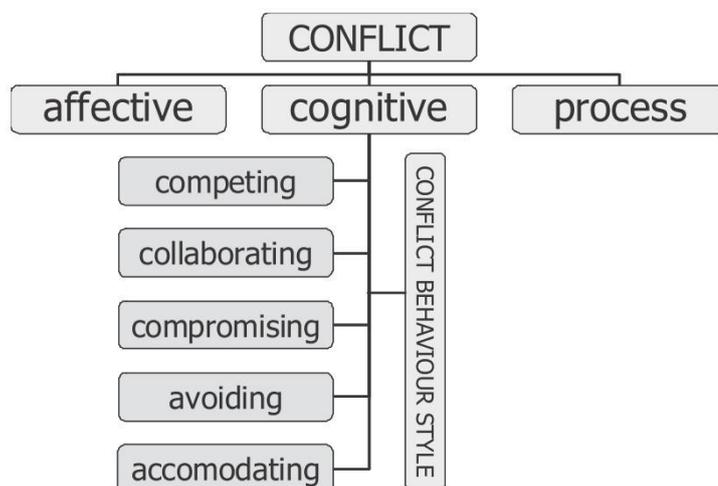


Figure 2.4: Conflict behaviour styles of cognitive conflict (Badke-Schaub et al. 2010)

In terms of examining conflicts in teams Paletz et al. (2011) use an additional differentiation by distinguishing between micro-, meso- and macro-conflicts, referring to the amount of time for which a conflict lasts. While micro-conflicts are described as ‘fleeting, minute-by-minute disagreements, meso-conflicts can take place over hours or over the course of a day and macro-conflicts are long-standing disagreements that may last over several days (Paletz et al. 2011, p. 315) (see **Figure 2.5**).

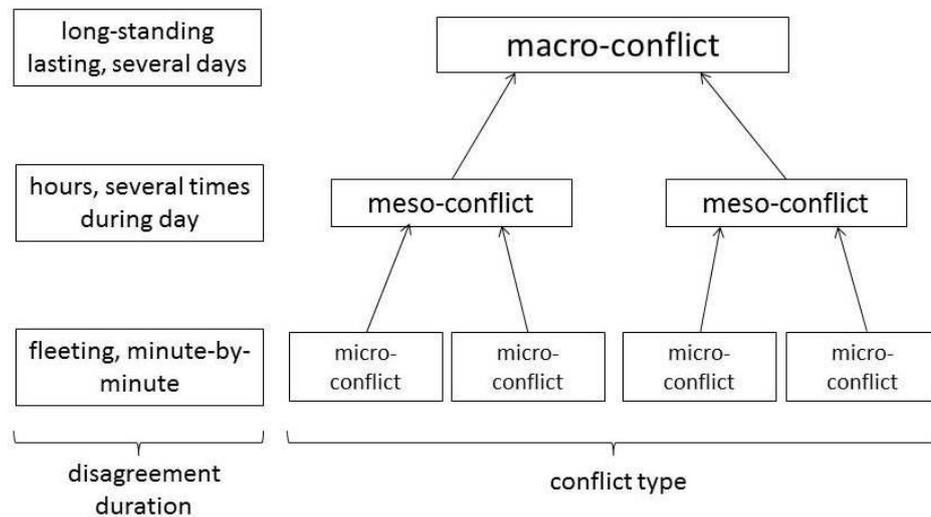


Figure 2.5: Graphical depiction of Paletz et al. (2011) conceptualisation of conflict

Notably, their overall definition of conflict refers to conflicts as ‘disagreements about specific topics during the ebb and flow of conversation’ (Paletz et al. 2011, p. 315). This definition of conflict is derived from Jehn and Bendersky (2003, p. 189) who define conflict as ‘perceived incompatibilities or discrepant views among the parties involved’. The Paletz et al. (2011) conceptualisation is useful in that it offers a conceptualisation based on time rather than aiming to break the term up into many different sub-terms. Micro-conflicts could, for instance, be brief disagreements that take place when one person makes a suggestion and another disagrees with it. According to Paletz et al. (2011, p. 318)

‘(...) micro-conflicts are behavioural and at a lower level than typically examined. They are also disagreements, which put them ostensibly into the cognition category. They are expressed via communication, as cognition is often measured via expressed communication.’

Paletz et al. (2011) criticise the focus on perceptions of conflict since important aspects of conflict are expressed in behaviour and task disagreement might not be perceived as conflict. Nevertheless, task conflict can also include emotion just as relationship conflict can entail cognition (Jehn 1997; Jehn and Bendersky 2003; Paletz et al. 2011). Furthermore, clarifying how conflict is conceptualised is essential for employing the right methods for measurement. Thus Paletz et al. (2011) emphasise that conflict can be conceptualised as

- Perceived;
- Behaviours; and
- Cognition.

2.3.3 Team Innovation

A fundamental issue for today's organisations adapting to changing environments is innovation. According to Adair (2007), all innovations are changes but not all changes are necessarily innovations. Furthermore, flexibility is the key to a truly innovative organisation as it provides individuals, teams or organisations with the capability of responding or conforming to changing or new situations. Innovation can be studied at three different levels of analysis: The individual, the group or the organisation. Nevertheless, these different levels can be integrated and are therefore not rigid. Past research has focused on the organisational and individual level of analysis, rather than the work group or management team (Anderson and King 1991). This is due to work groups playing a significant role in the innovation process within most organisations. When examining the effectiveness of the interaction of sports teams with the wider organisational structure, leadership and communication processes within these teams need to be taken into account (King and Anderson 2002).

Innovation is linked to creativity, which can be defined as the development of original ideas that are useful or influential (Paulus and Nijstad 2003). Nevertheless, due to the large number of definitions of creativity, King and Anderson (2002) distinguish between the creative person, the creative product and the creative process. They further emphasise that creativity should not merely be defined in terms of specific mental processes but also by taking a more social understanding of creativity.

It is important to distinguish between concepts of creativity and innovation as creativity only represents the first stage of innovation, which additionally includes the implementation of these newly generated ideas (Hülshager et al. 2009). Therefore, 'creativity is thinking about new things, innovation implementation is about doing new things' (West and Rickards 1999, p. 46). Paulus and Nijstad (2003) emphasise that meeting challenges in organisations increasingly requires group interaction for which teams with diverse skills and knowledge are formed. Nevertheless, they criticise that much of the research has focused on the creativity of the individual rather than also examining creativity as a group process.

Table 2.12 provides an overview of several important definitions of team innovation. According to West and Anderson (1996), the term innovation does not merely refer to technological change but also to new ideas or processes. The definition of West and Farr (1990, p. 9) of innovation as

'the intentional introduction and application within a job, work team or organization of ideas, processes, products or procedures which are new to that job, work team or organization and which are designed to benefit the job, the work team or the organization'

is the most widely used in the literature. West and Rickards (1999, p. 46) emphasise that the term innovation is generally restricted to bringing about benefits from new changes such as 'economic benefits, personal growth, increased satisfaction, improved group cohesiveness, better organizational communication, as well as productivity and economic gains'. Nevertheless, it has been criticised that this definition does not define the terms 'intentional', 'beneficial' or 'new' and does not take the scale or scope of ideas, processes, products or procedures into account (King and Anderson 2002; Nicholson 1990).

Table 2.12: Definitions of team innovation

Author	Field	Definition
Tushman and Moore (1982)	Management	New products and processes.
Van de Ven (1986)	Management	A new idea, which may be a recombination of old ideas, a scheme that challenges the present order, a formula, or a unique approach.
West and Farr (1990)	Organisational Psychology	The intentional introduction and application within a job, work team or organization of ideas, processes, products or procedures which are new to that job, work team or organization and which are designed to benefit the job, the work team or the organization.
Christensen (1997)	Management	New technologies that may be sustaining or disruptive.
West and Hirst (2003)	Organisational Psychology	The introduction of new and improved ways of doing things.
Gupta et al. (2007)	Organization studies	The production or emergence of a new idea.
Crossan and Apaydin (2010)	Management	Production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management system. It is both a process and an outcome.

Although there has been some disagreement on whether to place the focus on individuals, groups or organisations regarding the level of analysis of innovation, King and Anderson (2002, p. 100) identify the most important areas of research as being leadership, group composition, group structure, group climate and group longevity. Desivilya et al. (2010) emphasise that team-innovation is affected by a pro-social atmosphere in a team where team members discuss their views and act on the behalf of the team, whereas West (2002) argues that task characteristics, group knowledge diversity and skills, external demands and integrating group processes, principally determine the level of group innovation. Burningham and West (1995) on the other

hand find that innovative groups can be characterised as having high levels of task orientation as well as support for innovation.

2.3.4 Conflict and Innovation

Mumford and Gustafson (1988, p. 32) emphasise that divergent thinking and thus ‘an individual’s ability to generate multiple potential solutions to a problem’ is a key cognitive component in creative production, although different perspectives need to be managed. Furthermore, they propose that constructive controversy in teams, occurring in teams with mutual beneficial goals, improves the quality of decision making and with it team innovation. De Dreu and West (2001, p. 1192) find that divergent thought and creativity are required for team innovation and that minority dissent in teams prevents ‘premature movement to consensus, promotes cognitive complexity, and prevents defective group decision making’. They take this further by arguing that negative minority dissent is also important for teams as it enables them to see problems from more perspectives in order to find more and adequate solutions. Although their findings show that minority dissent leads to innovation, this is only the case when there is high participation in decision making by team members.

Recent research has emphasised that researching moderators of team conflict is important for team conflict research as there have been diverging views on whether conflict relates positively to team performance (Bradley et al. 2012; De Dreu and Weingart 2003) (see **Table 2.13**).

Table 2.13: Moderators of team conflict

Author	Moderators	Outcome
Bradley et al. (2012)	- Psychological safety	Psychological safety allows task conflict to improve team performance.
Hon and Chan (2013)	- Challenge-related stress	Task conflict positively associated with challenge related stress, which is positively related to job performance and satisfaction.
Jiang et al. (2013)	- Emotion regulation	Team members who are able to regulate their emotions are more likely to manage task conflict to improve performance.
Chen et al. (2012)	- Knowledge integration; - Need for cognition; and - Resource interdependence.	Knowledge integration mediates positive effect of cooperative response to task conflict.

Bradley et al. (2012, p. 152) for instance find that psychological safety and thus ‘a shared belief held by team members that the team is safe for interpersonal risk taking’ plays a moderating role as team members working in such an environment tend not to take task disagreements personally. Rather than discouraging disagreements amongst team members as done through team cohesion, psychological safety facilitates constructive disagreements within teams and

should therefore be supported (Bradley et al. 2012). Furthermore, Jiang et al. (2013) propose that individuals skilled in regulating their emotions are more likely to benefit from the positive effects which task conflict can have on performance. They emphasise that the way in which conflicts are managed by team members determines whether they will be beneficial to the team.

Although team conflict is a universal phenomenon, it is important to emphasise how the concept of conflict can have significant cross-cultural differences as defined by Hofstede (1984). Although most studies on the benefits of conflict have been conducted in a Western setting, an increasing amount has been conducted in collectivistic and group-oriented cultures such as China (e.g. Chen et al. 2012; Huang 2012; Jiang et al. 2013).

As can be seen in the list of relevant studies in **Table 2.14**, Amason (1996) distinguishes between functional and dysfunctional conflict in the examination of how top management teams can use conflict to enhance the quality of their decisions. He uses the term cognitive conflict to describe functional, task oriented conflict which focuses 'on judgemental differences about how best to achieve common objectives' (Amason 1996, p.127). Affective conflict on the other hand refers to dysfunctional forms of conflict which tend to be more personal (Amason 1996). Troyer and Youngreen (2009) find that what they term negative evaluations, leads to greater team innovativeness when the focus lies on the idea which is generated, rather than the individual who generates it. For instance, the more personal statement 'your idea is not good' has a significantly more negative effect than 'the idea is not good' (Troyer and Youngreen 2009, p. 422). This effect is particularly visible in problem-solving groups that rely on creativity in order to generate beneficial outcomes.

When considering the effectiveness of conflicts in teams, apart from distinguishing between types of conflict it is important to differ between what Schulz-Hardt et al. (2002) describe as genuine or contrived dissent. Their employment of the so-called devil's advocacy procedure uses an approach of assigning to a group member the role of the devil's advocate whose task it is to criticise proposals made by other members of the group. The Schulz-Hardt et al. (2002) results demonstrate that genuine dissent was more effective regarding information seeking than contrived dissent. Their strategies for facilitating genuine dissent lie in trying to achieve demographic group diversity as well as ensuring that group members express heterogeneous preferences during discussions (Schulz-Hardt et al. 2002).

Table 2.14: Studies focusing on the effects of conflict on team performance and innovation

Author	Topic	Conflict type	Data collection	Analysis	Results
Huang (2012)	How team conflict, as TC & RC relates to team performance in a Chinese cultural context.	- Task conflict; - Relationship conflict	Self-administered survey (110 work teams, 472 employees)	Descriptive statistics, regression analysis	Team goal orientation moderates conflict and team performance relationship. High learning orientation = task conflict positive; High performance orientation, TC negative.
Boyle et al. (2012)	Whether conflict contributes to a reduction in information bias in groups (information distortion ID).	- General conflict	Provide conflict solving tasks to individuals. (244 students, 35 groups)	Descriptive statistics, observed information distortion.	TC valuable to group decision making. Conflict rarely desired and avoided. Information distortion could be reduced by encouraging the development and maintenance of conflicting positions.
Bradley et al. (2012)	Circumstances under which task conflict associates positively with team performance.	- Task conflict	Online survey, Exam (control) 117 teams (561 students)	Descriptive statistics, hierarchical regression	Psychological safety allows TC to improve team performance
Amason (1996)	How top management teams can use conflict to enhance the quality of their decisions	- General conflict	- Measuring TC & RC - Mail survey, 48 top management teams (94 CEOs) Likert 5&4	Factor analysis, ANOVA, Correlation, Descriptive Statistics	Conflict can improve decision quality The cognitive dimension of conflict accounts for the improvement. Decision quality improves as divergent opinions are sought and considered.
Schulz-Hardt et al. (2002)	To compare the effectiveness of genuine and contrived dissent "Devil's advocacy" procedure.	- Genuine dissent; - Contrived dissent	Questionnaire 201 decision makers (3-person groups) Likert 1-10	Descriptive statistics	Genuine dissent more effective in keeping group information seeking balanced than contrived dissent.
Breugst et al. (2012)	To demonstrate the applicability of multilevel design to team performance research focusing on RC.	- Relationship conflict	- Team decision making task - 156 business students (52 teams) - Using Jehn 1997; 1995 scale	Ordinary least squares (OLS) regression	Relationship conflict improves team performance when the task consists of assessing team performance.

Hon and Chan (2013)	To investigate the negative effects of group conflict and work stress.	- Task conflict - Relationship conflict	- 50 Chinese hotel work teams - 265 team members 7-point scale	Hierarchical linear modelling (HLM) Descriptive statistics	TC and the resulting stress may improve employees' sense of accomplishment when the task is complete.
Jiang et al. (2013)	To identify a possible reason for the inconsistency between the theory of TC&RC	- Task conflict; - Relationship conflict	40 Chinese business bank teams (4-13 members) - 6-point Likert-type scale	- Hierarchical linear modelling	Emotion regulation can enhance the positive impact of TC and reduce the negative impact of RC on individual performance.
Troyer and Younggreen (2009)	To analyse the role that conflict may play in generating solutions to ill-structured problems.	- Counter-product. dissent - Performance enhance. dissent	- 60 undergraduates, - simulated, virtual study	- t-test, F-test	- Creativity is higher in the conditions involving idea-targeted negative evaluations than source-targeted or no negative evaluations
Chen et al. (2012)	How and when cooperative response to TC increases team performance.	- Task conflict	- 71 Chinese work teams (315 team members) - Team size 3-6 - 5, 7-point Likert-type scale	- Descriptive statistics - Regression	Teams need for cognition regulated the cooperative response - knowledge integration linkage and that resource interdependence regulated the knowledge integration-team performance linkage.

The negative effect of relationship conflict on team performance has been widely acknowledged in the literature. Nevertheless, as an exception, Breugst et al. (2012) find that this does not apply to team tasks that consist of assessing team performance. According to their results, in this case, relationship conflict improves a team member's ability to accurately assess their team's performance. Nevertheless, their measurement of relationship conflict includes only the individual and not the team level and the study was conducted in a laboratory rather than in a real-life setting. Troyer and Younggreen (2009) emphasise that team members' sense of being evaluated creates competition in a team leading to team members focusing on ideas for which they are more likely to receive positive feedback and being more negative in the evaluation of their fellow team members.

2.3.5 Conflict and Creativity Stages

One of the main issues that researchers have faced regarding the presence of task conflict in teams has been the question at what stage of a project task conflict is useful. Although, as discussed, task conflict has been shown to lead to an increase in team creativity and team

innovation, too much conflict may be detrimental to finding solutions within teams, as at some point the team should agree on how the task will be undergone. Past research has shown that depending on the stage the team is passing through, the effects of task conflict can vary (Tekleab et al. 2009; Farh et al. 2010). The widely cited four-stage model of Tuckman (1965, p. 396) differs between the (1) forming, (2) storming, (3) norming and (4) performing stages. In relation to the task at hand these activity stages were also labelled (1) orientation to task, (2) emotional response to task, (3) open exchange of relevant interpretations, and (4) emergence of solutions (Tuckman and Jensen 1977, p. 43). Regarding stage two which is also referred to as 'intragroup conflict', Tuckman (1965, p. 396) emphasises the importance of 'interpersonal issues' and conflicts 'in the task sphere' which 'serve as resistance to group influence and task requirements'. The model of conflict places its emphasis on task conflict being mainly present and mainly beneficial during the 'storming' stage as coalitions are formed. The failure of resolving task conflict at some point of a project could therefore let once positive task conflict transform into negative relationship conflict.

Farh et al. (2010) find that levels of task conflict that are too high are detrimental for team creativity. Furthermore, their results show that task conflict needs not only to be moderate but should also occur at the early stages of a project to deliver high levels of team creativity. Regarding the length of a project they divide the project life cycle into the phases 'project initiation', 'early phase' and 'later phase'. The early phase of a project in which team members are motivated to engage in task conflict for idea generation is defined by Farh et al. (2010, p. 1174) as the 'period of time between the midpoint and project deadline'. They illustrate this as being between 11 - 58% of project completion.

Figure 2.6 graphically depicts the results of the Farh et al. (2010) study and demonstrates that during an early phase of a project, when task conflict is still moderate (2.5), team creativity peaks. High rather than moderate levels of task conflict do not lead to equally high creativity and higher levels of creative outputs are not generated during later phases of the project. Although Farh et al. (2010) do not offer an explanation, this may be the case as a result of too many disagreements about the task resulting in relationship conflict, which will affect the team negatively. Similarly, Jehn and Mannix (2001) show that moderate levels of task conflict at the midpoint of a project permit groups to adopt new perspectives. The group will perform well if there is a decrease in task conflict after the project midpoint.

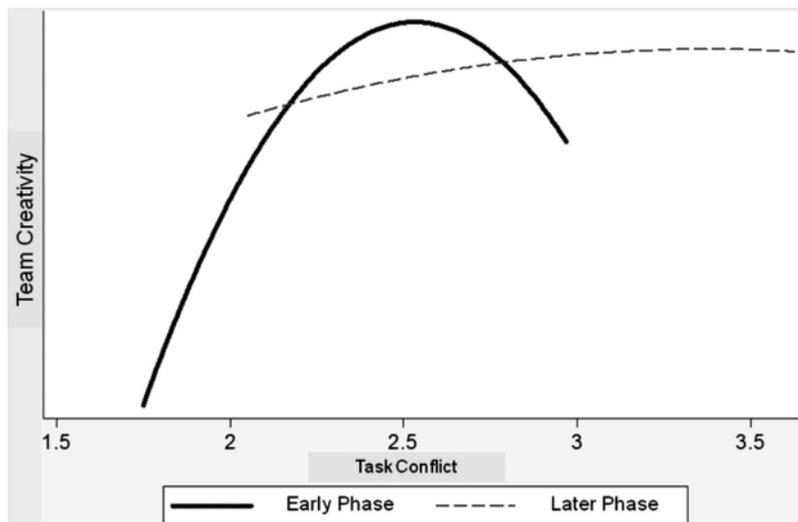


Figure 2.6: Relationship between task conflict and team creativity by phase of project (Farh et al. 2010, p. 1179)

Some research has found that early task conflict does not lead to cohesion later in the team's life, which could be linked to the possibility of task conflict resulting in relationship conflict (Tekleab et al. 2009). However, this does not necessarily concern team creativity and team innovativeness. De Dreu (2006) reconfirm the curvilinear, inverted U-shaped relationship of task conflict, in this case related specifically to innovation, and show that work teams are less innovative at low and high levels of task conflict than at moderate levels. Their results demonstrate that the relationship between task conflict and team innovation is mediated by collaborative problem solving. This is in line with Parayitam and Dooley (2011) who find teams to be more productive at moderate rather than high levels of task conflict.

De Dreu (2006) further argues that information exchange and collaborative problem solving are required levels at moderate levels of task conflict to facilitate innovation. Nevertheless, De Dreu (2006) does not refute former research showing a negative relationship between task conflict and overall team effectiveness (De Dreu and Weingart 2003). Although some components such as innovation may benefit from moderate levels of task conflict, the overall effects on the team would be dependent on the importance of innovation for the team. Relationship conflict on the other hand has a consistent negative relationship with innovation. A more recent meta-analysis of O'Neill et al. (2013) does find a positive relationship between task conflict and team performance in decision making teams refuting the De Dreu and Weingart (2003) results.

2.4 Shared Leadership and Conflict in Teams

While many studies on shared leadership have focused on how sharing leadership within teams can result in an increase in team performance (e.g. Avolio et al. 2009; Carson et al. 2007; Pearce 2004; Solansky 2008), there has been significantly less research on the role of conflict throughout the shared leadership process. Much of the literature on shared leadership agrees on the importance of resolving conflicts within teams to increase positive team outcomes such as order and economic prosperity (Bergman et al. 2012; Greer and van Kleef 2010; Gupta et al. 2010; Solansky 2008). Conflicts within shared leadership teams have partially been described as 'power struggles' (Greer and van Kleef 2010), 'interpersonal disharmony reflected in tension, animosity, and annoyance among group members' (Gupta et al. 2010, p. 338) and 'tension generated by emotional and interpersonal struggles' (Solansky 2008, p. 334). Past studies have shown that shared leadership in teams leads to more cohesion and that such teams display less conflict than those employing a single leader (Ensley et al. 2003; O'Toole et al. 2002; Solansky 2008). However, **Table 2.15** shows that over the past years the role of conflict has gained increased attention regarding the study of leadership in teams.

The Acar (2010) study on emotional conflict examines the interplay between group diversity and emotional conflict and the moderating influence of shared leadership. Survey questions included issues such as relationship tension, anger, emotional conflict, stereotyping, prejudice, personal attacks and insults. The results demonstrate that surface-level differences such as gender and diversity were more likely to trigger emotional conflict when relationship-oriented shared leadership was exhibited in the team than when shared leadership was not present. However, although the study uses a longitudinal approach, causal relations are not established. Conflict was measured through self-administered questionnaires and was thus reliant on respondents' perceptions of conflict, prone to bias. Examining more closely what triggered the respective conflicts would provide insight into the processes of conflict within teams demonstrating shared leadership.

The relevance of the Acar (2010) study in the context of shared leadership and conflict is that its results indicate that shared leadership may backfire and lead to undesired consequences, in this case increased emotional conflict. However, other research examining the mediating role of shared leadership on conflict finds that conflict scores are lower on average for teams displaying shared leadership (Bergman et al. 2012; Greer and van Kleef 2010; Solansky 2008). Bergman et al. (2012), for instance, find that shared leadership teams experience significantly less socio-emotional and task conflict and greater consensus than teams not displaying levels of shared

leadership. However, they only establish that a negative relationship between conflict and shared leadership exists. The underlying processes causing conflict are not examined. Furthermore, the broad questions asking participants to rate conflict within their teams do not account for the different types of conflict experienced in a team. A general negative relationship between team performance and conflict is assumed. Past research on conflict, however, has shown that this is not necessarily the case (De Dreu 2006; Jehn 1995; Tekleab et al. 2009).

Table 2.15: The role of conflict in the shared leadership literature

Author	Description	Research methods	Results	Type of conflict	Conflict measurement
Acar (2010)	Interplay between diversity and emotional conflict over time.	- Surveys; - Longitudinal data - Exploratory factor analysis	SL moderates relationship between diversity and emotional conflict.	- Relationship tension; - Anger; - Prejudice; - Personal attacks; - Insults	- Self-administered questionnaires; - Five-point Likert scale (1 = strongly disagree, 5 = strongly agree)
Bergman et al. (2012)	Process of SL in decision-making teams.	- Video observation; - Behavioural coding; - Cluster analysis	SL teams experience less conflict, greater consensus, higher trust & cohesion.	- Friction (socio-emotional conflict); - Disagreement (task conflict)	- Self-administered questionnaires; - Five-point Likert scale (1= none, 5= a great deal)
Greer and van Kleef (2010)	Role of power and power dispersion for conflict resolution in work groups.	- Video observation; - Survey; - Hierarchical linear regression	Power equality is better for conflict resolution.	- Domination; - Hierarchical order; - Competition for control; - Task disagreements	- Power struggles measured by video coder ratings (1-7); - Conflict resolution measured with self-report 7-point Likert scale ratings
Gupta et al. (2010)	Mediating role of cohesion and conflict in relationship between team leadership and performance.	- Surveys; - Longitudinal data; - Partial least squares	Conflict mediates the impact of team leadership on performance	- Tension; - Animosity; - Annoyance	- Questionnaires; - Scales for task conflict (three items, $\alpha=0.7$); - Relationship conflict (five items, $\alpha=.67$)
Kotlyar et al. (2011)	How leader behaviours influence member commitment decisions via conflict.	- Surveys; - Regression analysis/ - hierarchical regression analysis	Pragmatic leader behaviours are better at restraining conflict.	- Task conflict; - Relationship conflict	- Task conflict: four-item scale (1=none; 7=a great deal), relationship conflict: three-item scale
Solansky (2008)	Influence of leadership on motivation, cognitive and social processes.	- Surveys; - Descriptive and correlation information	Conflict scores for teams with SL on average lower.	- Relationship conflict	- Self-administered questionnaires (7-point and 3-point Likert)

Greer and van Kleef (2010) look at the effects of power dispersion on group outcomes, specifically focusing on conflict resolution as a group outcome. Their definition of conflict resolution as 'the degree to which perceived incompatibilities in a group are effectively resolved' assumes that resolving conflicts within groups is critical, creating positive outcomes such as order and stability (Greer and van Kleef 2010, p. 1033). They propose that in groups with power dispersion and thus groups that share leadership, group members' goals, desires, and actions are prioritised, reducing power struggles and improving conflict resolution. In contrast to using self-reported measures, the study measures members' behaviours through observational coding. It is found that management teams, and thus high-power groups, benefit from shared leadership, whereas teams with low power such as factory line teams benefit from hierarchies. Furthermore, team members solve their conflicts better when they have equal levels of power since power struggles can interfere with conflict resolution.

Gupta et al. (2010, p. 338) provide evidence that conflict in teams with 'non-hierarchical' models of leadership mediates the impact of team leadership on performance. They find that conflict between team members may negatively influence team leadership and performance. However, they acknowledge that previous research has found 'some level of task-related conflict as beneficial for teams'. They emphasise that 'no one really likes to be criticised or contradicted' and that idea disputation leads to feelings of disrespect and anger. Similar to other research (Jehn 1995; Paletz et al. 2011; Tekleab et al. 2009), Gupta et al. (2010) distinguish between task and relationship conflict. Task conflict has been found to positively affect group performance and, thus, outcomes such as innovation, productivity and effectiveness (De Wit et al. 2012). However, Gupta et al. (2010) only consider negative effects on team performance, limiting the inferences that can be drawn from their study. Furthermore, their data was collected through self-response surveys. Thus they call for more objective methods for leadership and interpersonal processes to be developed (Gupta et al. 2010).

Kotlyar et al. (2011) emphasise the negative effects of relationship conflicts on groups. Nevertheless, they acknowledge that task conflict, when managed properly, can be productive in finding different solutions. However, they assume that teams with shared leadership contain more negative conflict than teams with pragmatic leadership. Apart from the study of Kotlyar et al. (2011), a majority of research on conflict and shared leadership literature finds lower conflict scores for teams employing a shared leadership approach (Acar 2010; Bergman et al. 2012; Greer and van Kleef 2010). Assuming that conflict leads to negative outcomes in teams, shared leadership can thus be seen as being beneficial for teams.

2.5 Additional Research Techniques

Having discussed the concepts of shared leadership, conflict and innovation, it is important to examine past research methods, as an important objective of this study is the inclusion of additional research techniques. As demonstrated in the bibliometric analysis and depicted in previous tables, a majority of the empirical studies on shared leadership as well as much of the research on conflict employ quantitative techniques. Research on shared leadership often relies on self-ratings of team members to assess to what extent leadership had been shared in teams (Avolio et al. 1996; Ensley et al. 2006; Pearce and Sims 2002; Pearce et al. 2003; Sivasubramaniam et al. 2002).

However, according to Jackson and Parry (2011, p. 106) these studies may be insufficient in achieving an adequate level of insight and depth of understanding. There has been much less qualitative research on shared leadership. Calls for such approaches place an emphasis on including more depth, richness and understanding to the study of shared leadership (Antonakis et al. 2004; Denis et al. 2012; Shuffler et al. 2012). For instance, Vandewaerde et al. (2011, p. 417) emphasise the importance of including qualitative methods as they allow for studying 'leadership processes as they unfold in real time'. Similarly, Shuffler et al. (2012, p. 440) find that qualitative data and case studies can assist in building 'more grounded approaches whereby the phenomenon drives theory development'. Denis et al. (2012) go further in promoting qualitative methodologies through which interactions and relational dynamics can be observed as they are happening 'in situ'. Including qualitative research methods in the study of shared leadership can complement or better interpret numerical data (Parry et al. 2013), and is illustrated through the discussion of relating literature.

2.5.1 Multiple Methods

Many of the previous studies of shared leadership that employ both qualitative and quantitative measures follow a case-study approach (Rowland and Parry 2009; Steinheider and Wuestewald 2008; Taylor et al. 2011). **Table 2.16** provides an overview of the studies using mixed or multiple methods in the fields of shared leadership, leadership and conflict. Most studies starting with a quantitative approach followed up by a qualitative element, use a more dominant quantitative approach. Regarding study design, Steinheider and Wuestewald (2008), for instance, employ triangulation to research whether shared leadership can improve employee attitudes about working conditions and enhance commitment. The use of quantitative survey and qualitative interview data adds robustness to their findings, by assessing employees' perceptions of the situation as well as changes in emotions and behaviours (Steinheider and Wuestewald 2008).

Table 2.16: Mixed method studies in shared leadership research, sequential approaches in leadership research and positive conflict research utilising mixed methods

Author	Quantitative data	Qualitative data	Design type	Dominance	Integration
Shared leadership studies employing mixed methods					
Steinheider and Wuestewald (2008)	- Survey	Interviews	- Embedded (triangulation)	- Qualitative (QUAN → qual)	- At data interpretation stage
Taylor et al. (2011)	- Survey	- Individual interviews; - Group interviews; - Documents	- Concurrent parallel	- Qualitative (QUAL → quan)	- At data interpretation stage
Leadership studies employing sequential mixed methods					
Anderson et al. (2008)	- Survey	- Interviews	- Exploratory sequential 1. developing a set of leadership attributes 2. Testing leadership attribute survey	- Equal (QUAL → QUAN)	- At data collection stage
Currie et al. (2009)	- Survey	- Interviews	- Explanatory sequential	- Quantitative (QUAN → qual)	- At data analysis stage
Rowland and Parry (2009)	- Survey	- Interviews; - Observations	- Embedded (triangulation)	- Qualitative (QUAL → quan)	- At data interpretation stage
Positive conflict research employing mixed methods					
Jehn (1995)	- Survey	- Interviews; - Observations	- Explanatory sequential	- Quantitative (QUAN → qual)	- At data collection stage
Amason (1996)	- Survey	- Interviews	- Embedded sequential	- Quantitative (QUAN + qual)	- At data analysis stage
Behfar et al. (2008)	- Survey	- Open-ended questions	- Embedded sequential	- Quantitative (QUAN + qual)	- At level of design

Taylor et al. (2011) on the other hand, employ a multiple case study approach to assess how models, such as distributed leadership, influence champion-driven leadership and, thus, emergent leaders. Their main rationale for employing such an approach is, firstly, that leadership is a phenomenon strongly affected by contextual factors, for which a multiple case study is ideally suited. Secondly, it is useful when seeking to understand why phenomena occur, particularly when behavioural events cannot be controlled. Thirdly, they emphasise the possibility of employing both quantitative and qualitative data collection methods in case study research. The Taylor et al. (2011) research entails both the gathering of qualitative individual and group interview data and quantitative questionnaire data from agencies acting as cases.

However, due to the small amount of survey data gathered from the participants in each case, the quantitative data should be seen as quite limited. Therefore, a dominant qualitative approach was employed. The data were first analysed by looking for common themes emerging from the data. Following this, using cross-case analysis, common themes supported by multiple sources, methods and cases were identified.

To examine relationships between variables further, more detailed exploration can be conducted in particular through interviews and observations, as similarly employed by Jehn (1995) and Rowland and Parry (2009) (see **Table 2.16**). Calls for qualitative approaches can also be found in creativity and innovation research, in particular as regards teams' idea generation and idea implementation stages (Kaplan et al. 2009). **Table 2.17** displays studies in the fields of shared leadership as well as conflict and innovation that include both interviews and observations. An ethnographic approach or case study design was mostly employed. Furthermore, the table shows that most studies either gave preference to observations or gave both interviews and observations equal weight in their study.

Table 2.17: Studies employing observations/ interviews as part of a case study or ethnographic design

Author	Purpose	Research design	Data	Dominance	Data analysis
Benson and Blackman (2011)	The advantageous impact of distributed leadership on tourism firms.	Case study	- Participant observation; - Interviews documents	Equal	Thematic analysis
Kramer (2006)	How does communication function in a shared leadership structure to create a theatre production?	Ethnography	- Participant observation; - Interviews	Observation (+interviews)	- Ethnography; - Themes, explored in interviews and additional observations
Kramer and Crespy (2011)	The communication behaviours that create a collaborative group culture.	Ethnography	- Observation - Interviews	Observation (+interviews)	- Ethnography; - Sensemaking; - Data reduction, themes
Manz et al. (2011)	The role of shared leadership in fostering sustainable performance in an organisation.	Case study	- Video observation; - Interviews	Equal	- Interpret. and descriptions of findings ('qual. analysis')
Conflict and innovation					
Ayoko et al. (2002)	Impact of communicative behaviours and strategies in culturally heterogeneous teams.	Case study	- Participant/non-participant observation; - Interviews	Observation (+interviews)	- Content coding/ Analysis; - Linguistic text analysis

2.5.2 Team Observations

Although observation of team meetings to capture shared leadership in teams has been used significantly less than survey techniques, it has attracted increasing interest in research on shared leadership (Crevani et al. 2010; Bergman et al. 2012; Gordon 2002; Greer and van Kleef 2010; Manz et al. 2011). Indeed, studies simply employing positivist methods cannot capture the underlying processes occurring in teams but rather focus on examining the relationship between variables and therefore do not allow a rich enough picture to be constructed (Ladkin 2010). Bergman et al. (2012, p. 19) emphasise that the use of observational techniques allowed them to observe actual leadership behaviour in teams by directly examining 'the content and distribution of leadership behaviours that define shared leadership'. In their study they employ video observation to assess each team member's actual leadership behaviour, adding to the validity of their findings. Bergman et al. (2012) do not dispute the usefulness of team member ratings in field studies. However, they emphasise that this technique does not clearly demonstrate that several team members are engaging in team leadership. Furthermore, Klenke (2008) points out that image-based leadership research can assist in examining contextual factors at which expressions in the context of lived situations are considered.

According to Paletz et al. (2011) conflicts can be brief and immediate, which is why they describe them as best measured via observation and not adequately measured by self-reported questionnaires. Micro-conflicts, which are described as fleeting, minute-by-minute disagreements, are likely to be less emotionally intense, and to be simple disagreements, often not likely to be recalled by those engaged in them. Furthermore, micro-conflict measurements can uncover immediate antecedents and consequences of small disagreements and specific micro-conflicts can be examined as to whether they spur events such as creativity and innovation.

Table 2.18 displays a number of studies in similar fields, where observational techniques were employed as part of the research design. Studies that used coding systems to assess shared leadership through the video observation of teams (e.g. Bergman et al. 2012; Greer and van Kleef 2010; Künzle et al. 2010) did not report problems regarding participants' reactions to the observations. Nevertheless, Meyers et al. (2001), who use observational techniques, discuss their potential for producing biased information and emphasise the importance of 'prolonged engagement' and 'persistent observation' to minimise any bias created during such observations.

Table 2.18: Shared leadership, conflict and innovation studies employing team observation

Author	Purpose	Team type	Observation type	Data analysis
Bergman et al. (2012)	To examine the process of SL in decision-making teams.	Decision-making teams	Participant observation, video observation	- Coding (behaviourally anchored rating)
Crevani et al. (2010)	How leadership is shared in practice.	Organisational teams	Observation of formal and informal meetings	- Ethnography
Gordon (2002)	How the relationship between deep structure and power affects dispersed leadership.	Organisational teams	Observation of team meetings' proceedings	- Grounded theory, discourse analysis; - Ethnography
Greer and van Kleef (2010)	The interactive effects of power level and power dispersion in teams.	Organisational work teams	Video observation	- Video coder ratings
Künzle et al. (2010)	How SL patterns during anaesthesia induction are linked to team performance.	Anaesthesia teams	Video observation	- Coding units (behavioural)
Kramer (2006)	How communication functions in a shared leadership structure to create a theatre production.	Community theatre groups	Observation	- Ethnography
Kramer and Crespy (2011)	The communication behaviours that create a collaborative group culture.	Group rehearsal teams	Participant observation	- Ethnography
Manz et al. (2011)	The role of SL in fostering sustainable performance in an organisation.	Org. and within-org. teams	Video observation	- Description of findings
Meyers et al. (2001)	To examine the similarities and differences in patterns of leadership and their effects on shared decision-making teams.	School teams	Participant observation of teams (3 teams, 9-13 meetings)	- Three coding systems; - comp. case study
Weibler and Rohn-Endres (2010)	How and under what conditions network relationships are developed in SL processes.	Organisational work groups	Participant observation	- Grounded theory (coding)
Xiao et al. (2004)	Leadership of extreme action teams.	Medical teams	Observation	- Grounded theory
Conflict and innovation				
Ayoko et al. (2002)	Impact of communicative behaviours and strategies in culturally heterog. teams.	Organisational teams	Observation (+interviews)	- Content coding/analysis; - text analysis
Badke-Schaub et al. (2010)	To examine if TC is a precondition to developing innovative ideas.	Organisational teams (design)	Video observation	- Coding (categorisation)
Falk (1982)	To discover whether majority rules or unanimous decision rules facilitates TC.	Business student teams	Observation	- Valence coding system (quantitative)
Kuhn and Poole (2000)	To determine the impact of conflict management style on decision effectiveness.	Organisational teams (government)	Video observation	- Coding, (quantitative)
Wood et al. (2011)	To examine the concepts of team approach and ideas-task complexity in the context of positive TC.	Student teams	Observation	- Coding (Jehn trichotomy of conflict)

The table shows an increase of observational studies in shared leadership studies over the past years. A differentiation is made between studies that use participant observation, non-participant observation, both participant and non-participant observation as well as video observation. It is important to distinguish between regular observation and video observation since differences in observer bias may exist. Using video observation, the researcher can revisit the data multiple times, looking for nuances within the data. Other types of field observation on the other hand can be useful in capturing an individual's perceptions or behaviours unobtrusively, but important details may be missed.

Greer and van Kleef (2010) emphasise the usefulness of having measures of actual team member behaviours based on observational coding. In particular, in relation to their examination of power dispersion and intragroup power struggles in shared leadership teams, they find that conflict and conflict resolution are defined in terms of behaviours. Furthermore, as regards the disagreements or micro-conflicts which are to be measured in this study, as discussed, these can be very brief and immediate (Paletz et al. 2011). In order to measure possible small disagreements in teams that may influence team outcomes, observations are required.

Most authors use observations in combination with other sources of data, such as interviews and surveys, thus providing triangulation and reducing potential bias (e.g., Bergman et al. 2012; Gordon 2002; Meyers et al. 2001; Weibler and Rohn-Endres 2010). Fitzgerald et al. (2013) for instance research distributed leadership patterns in health care teams using a multiple-case study design employing interviews, meeting observations and document analysis. The data are analysed through grounded theory and combined through triangulation. However, their observations differ from those of Bergman et al. (2012) in that they focus on perceptions of people in meetings rather than actual behaviours. Indeed, multiple studies in leadership research have employed different qualitative methods to combine observations of team meetings with interviews (e.g., Beyer and Browning 1999; Fineman 1996; Pescosolido 2002).

2.6 Research Gaps

Table 2.19 provides a summary of studies closely related to this current research, including their key findings and gaps. Furthermore, the contribution column displays the areas to which this current research will contribute to. Importantly, the table demonstrates that there is a paucity of research that examines the positive role of task conflict in relation to shared leadership. Furthermore, it is established that shared leadership has been studied in relation to conflict and conflict has been studied in relation to innovation, demonstrating a gap in previous literature.

Therefore, this current research contributes towards bridging the gap between shared leadership, conflict and innovation. The nature of this relationship is examined in detail throughout the study, uncovering sub-processes regarding the three concepts and their interrelationships. As discussed, the underlying processes of shared leadership, conflict and innovation require investigation through the inclusion of additional, qualitative research techniques, such as more detailed team observations. This will allow for uncovering real-life subtleties and fleeting, minute-by-minute disagreements and provide an essential contribution toward researching the three concepts.

Table 2.19: Summary of similar studies and proposed contribution of this current research

Topic	Focus	Key findings	Gaps	Contribution
Shared leadership and conflict	Shared leadership in decision-making teams (Bergman et al. 2012)	Shared leadership teams experience less conflict, greater consensus, higher trust and cohesion.	- General assumption of negative effects of conflict; - Conflict processes not examined; - Solely quantitative techniques.	- Examination of positive aspects of conflict; - Consideration of conflict processes; - Inclusion of qualitative techniques to uncover underlying processes.
	Shared leadership and conflict (Paulson et al. 2009)	Participation and skills of team members are essential regarding constructive use of conflict in SL teams.	- Case study data analysis technique unclear; - Lack of evidence regarding collaboration and creativity.	- Additional evidence required regarding the development of creativity and innovation; - Inclusion of quantifiable evidence.
Shared leadership and creativity/ innovation	Shared leadership and creativity in organisational teams (Gu et al. 2016)	Shared leadership is positively related to team and individual creativity.	- Creativity solely self-reported; - Cross-sectional study, no examination of processes.	- Observation of creativity episodes and leadership processes; - Inclusion of qualitative methods to research processes.
	Shared leadership in fostering sustainable performance (Manz et al. 2011)	SL and sustainable performance are moderated by an ongoing creative process and recognition of organisational members as valuable resources.	- Inclusion of observation in action (interviews included); - Reliance on qualitative data.	- Inclusion of quantitative survey data; - Observation of team in action; - Inclusion of conflict regarding team performance (creativity/ innovation).
Conflict and creativity/ innovation	Task conflict in developing creativity (Badke-Schaub et al. 2010)	Teams with high innovative output collaborate less than those with low innovative output. Creativity requires cognitive confrontation.	- Conflicting results compared to previous research regarding collaborative conflict behaviour; - Laboratory research (observation), short teamwork.	- Assessment of task conflict in real-life team in action; - Qualitative and quantitative methods to strengthen results; - Focus on shared leadership teams.
	Performance enhancement through idea generation in task conflict (Wood et al. 2011)	Team approach shapes conflict. Ideas emerge both in and outside of conflict in teams.	- Only audio observation (conflicts harder to identify) - Only observation (quantitative coding)	- Video observation and additional research techniques; - Focus on/ inclusion of shared leadership teams and processes.

2.7 Conclusions

This chapter provided a review of the literature on shared leadership as well as conflict and innovation. Starting with a systematic literature review on the shared leadership literature, the background to the literature on shared leadership was discussed. Shared leadership was found to have mainly been discussed in three different fields, of which the team based literature is most relevant for this study. Furthermore, shared leadership can be seen as having developed through follower-centred approaches to leadership, although the distinction between leaders and followers can be seen as almost having been eliminated. The relevance of self-leadership and self-managed teams in the light of shared leadership was discussed and different definitions of shared leadership were outlined. The section on conflict and innovation conducted a systematic literature review on the positive outcomes of conflict in teams. The literature mainly distinguishes between task and relationship conflict, with the former having potential positive and the latter negative effects regarding team outcomes. As discussed, some studies have found a potential link between task conflict and innovation, however, results have been mixed. Furthermore, prior studies have mainly focused on hierarchical forms of leadership and the negative effects of conflict in the context of researching leadership and conflict. Therefore, there is a case for determining the positive effects of both shared leadership and conflict on team innovation. Due to the limitations of previous studies regarding the observation of real-life management consultant team interactions, the use of both quantitative and qualitative research methods is proposed. The next chapter will discuss the relationships among the concepts of shared leadership, conflict and innovation and the development of a conceptual framework.

Chapter 3 - Conceptual Framework

3.1 Introduction

The previous chapter involved an examination of relevant literature in the fields of shared leadership, conflict and innovation and identified a gap related to the examination of the relationships among these concepts. This chapter discusses the development of a conceptual framework for this study. The conceptual framework focuses on the relationship between the three main concepts of shared leadership, conflict and innovation. The general focus of examining these concepts lies on management consultants working in teams. These management consultant teams often tend to be self-managed and highly empowered, with little formal hierarchy and, as discussed in the previous chapter, entail high levels of interdependence. This is reflected in the wording of the hypotheses.

Starting with a discussion of the relationship between conflict and shared leadership, in section 3.2 both relationship conflict and task conflict are discussed in detail. This is followed by a section on shared leadership and innovation in section 3.3 and section 3.4 which explains the relationship between shared leadership, task conflict and innovation as well as shared leadership, relationship conflict and innovation, respectively. Sections 3.6 to 3.8 discuss further variables influencing the relationship and the development of a conceptual framework including several relevant hypotheses.

3.2 Shared Leadership and Conflict

3.2.1 Shared Leadership and Relationship Conflict

Examining how conflicts can be resolved has been the focus of recent research on shared leadership and its relationship to conflict. Bergman et al. (2012), for instance, find that shared leadership teams experience significantly less socio-emotional and task conflict and greater consensus than teams not displaying any levels of shared leadership. Socio-emotional conflict, as assessed by Bergman et al. (2012) can be seen as another term for relationship conflict, in particular as they use the intragroup conflict scale of Jehn (1994) to measure conflict, who distinguishes between relationship and task conflict. Thus, items measuring relationship conflict include questions such as 'How much friction was present in your group?' and the results suggest this type of conflict to be detrimental toward team outcomes (Bergman et al. 2012). Solansky

(2008) clearly distinguishes between relationship and task conflict and finds that teams with shared leadership on average have lower scores for relationship conflict than those without.

Greer and van Kleef (2010, p. 1033) on the other hand look at the effects of power dispersion on group outcomes. They define conflict resolution as 'the degree to which perceived incompatibilities in a group are effectively resolved' and find that power equality, which is linked to shared leadership, enhances conflict resolution. Similarly, Gupta et al. (2010) discover a positive effect of team leadership, a term which they acknowledge is used interchangeably with shared leadership, on team cohesion with regard to team performance. However, a strong negative relationship with conflict is identified. Although they acknowledge that past research has found some level of task-related conflict to be beneficial for teams, they also assume task conflict to be personal and thus negative as 'no one really likes to be criticised' (Gupta et al. 2010, p. 338). Thus, Gupta et al. (2010) assume both relationship conflict and task conflict to be negative. However, they use the Jehn (1995, p. 258) definition of relationship conflict as their overall definition of conflict, which conceptualises conflict as including 'tension, animosity, and annoyance among members within a group'. Although they claim all conflict to be negative, they specifically focus on the definition of relationship conflict which has been shown to negatively affect team performance. Therefore, the Gupta et al. (2010) study should be seen as adding to the evidence that it is specifically relationship conflict which is reduced by shared leadership and not task conflict.

Overall, past studies demonstrate that shared leadership in teams leads to more cohesion and that shared leadership teams, therefore, display less conflict than those employing a single leader (Ensley et al. 2003; O'Toole et al. 2002; Solansky 2008). As discussed, much of the literature examining conflict in shared leadership teams does not consider constructive forms of conflict, however, there is evidence that shared leadership in teams reduces negative effects of conflicts in teams. The assumption that this applies more specifically to negative relationship conflict leads to the following hypothesis:

Hypothesis 1: Management consultants' perceptions of shared leadership have a negative relationship with relationship conflict.

3.2.2 Shared Leadership and Task Conflict

According to Hooker and Csikszentmihalyi (2003), shared leadership transforms work into an autotelic activity, as fear of failure and self-consciousness are removed and autonomy and self-control are granted. Furthermore, Alper et al. (1998) find that cooperative interdependence aids a team's constructive discussion of opposing views, promoting team confidence and thus resulting in effective performance such as innovation. Thus, they suggest, rather than having team members work harmoniously without disagreement, cooperative, 'skilful disagreement' can help team members develop the confidence to deal with issues and to create new solutions (Alper et al. 1998, p. 46). Similarly, Yang and Mossholder (2004) find that highly skilled individuals in self-managing teams have responsibilities for many aspects of their work. In addition, if they are in equal relationships they also feel freer to disagree with one another. Therefore, according to Jehn and Mannix (2001), high-performing groups experience more task conflict and less relationship conflict.

Fletcher and Käufer (2003) assume that disagreement or 'talking tough' is a prerequisite for shared understanding within a team, as team members can then articulate opposing views and talk with authenticity. People engaging in reflective dialogue, and rather than resisting an idea, thinking 'I have something to learn from this', benefit from the constructive conflict in terms of mutual learning (Fletcher and Käufer 2003, p. 37). Furthermore, conditions that require further involvement include, for example, when there is a higher need for quality decision making, and when team members can supplement each other's knowledge (Pearce and Conger 2003a).

Allowing team members to share dissenting views, with an overall singular view regarding the team's goals, should not lead to negative forms of conflict (Ensley et al. 2006). In shared leadership environments, where power is distributed, constructive and collaborative conflict is key (Paulson et al. 2009). Since shared leadership is more closely related to collective vision than vertical leadership, team members will have a greater understanding of something they helped create, rather than something that has just been communicated to them and which they merely follow (Ensley et al. 2003, p. 336). Furthermore, Pearce (2004) emphasises that task conflict is highly related to shared directive leadership and has been positively linked to the performance of a wide variety of knowledge worker teams. These arguments lead to the following hypothesis:

Hypothesis 2: Management consultants' perceptions of shared leadership have a positive relationship with task conflict.

3.3 Shared Leadership and Innovation

As shown in a meta-analysis, many studies have found shared leadership to relate positively to team performance (D'Innocenzo et al. 2014). Within teams of shared leadership, team members' participation as well as the sharing of information in the team process can be enhanced (Hooker and Csikszentmihalyi 2003; Mehra et al. 2006). Such active participation has been shown to improve team performance through increased coordination, collaboration and commitment (Small and Rentsch 2010). According to Hooker and Csikszentmihalyi (2003) when, with shared leadership, work is transformed into an autotelic activity, this leads to sources of enjoyment, pride, and intrinsic reward. Teamwork is thereby enhanced and team members' sense of time becomes distorted as their consciousness begins to exclude all irrelevant information (Hooker and Csikszentmihalyi 2003). This effect is contagious in the team, which becomes more innovative and creative (Hooker and Csikszentmihalyi 2003). According to Gilson and Shalley (2004), team members' belief in their team having shared goals, their belief that individual team members can actively participate in problem solving, and that their team has a climate supportive of creative efforts, can be linked to creative team outcomes. Gilson and Shalley (2004) emphasise that creativity is predicated upon individuals feeling motivated to perform their tasks thus making them more actively engaged in their work. Furthermore, Pearce (2004) notes that teams conducting tasks that require high levels of creativity benefit from shared leadership, as creative knowledge work requires inputs from multiple individuals.

Manz et al. (2011) find that shared leadership promotes a higher likelihood of sustainable performance which is moderated and strengthened by the value placed on an ongoing creative process. Furthermore, although power struggles may occur in shared leadership teams, a team's long term success can be increased by combining the talents and interests of several individuals (Solansky 2008). Bligh et al. (2006) emphasise that since it is difficult for a single leader to have all the knowledge, skills, and abilities necessary to conduct knowledge work, integrating the ideas and abilities of individuals with different backgrounds, experiences, and approaches is essential. Furthermore, encouraging team members to lead themselves and to share influence in 'defining problems, making decisions, solving problems and identifying opportunities and challenges' makes creativity and innovation more likely to result (Bligh et al. 2006, p. 309).

Similarly, Contractor et al. (2012) consider that greater dispersion in leadership provides teams with access to more ideas and information. This can translate into higher creativity and innovation particularly with regard to the multiplexity of shared leadership (Contractor et al. 2012). Therefore, shared leadership in teams is strongly related to the empowerment of team

members. Highly empowered teams are more effective than less empowered teams as their team members tend to be more proactive, seeking innovative solutions to problems (Kirkman and Rosen 1999). Paulson et al. (2009, p. 12) emphasise that flat power structures give autonomy to team members, creating 'a breeding ground for creativity'. This leads to the development of Hypothesis 3 which states:

Hypothesis 3: Management consultants' perceptions of shared leadership have a positive relationship with team innovation.

Creativity can be defined as the production of an idea, action, or object that is perceived as both original and useful for a team (Mayer 1999) and innovation as 'the intentional introduction and application of ideas within a team' (West and Wallace 1991, p. 303). The issue that a certain level of task conflict within a team may be beneficial to teams, in contrast to relationship or process conflict which are detrimental to teams, has been much debated in the literature (e.g. Behfar et al. 2011; De Dreu 2006; Jehn 1997; Yang and Mossholder 2004).

Task conflict can be described as 'an awareness of differences in viewpoints and opinions about the group's task' (Behfar et al. 2011) and may encourage greater understanding of issues and lead to greater team confidence and effectiveness (Alper et al. 1998; Jehn and Mannix 2001; Yang and Mossholder 2004). Furthermore, research has linked task conflict to innovation (e.g. Anderson et al. 2004; Boyle et al. 2012; De Dreu 2006). However, strong forms of task conflict can trigger negative relationship conflict, which is why moderate forms are preferable (De Dreu 2006; Kotlyar et al. 2011; Jehn and Mannix 2001). The potential positive aspects of task conflict as discussed in the literature therefore suggest that:

Hypothesis 4: Management consultants' perceptions of task conflict have a positive relationship with team innovation.

3.4 Shared Leadership, Conflict and Innovation

Paulson et al. (2009, p. 6) find conflict to be necessary for the successful practice of shared leadership and associate conflict with 'diversity, innovation, creativity and organizational growth'. They offer three different cases to demonstrate how shared leadership can benefit what they name 'constructive disagreement'. Paulson et al. (2009, p. 5) emphasise the importance of self-leadership for shared leadership as it 'enables members to have the confidence and capacity to step up and take charge when dealing with an issue pertaining to

their specific area of expertise'. However, they emphasise the negative effects of what they term 'personal' and thus relationship conflict. Their conceptualisation of constructive conflict is termed 'idea conflict', which can lead to creativity and innovation, particularly in an environment with people from different backgrounds. This again can be linked to the issue of functional diversity in a team. Paulson et al. (2009) find that flat power structures benefit innovation and heighten the desire to participate, and that constructive conflict is the key to sharing knowledge that leads to high performance. Their conceptualisation of cooperative conflict and its relationship to shared leadership is included in the proposed conceptual framework of this study. However, the distinction between task and relationship conflict and inclusion of further concepts provide more fine-grained distinctions that require validation through a novel combination of research methods.

The fact that task conflict is most beneficial in teams that share leadership is re-emphasised through the research of Troyer and Younggreen (2009) who find that innovation is enhanced when conflict does not focus on an individual team member. Shared leadership provides an important prerequisite for all members of a team being allowed to engage in discussions. Chen et al. (2012) emphasise the positive effects of cooperative responses to task conflict in teams. The cooperation of team members lets them deal with conflict effectively, as they discuss their different views about the task open-mindedly, which in turn increases team performance. Their research shows that cognition, and thus 'a type of motivation to process new information', moderates the cooperative response to task conflict (Chen et al. 2012, p. 174). Thus, an increase in team members' need for cognition allows for managing task conflict through collaboration.

Teams that benefit from task conflict cultivate an environment open and tolerant of different viewpoints, use more collaborative communication when expressing disagreements and overall maintain an 'open environment characterised by collaboration rather than contention' (De Dreu and Weingart 2003, p. 747). These characteristics can be linked to shared leadership outcomes.

The discussion demonstrated how shared leadership can lead to more constructive forms of conflict in teams and that higher levels of shared leadership enhance team innovation. Combining this with extensive research on the benefits of task conflict within teams, and assuming that both task conflict and shared leadership enhance team innovativeness, the following hypothesis is developed:

Hypothesis 5: Management consultants' perceptions of (a) shared leadership and (b) task conflict have a positive relationship with team innovation.

Similarly to relationship conflict, process conflict has been demonstrated to be negatively related to group outcomes, as it has a tendency to become highly personal (De Wit et al. 2012). However, due to the overlap of process conflict with task or relationship conflict it is omitted in many studies (Jehn and Mannix 2001; Korsgaard et al. 2008; Tekleab et al. 2009). As regards relationship conflict, due to its focus on people rather than ideas it is considered counterproductive (Jehn 1995; Shaw et al. 2011). As discussed, relationship conflict has been shown to reduce team performance and, most importantly, team innovation. Hence,

Hypothesis 6: Management consultants' perceptions of (a) shared leadership and (b) relationship conflict have a negative relationship with team innovation.

3.5 Relationships between Concepts

The six hypotheses that have been logically derived from the literature have been graphically depicted in the model in **Figure 3.1**. Most importantly, shared leadership and task conflict affect innovation positively, as can be seen from Hypothesis 5.

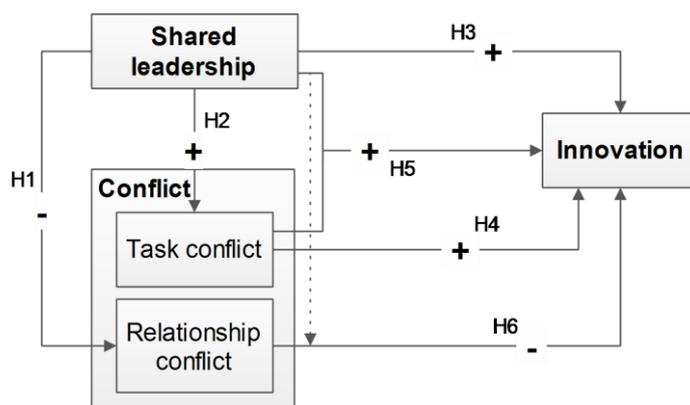


Figure 3.1: Relationship between main concepts and research hypotheses

3.6 Moderating Variables

According to Hüttermann and Boerner (2011) functional diverse teams and thus teams that differ in terms of expertise, knowledge and perspectives of team members, promote the development of creative and innovative solutions. Jehn and Mannix (2001, p. 241) find that such high-performing teams will 'confront diverse task perspectives' and will therefore experience moderate to high levels of task conflict. Furthermore, they find that task conflict mediates the relationship between functional diversity and team outcomes. In addition, functional diverse

teams that are self-managed will likely benefit from sharing leadership responsibilities (Small and Rentsch 2010). Bligh et al. (2006, p. 309) argue that knowledge creation, in particular as regards knowledge work, requires the involvement of several individuals with different 'backgrounds, experiences, and approaches' whose ideas and abilities are coordinated and integrated. Thus, functional diversity is likely to moderate the relationship between shared leadership and innovation and task conflict and innovation.

In self-managed work teams, shared leadership can occur more naturally through the dispersion of power and influence, as various members of a group contribute influence to activities within the group. Therefore, it is to be assumed that self-managed teams are more likely to employ shared leadership. It is further assumed that sole-proprietors and small management consultancy firms are more likely to have multiple team members engaged in the decision-making of the team and, thus, to utilise shared leadership. This may be due to the reduced likelihood of hierarchical structures being employed. Furthermore, the size of the team could affect its ability to employ shared leadership, which is thus examined.

3.7 Conceptual Framework

With the main concepts having been laid out and set in relation to each other in the previous **Figure 3.1**, it is important to define the concepts that may further influence these main concepts. These concepts are presented in a more detailed conceptual framework in **Figure 3.2**. The model displays the six hypotheses as well as important factors influencing the three main concepts of shared leadership, conflict and innovation and the relationships among them. These factors have been derived from the literature. Furthermore, each main concept involves underlying concepts displayed in the large boxes of the main concepts:

- Shared leadership involves the important precursors of shared purpose, social support as well as participation and input (Carson et al. 2007);
- Conflict is separated into task, relationship and process conflict as discussed by Jehn et al. (1999), and properties of interpersonal conflict, such as cognitive disagreement, behaviour and interference as well as affect and negative emotion, which influence the focus of interpersonal conflict are important (Barki and Hartwick 2004); and
- Innovation involves team effectiveness, problem solutions, knowledge and idea exchange as well as ideas, processes and procedures (Cox et al. 2003; Hüttermann and Boerner 2011; West and Farr 1990).

Going back to the shared leadership literature, the main factors influencing the development of shared leadership in teams can be identified as:

- Project complexity (Pearce and Conger 2003b);
- Self-management (Pearce and Conger 2003b); and
- Team size, found most influential as regards team characteristics (Cox et al. 2003).

In addition, functional diversity has been found to influence both the development of shared leadership and, as discussed before, the amount of task conflict and innovation displayed in teams (Hüttermann and Boerner 2011).

Important prior conditions to intragroup conflict are inputs which develop into behaviour and finally evolve into sensemaking, as displayed in the bottom left of **Figure 3.2** (Korsgaard et al. 2008). Intragroup conflict has been divided into types that are competitive and types that are cooperative as defined by Tjosvold (1998). While relationship and process conflict can generally be described as competitive forms of conflict that reduce innovation, task conflict, at moderate levels (De Dreu and Weingart 2003), is classed as cooperative conflict which positively affects team innovation. Task conflict that is too high results in negative competitive conflict. In addition, while it has been discussed that shared leadership can reduce relationship conflict, this influence can go both ways (Ensley et al. 2003; Greer and van Kleef 2010; Solansky 2008). The constructive relationship between shared leadership and collaborative disagreement is discussed by Paulson et al. (2009) although innovation is only mentioned as one possible outcome. Their proposed relationship is therefore included while further providing more fine-grained distinctions of conflict and a clear focus on innovation as a team outcome.

Management consultant teams that work on complex or multiple tasks have a broader base for individuals to make unique contributions to group goals which may require multiple exchanges among members and complementary skills and abilities (Seers et al. 2003). Furthermore, Cox et al. (2003) argue that the level of complexity of the team's task moderates the effect of shared leadership and team effectiveness. It is assumed that shared leadership will be more effective than vertical leadership in contributing to complex and interdependent projects (Clarke 2012a; Pearce 2004). Thus task complexity can be seen as influencing the relationship between shared leadership and team innovation. Lastly, team effectiveness and thus innovation is affected by responses of team members which again interlink with the production of ideas, processes, products and procedures (Cox et al. 2003; West and Farr 1990). Innovation can be classified as including elements of relative or absolute novelty in terms of outcomes (West and Farr 1990).

In light of this detailed conceptual framework, it is important to note that although some of the relationships as depicted in the framework can be tested through quantitative methods, others

require different, qualitative methods. While the relationships depicted through the hypotheses can be tested using a quantitative survey, as discussed in the next chapter, and moderating variables such as team size and functional diversity can be included, behaviours and occurrences influencing the development of the respective concepts cannot be easily measured and subsequently require different, qualitative techniques. The underlying methodological approach to test this framework will be outlined in Chapter 4.

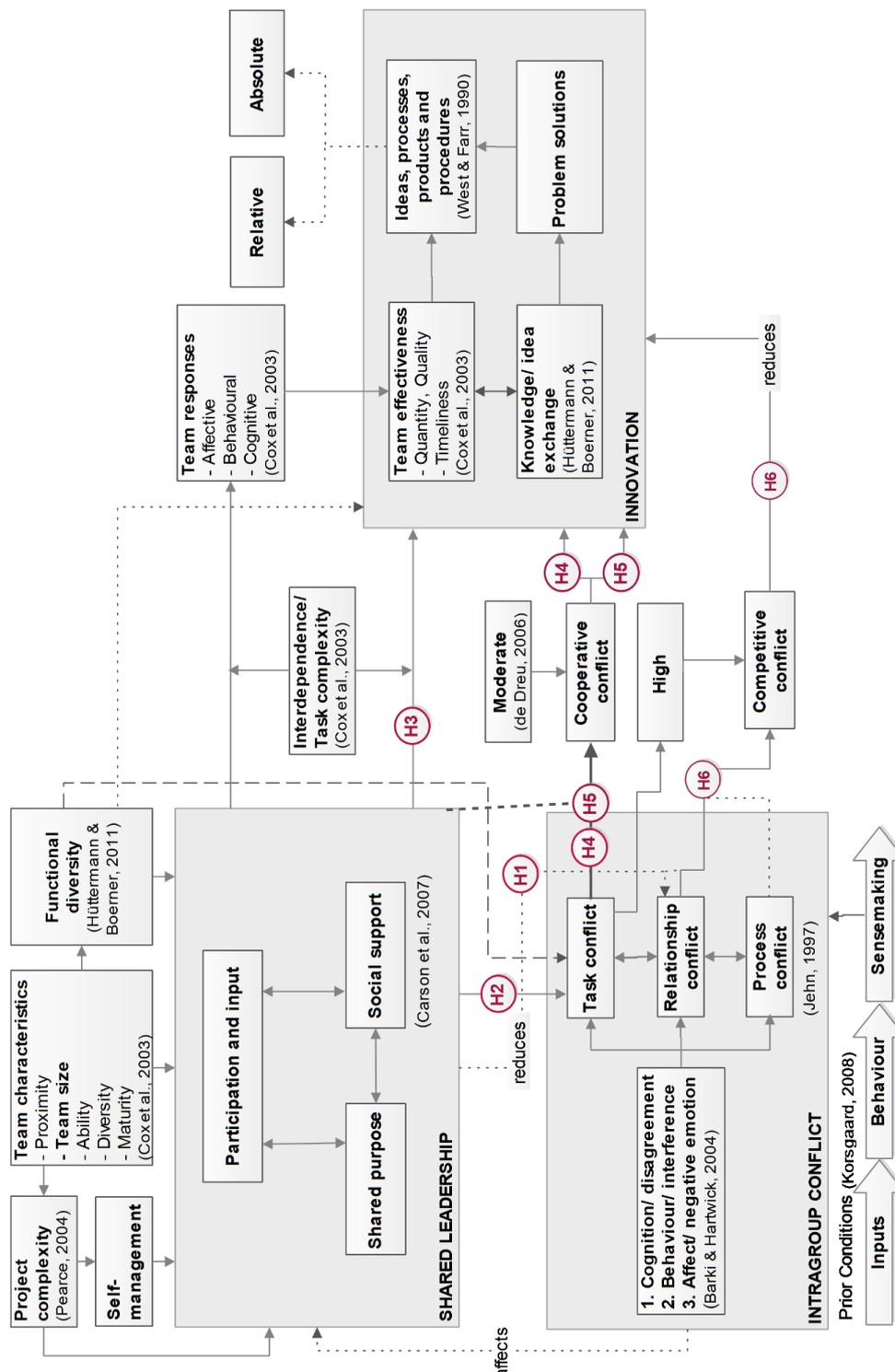


Figure 3.2: Conceptual model of shared leadership, task/relationship conflict and innovation

3.8 Testable Hypotheses

Table 3.1 below displays the research question of this current research as well as the different research hypotheses and the corresponding independent and dependent variables.

Table 3.1: Research hypotheses and variables

Research question (RQ)	Hypotheses	Variables
How can task conflict be utilised in shared leadership management consultant teams to benefit team innovation?	H0a: Management consultants' perceptions of shared leadership <u>do not</u> have a negative relationship with relationship conflict.	shared leadership (IV) relationship conflict (DV)
	H1a: Management consultants' perceptions of shared leadership have a negative relationship with relationship conflict.	
	H0b: Management consultants' perceptions of shared leadership <u>do not</u> have a positive relationship with task conflict.	shared leadership (IV) task conflict (DV)
	H2b: Management consultants' perceptions of shared leadership have a positive relationship with task conflict.	
	H0c: Management consultants' perceptions of shared leadership <u>do not</u> have a positive relationship with team innovation.	shared leadership (IV) innovation (DV)
	H3c: Management consultants' perceptions of shared leadership have a positive relationship with team innovation.	
	H0c: Management consultants' perceptions of task conflict <u>do not</u> have a positive relationship with team innovation.	task conflict (IV) innovation (DV)
	H4c: Management consultants' perceptions of task conflict have a positive relationship with team innovation.	
	H0d: Management consultants' perceptions of (a) shared leadership and (b) task conflict <u>do not</u> have a positive relationship with team innovation.	shared leadership (IV) task conflict (IV) innovation (DV)
	H5d: Management consultants' perceptions of (a) shared leadership and (b) task conflict have a positive relationship with team innovation.	
H0e: Management consultants' perceptions of (a) shared leadership and (b) relationship conflict <u>do not</u> have a positive relationship with team innovation.	shared leadership (IV) relationship conflict (IV) innovation (DV)	
H6e: Management consultants' perceptions of (a) shared leadership and (b) relationship conflict have a negative relationship with team innovation.		

Note: IV = independent variable; DV = dependent variable; H0 = null hypothesis; H1-6 = hypothesis

3.9 Conclusions

Following a thorough analysis of relevant literature, this chapter discussed the underlying theories regarding the relationships among the concepts of shared leadership, conflict and innovation. It is suggested that, due to limited literature examining the relationship between these three concepts, a conceptual model should be developed. In particular, there is a paucity of research focusing on the role of conflict throughout the shared leadership process. Past literature has mainly focused on resolving conflict rather than examining the potential benefit that conflict can have in the context of shared leadership. This issue requires further examination, particular in the context of innovation, as task conflict has been shown to positively impact team creativity and innovative outcomes, whereas relationship conflict has been shown to reduce team innovation.

Therefore, a simplified model depicting the relationships between shared leadership, conflict, which is divided into positive task conflict and negative relationship conflict, as well as innovation has been created. Furthermore, several hypotheses, which will be considered in subsequent chapters, have been developed to outline the relationships between these concepts. Each hypothesis focuses on management consultants' perceptions of their teams, which, due to their knowledge intensive work, are often conducted with less hierarchic structures. The relationships among the main concepts have been depicted in a more detailed conceptual framework which again shows the proposed relationships between the main concepts. Several underlying factors and further variables influencing the main concepts and the relationship amongst these have been identified and included in this framework. The following Chapter 4 describes the methodology employed to examine the conceptual framework empirically, the results of which are analysed in Chapter 5 and discussed in Chapter 6.

Chapter 4 - Methodological Approach

4.1 Introduction

The previous chapters discussed the research aim and objectives, the background to the literature and demonstrated the development of a conceptual framework. The following chapter provides an overview of the methodological approach employed in this study. Starting with philosophical debates of ontology and epistemology, the research design, which involves a mixed methods approach, is discussed and justified. Following that, three research elements are outlined as part of a sequential explanatory mixed method study. The first element entails a quantitative survey, the second element includes qualitative interviews and the third element involves qualitative observations. Issues such as sampling, methods of data collection and data analysis are discussed for each research element.

4.2 Philosophical Approach

The research philosophy adopted by the researcher contains important assumptions about how the world is viewed and thus plays an important role regarding the choice and appropriateness of methods adopted by the researcher. Research and its philosophical positions is what Kuhn (1962, p. viii) first referred to as 'paradigms', which he defines as 'universally recognized scientific achievements that, for a time, provide model problems and solutions for a community of researchers'. Paradigms are a source of guidance for conducting and evaluating research and are required to define problems and select methods, defining the nature of enquiry along the dimensions of ontology, epistemology, human nature and methodology (Benton and Craib 2010). Questions of ontology are concerned with the nature of being, epistemology is about the way of enquiring into the nature of the world, human nature about the relationship between human beings and their environment, and lastly, methodology specifies how to practically go about studying situations (Blanche et al. 2006; Burrell and Morgan 1979; Bryman and Bell 2011).

These four dimensions are shown in the subjective/objective dimension scheme of Burrell and Morgan (1979, p. 3) in **Figure 4.1**. Importantly, a differentiation is made between a subjectivist and an objectivist approach to social science. The main debates of ontology in social science are between the positions of internal realism, relativism and nominalism. These range from the ontology of realism, which accepts that there is one truth and that facts exist and can be

revealed, to the ontology of nominalism, which accepts that there is no truth and that facts are human creations (Easterby-Smith et al. 2012).

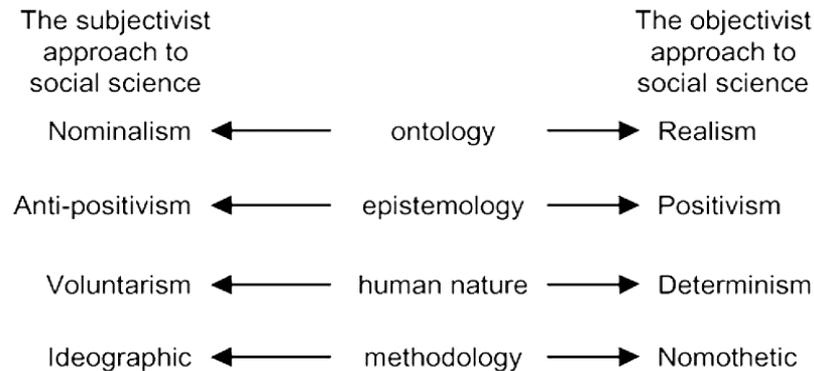


Figure 4.1: The subjective-objective dimension (Burrell and Morgan 1979, p. 3)

The main contrasting epistemological debates discuss the distinction between positivism (objectivist) and social constructionism (subjectivist). Positivism is an epistemological position which believes that the social world exists externally and that its reality can be studied through the application of the traditional methods employed in natural sciences (Bryman 2012). Its methodological approach is nomothetic, meaning it uses law-like principles, its focus being on replicability, deductive reasoning and thus the testing of theory through quantitative research techniques (Neuman 2007). The epistemology of anti-positivism, also referred to as social constructionism or by Habermas (1970) and others as interpretivism, stands in contrast to positivism. The social constructionist approach falls into the relativist ontology and assumes that reality is determined by people rather than objective factors (Burr 1998; Guba and Lincoln 1994; Niiniluoto 1991). Interpretive researchers favour an ideographic form of explanation that focuses on explaining aspects of the social world through detailed pictures, descriptions or relationships (Neuman 2007).

The disagreements regarding paradigms have in the past led to discussions of ‘paradigm wars’ and issues of ‘incommensurability’ (Jackson and Carter 1993; Phillips 1975). Due to the fundamental differences between the philosophical positions of positivism and social constructionism, the critical realist epistemology has been established as a compromise and an alternative (Easterby-Smith et al. 2012). According to Bhaskar (2011, p. 2), ‘we will only be able to understand - and so change - the social world if we identify the structures at work that generate those events or discourses’. Thus, critical realism does not seek solely to ‘identify generalisable laws’, such as positivism, nor does it seek solely to ‘identify the lived experience or beliefs of social actors’ as does interpretivism, but its goal is ‘to develop deeper levels of

explanation and understanding', while recognising that a single, correct understanding of the world cannot be attained (McEvoy and Richards 2006, p. 69). Reed (2009, p. 431) finds that six principles set critical realism apart from other philosophies of social science:

1. Its commitment to a stratified and differentiated social ontology;
2. Its support for a generative, rather than a successionist, model of causality;
3. Its engagement in retroductive analysis;
4. Its preference for intensive, rather than extensive, research strategy and design;
5. The transformative model of social action; and
6. The commitment to the concept of explanatory critique.

This research adopts a critical realist approach due to an objectivist verification of relationships between certain constructs being a central part of this study. Nevertheless, interactions of people and thus how they communicate, as well as their feelings and thoughts, are of equal importance. The approach to the research is outlined and justified in depth in the research design section 4.3. Social constructionist approaches in shared leadership are gaining increased interest due to leadership being seen as a process of social construction produced through a relationship (Crevani 2011; Uhl-Bien and Ospira 2012). As regards the study of leadership from a critical realist stance, Kempster and Parry (2011, p. 107) emphasise that contextual inferences require 'a deeper understanding and explanation' of how contexts are similar, while seeking 'generalization through theoretical comparison'. Thus, the critical realist approach as employed in this current research, aims at gaining convergence. Further implications are laid out in **Table 4.1** and are related to the current research project.

Table 4.1: Methodological implications for research project (adapted from Easterby-Smith et al. (2012))

Methodology	Critical realism	Research project
Starting point	Question	- How can task conflict be utilised in management consulting shared leadership teams to stimulate team innovation?
Designs	Cases and surveys	- Survey of management consultants; - Cases of management consultants; and - Case of independent management consultant team.
Types	Words and numbers	- Numerical data (survey); - Verbal data (interviews & meetings); and - Visual and verbal data (video observations).
Analysis/ Interpretation	Understanding, testing	- Quantitative testing of hypotheses; - Causal mapping of verbal data; and - Ethnographic analysis of visual and verbal data.
Outcomes	Theory generation	- Enhancing innovation in shared leadership teams; - Analysing the usefulness of task conflict in SL teams; and - Evaluating the possibilities of stimulating innovation.

4.3 Research Design

The following sections outline the mixed methods approach utilised in this study, providing a rationale as well as demonstrating the different elements during which both quantitative and qualitative methods are used. **Figure 4.2** depicts the different elements of the research and the procedures undertaken in each phase as well as their resulting product and outcomes. The sequential, explanatory, mixed-methods design research begins with a quantitative phase, and is followed by two separate qualitative phases.

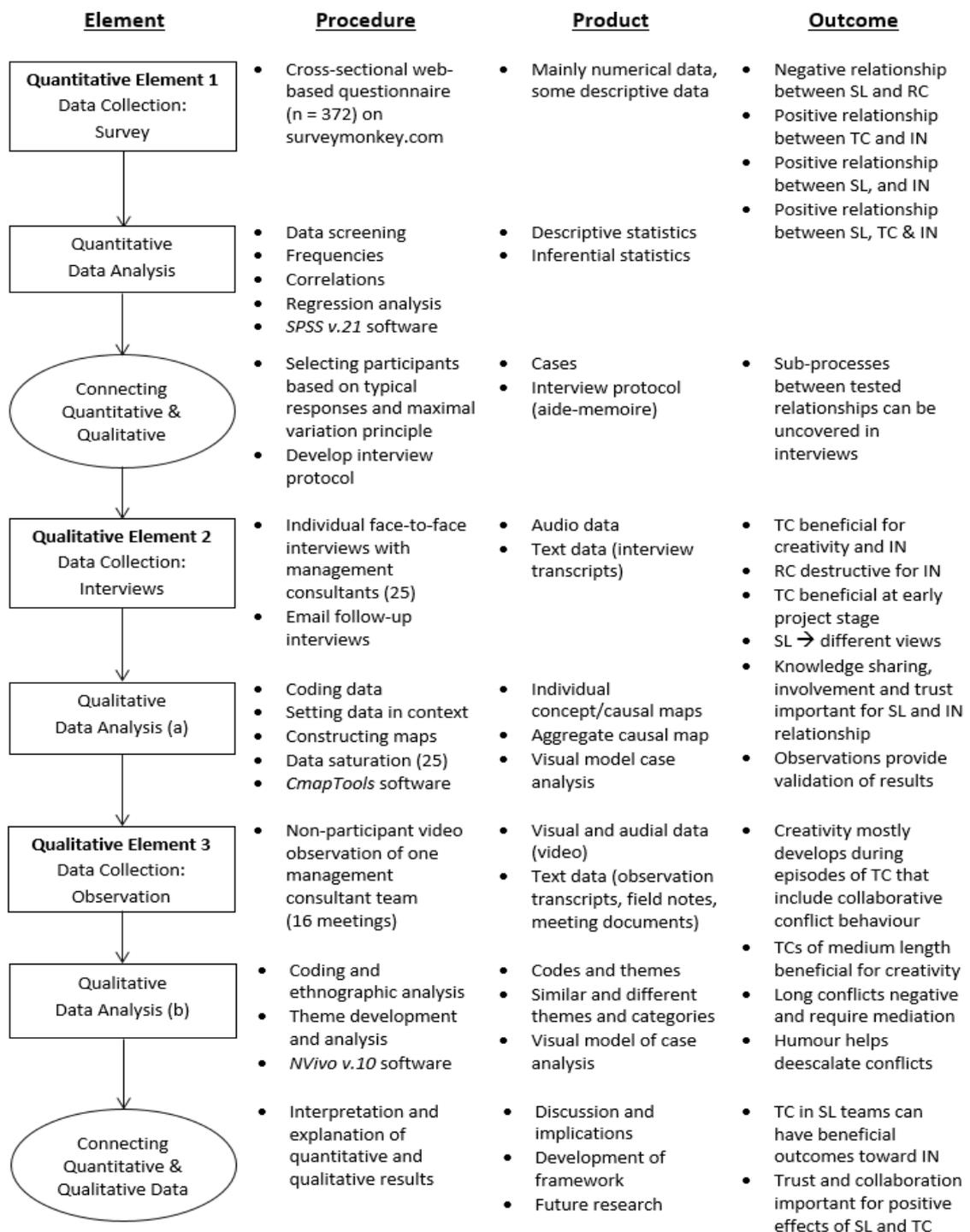


Figure 4.2: Research elements for mixed methods approach (adapted from Ivankova et al. 2006)

4.3.1 Mixed Methods Approach

In a recent review of mixed methods in leadership research Stentz et al. (2012) highlight the value of employing multiple research approaches to understand better the relevant processes and dynamics of leadership. They define mixed methods as involving both quantitative numeric and qualitative narrative data. Although Stentz et al. (2012) acknowledge the dominance of quantitative approaches in leadership research, they also find a trend towards using experimental studies for determining causal relationships between variables. Similarly, Mumford (2011) emphasises the importance of multi-method approaches to understand critical aspects of leadership, especially since single method studies are far from perfect. Furthermore, Mumford (2011) notes that collective leadership as an area of research raises some fundamental issues which should be addressed in future research. Importantly, some researchers use the term mixed methods to describe studies using a combination of qualitative methods, whereas the term 'between mixed methods' is used to describe studies that use a combination of quantitative and qualitative approaches (Klenke 2008). In this study, the term mixed methods is used to refer to the latter.

Doyle et al. (2009, p. 178-179) propose eight benefits for undertaking a mixed methods study: Triangulation, completeness, offsetting weaknesses and providing stronger inferences, answering different research questions, explanation of findings, illustration of data, hypotheses development and testing as well as instrument development and testing. The main advantages and disadvantages of employing multiple methods are highlighted in **Table 4.2**.

Table 4.2: Advantages/ disadvantages of using multiple methods (Creswell and Clark 2010, p. 12-17)

Advantages	Disadvantages
Combining strengths of qualitative and quantitative research.	Researchers require skills for both approaches.
Enabling researchers to use all available tools of data collection.	Research may require more time.
Answering questions that cannot be answered by one approach alone.	Difficult to convince others.
Bridging between quantitative and qualitative researchers.	
Encouraging the use of multiple worldviews.	
Using a practical approach (researchers are free to use methods).	

Rowland and Parry (2009) emphasise the use of a range of methods as not uncommon in observation-based research studies. They use a dominant qualitative approach, first observing processes and interpersonal dynamics within teams, followed by interview data for confirming these dynamics. Both observational and interview data are coded and developed into a set of

analytic memos, recording the development of insight into the team dynamics. Furthermore, each team member evaluates the team leader's style of leadership, thus including quantitative data. Nevertheless, the results can be seen as limited due to the relatively small sample size.

According to (Parry et al. 2013, p. 6) 'the nature of the problem and the theories of interest dictate the mix of methods used to answer any particular set of questions'. Looking at this current research, which aims to explore the effects of conflict in driving forward innovation in shared leadership management consultant teams, both a qualitative and a quantitative approach are warranted. Creswell and Clark (2010) emphasise the essentiality of not only collecting and analysing qualitative and quantitative data separately, but also of 'mixing' them in a way that forms a more complete picture of the problem. According to Doyle et al. (2009) the main decisions are whether to conduct the qualitative and quantitative stages concurrently or sequentially, whether equal priority should be given to both methods and where the mixing of the methods will occur. A further important factor to consider when conducting mixed methods research is whether integration of methods occurs at the interpretation or analysis phase. Creswell and Clark (2010) emphasise that mixing can occur at four possible stages:

- During interpretation;
- During data analysis;
- During data collection; and
- At the level of design.

Figure 4.3, developed by Johnson and Onwuegbuzie (2004) displays the nine main mixed methods designs, distinguishing between **QUAL**itative and **QUAN**titative with + standing for concurrent, → for the sequence and capital letters for the priority of either qualitative or quantitative methods.

		Decision	
		Concurrent	Sequential
Paradigm Emphasis Decision	Equal Status	QUAL + QUAN	QUAL → QUAN QUAN → QUAL
	Dominant Status	QUAL + quan QUAN + qual	QUAL → quan qual → QUAN QUAN → qual quan → QUAL

Figure 4.3: Mixed method design matrix (Johnson and Onwuegbuzie 2004, p. 22)

This current research will ensue in three distinct stages, starting with the collection and analysis of quantitative survey data, followed by the collection of qualitative interview, and finally qualitative observational data. Thus, following an 'explanatory sequential design' method as outlined by Creswell and Plano Clark (2006), the qualitative results will aim to explain the quantitative results and lead to the development of a model that allows for shared leadership teams to enhance their innovatory capacities. **Table 4.3** depicts the main issues regarding the use of mixed methods and the subsequent rationale for the study.

Table 4.3: Mixed method type and rationale for this study

Main issues	Decision	Approach	Rationale
Timing	Sequential	Quantitative followed by qualitative	- Testing hypotheses; and - Developing observation procedure and interviews.
Weighing	Unequal	Dominant qualitative (interviews + observations)	- Researching into 'how' conflict affects shared leadership management consultant teams.
Mixing	Following data analysis	Quantitative analysis followed by qualitative analysis	- Testing hypotheses first, gaining contacts for further research; and - In-depth exploration of the issues identified during the survey.

Hibberts and Johnson (2012) describe a multi-level relationship involving both qualitative and quantitative data derived from different levels of a population. In relation to the current research, this involves conducting interviews with individual management consultants, observations of management consultant teams, as well as quantitative survey data from a larger population of management consultants. According to Hesse-Biber (2010) a sequential mixed method design that employs a dominant qualitative approach followed by a quantitative approach is used to test the validity of qualitative findings on a wider population. Nevertheless, this study required the preliminary testing of hypotheses prior to the exploration of the results, in order to assess the relationships between the concepts. Therefore, a quantitative approach was employed first, followed by a dominant qualitative approach. **Table 4.4** provides an overview of possible stages of mixing and advantages and disadvantages for this study.

Table 4.4: Mixing of qualitative and quantitative strands and advantages/ disadvantages for the current study (adapted from Creswell and Clark (2010))

Mixing	Explanation	Advantages	Disadvantages
Interpretation	Mixing at final stage of the research when qualitative and quantitative data have been analysed.	- Each approach could be weighted according to its importance.	- Observations and interviews may provide results which should be validated through surveys.
Data analysis	Separate analysis of quantitative and qualitative data, merging results in analysis.	- Provides a clear picture of each data set; and - Data can be related to each other for comparison.	- Results gained from one stage cannot be further explained/ explored.
Data collection	Mixing when a second set of data is collected. Results of qualitative research build on collection of quantitative data.	- Results collected from one stage can be generalised; and - New questions can be developed based on the results from one stage.	- Difficult to specify the results which need to be further explained/ explored at start of study; and - Difficult to specify time frame of stages.
Level of design	Qualitative and quantitative strands mixed during larger design stage of research process.	- Methods can be mixed within a framework providing an overall design.	- Only possible if adequate framework exists.

Creswell and Clark (2010, p. 82) find that an explanatory design is useful ‘when the researcher wants to be able to explain the mechanisms or reasons behind the resultant trends’ and thus the requires ‘qualitative data to explain quantitative significant results’ The following points laid out in **Table 4.5** and mentioned by Creswell and Clark (2010, p. 82) have been identified as relevant for this research.

Table 4.5: Main considerations regarding choice of explanatory design for this research

Creswell and Clark (2010)	This research
The researcher knows the important variables and has access to quantitative instruments for measuring the constructs of primary interest.	A conceptual model including the main variables was developed through an extensive review of the literature.
The researcher has the ability to return to participants for a second round of qualitative data collection.	Participants interested in further research were identified through the questionnaire and agreed to participate in further research.
The researcher develops new questions based on quantitative results, and they cannot be answered with quantitative data.	Relationships between main variables can be assessed, however, research into the actual occurrences regarding effects of conflict in SL teams require more in-depth exploration.

4.3.2 Research Elements

A survey was conducted to test the six hypotheses of this study. The survey contained questions on the management consultants' backgrounds and their recent teamwork. Questions about teamwork involved obtaining information about the size of the team, the number of team meetings, and the client, as well as asking about shared leadership, conflict and innovation in these teams. This provided quantitative data that allowed checking for relationships between variables, providing preliminary results which could then be further analysed through interviews and team observations.

Following the survey, in-depth interviews were carried out with management consultants to explore results from the survey further and, additionally, observations were included as a method of qualitative data collection. The data for each individual interview were developed into a causal map. These were analysed in detail and summarised in an overall map, demonstrating the interrelatedness of the concepts. The relationships between these concepts were further examined through the video observation of a real-life management consultant team over several months, and a subsequent ethnographic analysis.

Therefore, to answer the overall research question and achieve the stated objectives, two types of qualitative data were gathered following the quantitative questionnaire. During the Qualitative Element 2, semi-structured interviews were conducted with a sample of survey respondents. Following that, observational data, both visual and verbal, were collected in Qualitative Element 3 by videotaping a number of consultant team meetings. **Table 4.6** outlines the rationale involved in using these qualitative methods and the relevant unit of interest.

Table 4.6: Qualitative data collection methods

Data type	Rationale	Unit of interest
Semi-structured interviews	- Gain an insight into the individual perceptions (how task disagreement/ SL occurred in team); and - Individual interpretations of teamwork.	Sub-sample of survey respondents
Video observation	- To capture visual and verbal data (e.g. non-verbal behaviours); - Important to analyse team task disagreements (not only verbal); and - Observe innovation 'in action'.	Consultant team as a whole (meetings)

Figure 4.4 displays an overview of the research design for this study, which involves different stages of data collection and analysis. The boxes show that the study commences with a survey, followed by interviews and observations, as discussed previously. The number of consultants surveyed and interviewed, as well as the number of meetings observed, are displayed in bold.

Regarding the management consultant case observed, it is important to note the usefulness of case studies as part of a larger mixed methods design, to investigate entities being surveyed further and to address complex research questions (Yin 2009).

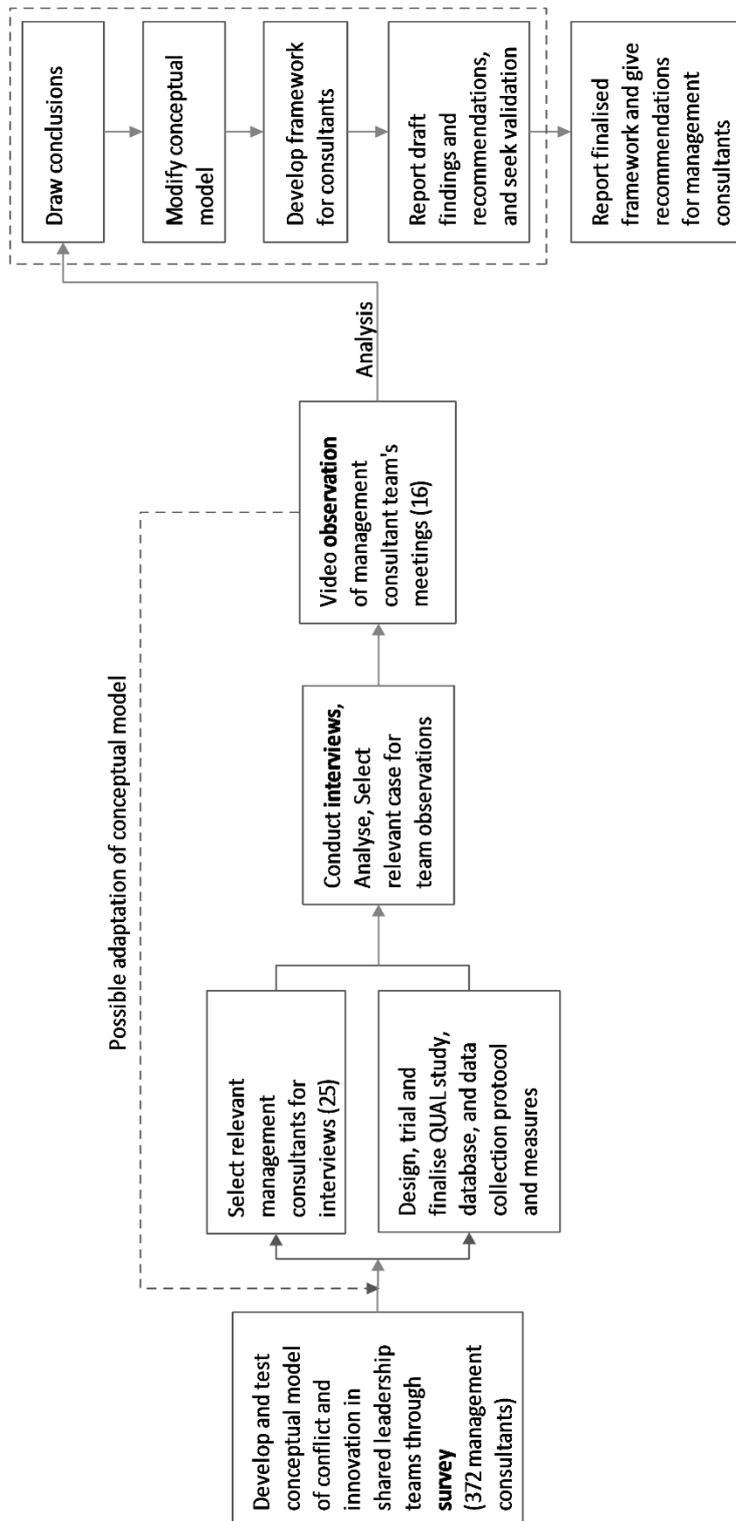


Figure 4.4: Research design and different steps of study (adapted from Taylor et al. 2011)

4.4 Quantitative Element 1 - Questionnaire

The quantitative element of this research included the development of a questionnaire and its distribution to a sample of management consultants. As described in the previous section, the aim of the survey was to identify relationships between the main variables of shared leadership, conflict and innovation and thus to test the main hypotheses and conceptual framework developed from the literature in Chapter 3. The issues identified from the survey would then be further explored in the qualitative part of the study. Furthermore, the survey also served as a method of collecting basic information on management consultants' work history, both individually and in management consultant teams, serving as a means of identifying suitable and willing consultants for the qualitative element of the study.

4.4.1 Sampling

Sampling for the quantitative element of this study involved taking a sample from a full set of cases, thus the population, as discussed under point a), in order to provide reliable findings. The process of selecting a sample involves:

- a) Considering the appropriate population;
- b) Considering the sample design;
- c) Determining the sample frame; and
- d) Drawing a sample from the population (Bryman and Bell 2011).

a) The population refers to the 'whole set of entities that decisions relate to' (Easterby-Smith et al. 2012, p. 222). The target population for this research were management consultants in the United Kingdom. As mentioned before, the definition of management consultants is someone who 'provides external advice for organisations that require specialist expertise or an objective outside perspective on their business' (Institute of Consulting 2014a). However, as the job title 'management consultant' can be used by any individual, it was important to identify relevant individuals with experience for the survey. According to the UK Consulting Industry Statistics Report 2014, the UK consultancy industry consists of approximately 80,000 consultants (Management Consultancies Association 2014). This includes:

- Individuals undertaking 'pure' management consultant work, mostly concerned with strategy; and
- Individuals providing services such as IT consulting, business advisory services, operations management, HR consulting and advice in other specialist fields. (O'Mahoney and Markham 2013)

b) Regarding the sample design, a representative sample with the likelihood of every individual in the sampling frame given an equal chance of being included was required. Thus, in order to gain a representative sample of management consultants, simple sampling was employed. Management consultants had to meet the criteria of:

- Defining themselves as management consultants and thus someone ‘who provides independent advice about the process of management’;
- Currently practising management consultancy as a profession;
- Having actively been practising as management consultants for more than two years (a prerequisite of the IC consulting qualification); and
- Agreeing to participate in the study and completing the questionnaire.

c) The sampling frame refers to ‘the listing of all units in the population from which the sample will be selected’ (Bryman and Bell 2011, p. 176). However, it can be difficult to obtain an accurate listing of the population under study. In the case of UK management consultants, accurate listings do not exist and the theoretical population is therefore not accessible. For this reason it is important to distinguish between the theoretical population and the accessible population, as the latter reflects a population of interest to which access can be gained when sampling (Trochim et al. 2015). The total number of UK management consultants can only be estimated, as the job title ‘management consultant’ can be used by any individual. Therefore, it was important to ensure that only management consultants with consultancy experience were included in the survey. Since the industry is quite scattered, locating respondents individually would have been a difficult process. Also, conducting a survey with management consultants from one large consultancy firm would have led to results focused very much on the leadership and management structures of that specific company. Therefore, in order to identify a relevant sample of diverse management consultants, a network that included individuals as members had to be identified. More precisely, a management consultant body was required that allowed access to a large number of management consultants who, due to their membership in this body could be recognised as possessing relevant consultant qualifications.

The largest and most established network of this type in the UK is the Institute of Consulting (IC) which is a body located within the Chartered Management Institute (CMI). According to the Institute of Consulting (2014b) the focus of the IC lies on supporting professionals ‘whose collective impact is to enhance performance in small and large organisations across the private, public and voluntary sectors’. Being the professional body for consultants and business advisers in the United Kingdom, and following meetings with the researcher, the IC allowed their

management consultant members to be benchmarked for the study. The sample would include respondents that were members or fellows of the IC and thus possessed at least two years of consulting experience as well as relevant qualifications.

This applied to **2,385** members of the Institute of Consulting. For the study, the IC was contacted and in a meeting with the Institute's chair cooperation was agreed in terms of the IC distributing the questionnaire to its members. In order to ensure that the consultants answering the questionnaire identified themselves as management consultants, the question 'Would you describe yourself as being a management consultant, that is, someone who provides independent advice about the process of management to clients?' was asked. Furthermore, respondents were asked to provide information on their professional qualifications as well as length of experience in the industry.

d) With the members of the above named management consultant membership organisations representing the accessible population, the sampling frame identified was surveyed. According to Fricker (2008) employing a sampling strategy in which most of the target population has a chance of being sampled reduces coverage error. The aim of this study being the investigation of the role of task conflict in driving forward innovation in shared leadership management consultant teams, the quantitative part of this study assesses the relationships between the main concepts as outlined in the conceptual framework in Chapter 3. Regarding the required number of respondents, two considerations should be made. Firstly, the larger the number of participants the better, in particular when a small effect size is expected, or stepwise regression is used (VanVoorhis and Morgan 2007). Secondly, as a rule of thumb and considering 95% confidence levels, the total number of cases depends on the number of independent variables. For a correlation no less than 50 participants are required, while a regression analysis, which tests individual predictors, requires a number of $N > 104 + m$ (m representing the number of independent variables) (Green 1991). Multiple regression analysis is used since the relationship between several independent variables and one dependent variable are to be examined. Since the number of independent variables in this study is three, the minimum number of participants should be 103.

Although the advantages of collecting data through a self-administered online questionnaire clearly outweigh the disadvantages, it should be noted that response rates are low compared to traditional pencil-and-paper or telephone surveys (Lefever et al. 2007). Studies concerned with contacting managers individually show that it is not uncommon to receive a response rate of

between 10-20% (Olson et al. 2007; Tang et al. 2012). According to Evans and Mathur (2005), the fact that online surveys are impersonal in terms of there being no human contact also limits the ability to probe in-depth as could be done by an interviewer. Nevertheless, in this current research relevance to management consultants' day-to-day work is provided, increasing their interest and the likelihood of completion. As this was a sample of professional people who work for various organisations and not one, it was clear that the response rate of the survey would not reach high levels. However, low response rates in this instance do not necessarily signify low representativeness, as it can be hard to receive responses from some individuals working in business. It was therefore expected that approximately **238** responses would be required, which constitutes **10%** of the sampling frame and significantly more than the minimum required for both correlation and regression analysis.

4.4.2 Data Collection Method

To collect the quantitative data a cross-sectional design was used. An analytical survey was used to collect the data, which, according to Bryman (2012) comprises a cross-sectional design by which data are primarily collected by questionnaire, on more than one case, at a single point in time, quantifiable and in order to examine patterns of association. Importantly, as they focus on people's beliefs, opinions, attitudes, motivation and behaviours, surveys are a useful method for this research (Kerlinger 1986). Due to the availability of potential participants via email, and in order to exclude interviewer effects, the questionnaire was self-administered and web-based.

An email containing a hyperlink was sent to management consultants inviting them to complete an online, web-based questionnaire. The collection of data through a web survey offered several advantages:

- Management consultants could easily access and complete the survey directly through the link in the email using a PC or other mobile device at any given time within the period that the survey was open for response. Furthermore, the invitation stated that the survey would take approximately ten minutes to complete. It was, therefore, designed to minimise disturbance to the daily routine of the participants and maintain their privacy;
- The survey could be distributed at low cost and fast speed in terms of administration to a unique population. Obtaining postal addresses and/or phone numbers would have been costlier in terms of time and due to the geographical dispersion of management consultants who, when independent

for example, are often not based in an office but work at home and at the locations of different companies;

- The online survey software 'SurveyMonkey' allowed the researcher to format the survey in terms of appearance, enhancing visibility and simplicity, thus making the survey more appealing to participants;
- Data could be collected in aggregate and directly downloaded into the statistical software SPSS eliminating any input errors by the researcher. Furthermore, the response rate could continuously be monitored online; and
- SurveyMonkey allowed for an option to direct irrelevant respondents to the end of the survey, or to the appropriate sections via response, as set up in the software by the researcher. Furthermore, certain questions could be made obligatory for respondents, thus limiting non-response.

4.4.3 Measurement

The questionnaire was divided into four main sections (see **Table 4.7**). It started with an introductory section containing questions regarding respondents' current occupations as management consultants in terms of their specialisation, the size of their organisation and their formal position. Respondents would only continue to the second section if they identified themselves as management consultants and indicated that they spent a percentage of their working lives in consultancy teams. The second section asked management consultants to focus on their most recent experience as a member of a consultancy team. Questions regarding team size, meeting length, frequency of meetings and functional expertise were asked. Furthermore, respondents were asked if shared leadership was implemented in their team and a positive response would lead them to the next section on shared leadership. The third section of the questionnaire was divided into four sub-sections each of which included statements on shared leadership, relationship conflict, task conflict and team innovation. Lastly, the fourth section included demographic questions and provided the respondents with the opportunity of receiving information on further research as well as the possibility of providing general comments. The full questionnaire can be found in Appendix B.

Table 4.7: Questionnaire structure, wording and supporting literature

Section	Objective	Questions	Question and variable type	Supporting literature
1.0 Management Consultant Information	- Identify management consultants working backgrounds. - Gain information on organisation size, formal position and specialisation.	Consultancy questions (8)	- Multiple choice (one option - 4; multiple options - 3);	De Jong and Van Eekelen (1999), O'Mahoney and Markham (2013)
2.0 Consultancy Teamwork	- Identify type of teamwork conducted by management consultants. - Identify team characteristics and SL use.	Teamwork questions (9)	- Multiple choice (one option - 7; multiple options - 1) - Open-ended (1)	Bligh et al. (2006), Ingvaldsen and Rolfsen (2012)
3.1 Shared Leadership (SL)	- Assess level of shared leadership reached during teamwork. - Identify client characteristics.	- SL statements (8); - Client characteristics questions (1)	- 5-point Likert-type scale (7 items); - Multiple choice (one option - 2)	Wood (2005), Gupta et al. (2010)
3.2 Relationship Conflict (RC)	- Assess level of relationship conflict during teamwork.	- RC statements (4)	- 5-point Likert-type scale (4 items)	Jehn (1995)
3.3 Task Conflict (TC)	- Assess level of task conflict during teamwork.	- TC statements (4); - Project characteristics question 1; - TC phase statements (4)	- 5-point Likert-type scale (4 items); - Multiple choice (one option - 1); - Multiple choice (one option - 4)	Jehn (1995)
3.4 Team Innovation	- Assess level of innovation during teamwork	Innovation statements (6 items); -Project quest. (1)	5-point Likert-type scale (one option - 6); (multiple - 1)	Drach-Zahavy and Somech (2001)
4.0 Demographics and further characteristics	- Identify demographic characteristics of the sample.	Questions (5)	Multiple choice (one option - 3) (multiple answers - 2)	

Regarding the measurement of perceived shared leadership, a seven-item shared leadership scale was used which included three interrelated shared leadership behaviours such as idealised influence (e.g., 'Irrespective of job titles used, all members were considered equal'), inspirational motivation (e.g., 'Each team member had the opportunity to participate in the decision making of the team') and teamwork encouragement (e.g., 'Team members encouraged each other to work together with other members') (Gupta et al. 2010; Jung and Sosik 2002; Wood 2005). Similarly to Gupta et al. (2010) the scores were averaged across all items to measure an overall shared leadership score. Regarding the level of perceived relationship conflict by management consultants the four-item scale from Jehn (1995) was adapted and included in the questionnaire (e.g., 'There was no tension among members of the team.').

Similarly, to measure task conflict, the Jehn (1995) four-item scale (e.g., 'Members of the team talked through disagreements about this team project.') was adopted. Perceived innovation was measured using a six-item scale (e.g., 'The team developed innovative ways of accomplishing work objectives.') developed by Drach-Zahavy and Somech (2001). Cronbach's alpha values were calculated for each scale to measure internal consistency and thus the extent to which the items 'hang together', as discussed later in this study (James et al. 1993).

In order to control for conflict that could have arisen from the size of the team in which the management consultant was working, team size was measured. A question on functional diversity was included in order to test the influence of the management consultant's team having different areas of expertise. Furthermore, meeting time was measured by asking how long approximately meetings lasted as well as their frequency. Team tenure was measured through a question regarding the length of the project until completion. Questions regarding the client included one regarding the size of the client using the EU definition of sizes of micro, small and medium sized enterprises (European Commission 2003). Furthermore, management consultants were asked to provide details regarding the area of focus of the project.

In terms of the rating instrument, Likert-type scales were used for measurement of items for shared leadership, relationship conflict, task conflict and innovation. According to Likert (1932, p. 9) these types of scales are a technique for measuring attitude, and thus the 'relation of persons viewed as the expression of, or as affecting, feeling, opinion, intentions'. In terms of the number of response categories the study adhered to the original work of Likert (1932) in which five-point scales were used. Past studies have not found reliability and validity to be significantly influenced by the number of scale points although most studies agree that too few response categories, such as two or three result in the least reliable scores (Clarke III 2000; Jacoby and Matell 1971). Moreover, Schutz and Rucker (1975, p. 323) provide evidence that 'the number of available response categories does not materially affect the cognitive structure derived from the results'. Thus, a larger number of scale points than five was not required and five-point Likert-type scales were used, similar to other studies researching conflict and innovation (De Dreu and West 2001; De Dreu 2002).

With the use of five-point Likert-type scales, it is apparent that the decision was made to include a neutral point in the scales, which was termed 'neither disagree nor agree'. Studies that have examined the omission or inclusion of a mid-point on a rating scale have produced differing results (e.g. Armstrong 1987; Guy and Norvell 1977). Nevertheless, respondents might feel

neutral rather than agreeing or disagreeing when providing an answer to a statement and this is of interest for this research. Forcing respondents into one or the other direction might introduce respondent bias, although there has been varying research on whether respondents would tend towards a negative or a positive response (Garland 1991). Furthermore, a review of past studies on conflict that used five-point Likert-type scales (e.g., Amason 1996; Chen et al. 2012) as well as shared leadership studies (e.g., Acar 2010; Bergman et al. 2012) demonstrated that these provided reliable results. No bias was identified to have occurred through their choice of scale. Thus, by reviewing the evidence from past studies and due to the nature of this study, five-point Likert-type scales were identified as most appropriate.

Items relating to the theoretical constructs were worded as statements. Some items were negated or reversed to ensure that the respondents would not simply repeat their response to different items. However, items that included double negatives were avoided. The inclusion of reversed and/or negated items has been criticised as affecting validity and reliability of a scale (Colosi 2005; Woods 2006). Nevertheless, recent research has also demonstrated that although the use of reversed and negated items might be error prone, eliminating them completely could cause a false sense of security by 'masking non-substantive responding' (Weijters and Baumgartner 2012, p. 746). Thus, Weijters and Baumgartner (2012) advocate the inclusion of reversed and regular items in the questionnaire. Amongst others, they recommend the use of five-point rating scales, cautioning the researchers to read each item carefully, to disperse items throughout the questionnaire and to eliminate adjectival and adverbial modifiers (e.g., considerable, great, very, strongly) from items.

4.4.4 Piloting

After a draft had been developed, two management consultants were interviewed while they were completing the questionnaire. This allowed the researcher to clarify whether all questions or statements were understandable as well as to identify potential confusion with parts of the questionnaire. These preliminary 'interviews' were used to improve and refine the questionnaire and to produce a final draft. The online SurveyMonkey questionnaire was then piloted with a selection of 12 experienced management consultants, both self-employed and working for companies, selected by convenience. This pilot allowed for improving the quality and efficiency as well as feasibility of the survey. The respondents were given the opportunity to comment on the questionnaire and to provide suggestions for improvement.

Following an analysis of results gained from this pilot, in terms of the content of the questionnaire and thus wording of statements and questions, no issues were identified that required further improvement of the questionnaire prior to the main study being conducted. Cronbach's alphas were at acceptable levels with 0.78 for shared leadership, 0.95 for relationship conflict, 0.7 for task conflict, and 0.86 for innovation scales. Thus, internal consistency of items was provided for each scale, as values above 0.6 are deemed acceptable (George and Mallery 2003; Hair 2006).

In terms of comments made by respondents, one respondent suggested making important parts of statements more visible by underlining wordings and placing them in bold letters, which was subsequently implemented. Furthermore, it was suggested that a question asking management consultants whether they expected to work in a shared leadership team in the near future be included. Thus, a question on whether the management consultant would expect to work within a shared leadership team in the next three months was added to the final version of the questionnaire. This was easy to implement and did not impact the design of the rest of the questionnaire.

4.4.5 Data Collection Process

A final version of the questionnaire was created on SurveyMonkey and a link to the online survey was distributed via email to the management consultants through the Institute of Consulting. The email contained information about the research and the background of the researcher and invited recipients to access the survey through a link. The online survey was opened in January 2014 and closed in March 2014. A total of **372** of responses were received through the online survey in the main study, which constitutes a response rate of **16%**. Since a minimum of 238 responses was required for the study, this constitutes an adequate response rate in order to achieve the aims of the quantitative part of the study. The survey data were downloaded directly from SurveyMonkey as Excel and SPSS software files for statistical analysis.

4.4.6 Data Analysis Process

The collected survey responses were analysed using the software IBM SPSS Statistics 21. Data analysis included descriptive statistics, examining the correlations between the variables and hierarchical regression analysis. In order to examine the relationships between variables it was clear that the data had to be tested for positive or negative associations. According to Easterby-Smith et al. (2012), a positive association between two variables includes high scores on one variable occurring with high scores on the other. A negative association on the other hand would

be shown when high scores on one variable corresponded with low scores on the other. To determine the strength of relationship between the variables of shared leadership, task conflict and innovation, Pearson's product moment correlation coefficient (r) was used. The value of Pearson's r could range from -1 to +1, where values close to 1 would represent a strong correlation. However, it was clear that correlations between variables did not imply causation and displayed non-dependent relationships.

In order to predict the value of one or more variables independent variables on a dependent variable and thus to examine a significant relationship, hierarchical regression analysis (HRA) was required. This type of multiple linear regression allowed for the prediction of the innovation variable through several predictor variables (Easterby-Smith et al. 2012). Furthermore, Howell (2012) emphasises that multiple regression is most commonly used to understand relationships between variables rather than to make predictions, which applies to this study. Hierarchical regression analysis allows for several independent variables and one dependent variable to be included in a predetermined order, while these variables can be interval and normal in nature (Leeper 2000). According to Easterby-Smith et al. (2012), this is what the model for two or more independent variables would look like:

$$Y = a + b_1X_1 + b_2X_2 + \dots + e$$

The symbol Y represents the estimated value for the dependent (outcome) variable and X_1 and X_2 the predictor or independent variables, whereas 'a' would represent the intercept and 'b' the regression weight, and thus how much Y changes for each unit of change in X . Finally, 'e' would be a residual. For this research three hierarchical regression models were constructed. Model 1 included relationship conflict as dependent variable (Y) and functional diversity, team size and shared leadership as independent variables (b_1X_1 ; b_2X_2 ; b_3X_3). Model 2 included task conflict as dependent variable (Y) and functional diversity, team size and shared leadership as independent variables (b_1X_1 ; b_2X_2 ; b_3X_3). Lastly, Model 3 included the most variables with innovation as dependent variable (Y) and team size, functional diversity, shared leadership, task conflict and relationship conflict (b_1X_1 ; b_2X_2 ; b_3X_3 ; b_4X_4 ; b_5X_5) as independent variables. Results for the hierarchical regression analysis were calculated using SPSS and are displayed and discussed in the quantitative data analysis section of this study.

4.5 Qualitative Element 2 - Interviews

The Qualitative Element 2 of this study included semi-structured interviews which were conducted with a sub-sample of 25 relevant management consultants from the survey. The aim of the interviews was to provide a more in-depth understanding and exploration of the underlying issues regarding the relationship between shared leadership, conflict and innovation, as identified in the survey. Furthermore, the interviews also served as a method of collecting additional information on management consultants' work, potentially relevant to the outcomes of the study.

4.5.1 Sampling and Data Saturation

Due to the sequential explanatory nature of this study, with a qualitative approach following a quantitative approach, the sampling frame for the qualitative study consisted of accessible respondents from the quantitative survey. As described by Teddlie and Yu (2007), information from the first sample was therefore required to create the second sample. Thus, a sub-sample was drawn from the survey containing management consultants who agreed to be contacted regarding participation in further research in the survey. Not all management consultants provided their contact details in the survey and potential participants had to be willing and available to the researcher for conducting an interview. Thus, a non-probability sampling approach rather than a random form of sampling was employed, which is usually the case for qualitative samples (Hesse-Biber 2010). Since the purpose of the qualitative study was not to generalise statistically from the sample of management consultants taken from the survey but rather to make analytic generalisations, a convenience sampling approach was deemed appropriate.

The adequacy of the sample size was established by interviewing to the point of redundancy, commonly known as data saturation. This approach is in line with the causal mapping method, which is further explained in the qualitative data analysis section. As with other methods of qualitative data analysis, the causal mapping technique ultimately requires data saturation to be achieved and the adequacy of the sample to be established (Armstrong 2005). In causal mapping, this represents a point where additional interviews with management consultants do not result in the identification of further concepts (Armstrong 2005; Nadkarni and Nah 2003). The sample size for the qualitative element of this research was therefore not determined beforehand, but became clear after the interviews had been completed and coded. Armstrong (2005) emphasises one of the challenges in using this approach being that the data saturation point cannot be calculated until after the interviews have been conducted and the classification

scheme has been developed. This was reached with 18 participants in her research. Similarly, sequential mixed methods studies examining shared leadership collected between 20 and 30 interviews (Steinheider and Wuestewald 2008; Taylor et al. 2011). It was therefore estimated that 25 interviews would be sufficient to achieve the required point of redundancy of saturation of concepts.

As will be explained in more detail in section 4.5.5, concepts were developed from statements made by the interviewed respondents. Following the method demonstrated by Armstrong (2005), the number of concepts developed in each individual interview was reviewed. As displayed in **Figure 4.5**, the total number of concepts was calculated for the first interview and displayed on the Y-axis, whereas the interview number was displayed on the X-axis. For the second interview, the number of new concepts that evolved was calculated and added to the number from the first interview. This process was continued until all interviews were reviewed and the total number of concepts that had evolved was calculated. As can be seen, following participant number 20, no new concepts emerge through the analysis of the interviews which is considered the point of redundancy (Armstrong 2005). In the case of this research, the total number of unique concepts that emerged was 190. As no new concepts evolved after the 20th interview or participant, it is demonstrated that the chosen sample size was adequate for this research.

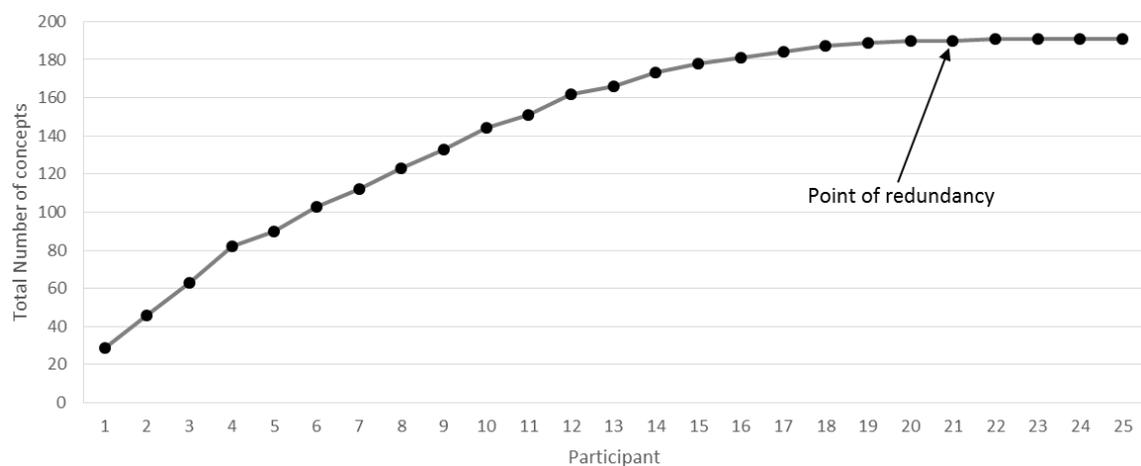


Figure 4.5: Saturation of interview data as achieved in this research

4.5.2 Interview Design

The interview guide was designed while keeping the questions from the survey in mind as information on predefined topics was sought. However, the use of open-ended questions would allow for a more in-depth exploration of the underlying relationships between the concepts. Bryman (2012) emphasises the importance of interviews in learning how research participants

view their social world. This approach is in line with the overall objective of analysing the role that task conflict plays in developing innovation in shared leadership management consultant teams.

The design of the interviews tended to be semi-structured, which allowed the researcher to cover specific topics, and also allowed the use of prompts to gain further information. Wengraf (2001) emphasises the importance of the prepared questions being sufficiently open, allowing subsequent questions to be improvised in a careful and theorised way. The advantage of this approach, compared to unstructured or structured interviews, was that, although this approach gave interviewees leeway in their response, management consultants would all be asked similar questions in a similar structure (Bryman 2012). Thus, it was important that the interviews involved some structure, as the investigation focused on very specific issues around the concepts of shared leadership, conflict and innovation in management consultants' teamwork. Therefore, a guide provided some structure, but ensured that respondents could be expansive in their responses.

As mentioned, some guidelines were required for the interviews, while allowing the conversation to flow naturally by changing the order of questions and using prompts to gain additional insight. Berg (2001) emphasises the importance of determining the nature of the investigation and listing the broad categories relevant to the study. Furthermore, he notes that researchers should develop sets of questions relevant to each category (Berg 2001). Following this, an 'aide-mémoire' was developed comprising four sections (see Appendix C): (1) Introduction, (2) Management consultant work, (3) Shared leadership, (4) Conflict, (5) Innovation and (6) Closing. The interview was structured as follows:

(1) Introduction: The researcher introduced himself and briefly described his background. Each participant was provided with information about the nature of the study and was given the opportunity to ask questions regarding the research and interview procedure. The necessity to audio-record the interview was explained to participants and, for which, their written consent was obtained. Additionally, the researcher explained the importance of data security and anonymity of participants to the study. This information was provided to the participants in writing.

(2) Management consultant work: Management consultants had provided demographic information and some work information in the survey. However, the opening questions

of the survey allowed for developing rapport, thus putting the participant and interviewer at ease with each other. The information elicited was potentially relevant career information, but gathered in much more depth than in the survey. Furthermore, it was seen as important to demonstrate an interest in the participant's management consultant background.

(3) Shared leadership: Questions regarding shared leadership and those following, concerned the central focus of the study and were geared towards eliciting specific desired information (Berg 2001). They focused on why shared leadership was implemented, advantages and disadvantages of the approach, as well as on the participant giving examples of recent teamwork conducted.

(4) Conflict: Questions regarding conflict were concerned with participants' experience of differences of ideas and disagreements in their teams as well as how they could be linked to project outcomes and project stages.

(5) Innovation: The innovation section focused on participants' personal experience of innovation in teams, factors considered relevant for innovation and the relevance of innovation in the context of shared leadership.

(6) Closing: Finally, participants were thanked. Interested participants were given the opportunity to ask questions regarding the research. It was also enquired whether participants would potentially be interested in participating in further video research with their team and a relevant information sheet was passed on.

4.5.3 Piloting

Similar to the questionnaire, the interview was piloted using a sample of three experienced management consultants. According to Kim (2011) this allows for receiving feedback from participants and can help in modifying interviews. What was important for this study is that the pilot study could provide an understanding of the meaning that phenomena and events had to actors and thus how the participants understood the concepts and theories under study (Maxwell 2008). Furthermore, conducting the pilot allowed an evaluation of which interview techniques supported the objectives of the study and which potentially detracted (Seidman 2012). The management consultants with whom the interviews were piloted were all working as full-time management consultants in the private sector and were chosen due to their

availability. The pilot study was conducted by sending the three management consultants the participant information sheet, the consent form and a sample of possible interview questions via email. Instead of providing detailed answers to the questions, management consultants were requested to comment on the clarity of the interview questions and to provide any other thoughts which they may have. Following this procedure, the management consultants felt that questions were straightforward and no complications were identified. Therefore, no changes were made to the interview strategy, which was subsequently adopted for the main study.

4.5.4 Interview Process

As discussed, 25 interviews were conducted with individual respondents from management consultants who responded to the questionnaire. All participants interviewed worked in senior management positions of the management consulting profession. Similarly to the survey, slightly more than half of management consultants interviewed were sole-proprietors. Furthermore, as can be seen in **Table 4.8**, all had high levels of consulting experience with diverse areas of specialisation, and most spent a large percentage of their working life in teams. Prior to the interview, each individual management consultant was investigated by the researcher online, regarding information about their company through company websites and reports. Naturally, their survey responses were also closely observed by the researcher. This allowed for good preparation for each interview as well as for cross-checking information in order to reduce bias.

All interviews were conducted face-to-face allowing for a more personal approach rather than conducting them on the phone, or simply paper-based. According to Openakker (2006) this method is highly advantageous in taking social cues such as voice, intonation and body language into account, providing the interviewer with a lot of additional information that can be added to the interviewee's verbal answer. Participants were first informed about the nature of the study and then asked to sign a consent form of which they were also handed a copy (see Appendix D). As shown in **Table 4.8**, the interviews lasted between 40 and 60 minutes. With each interviewee's permission obtained, all interviews were audio recorded. Some interviewees provided documents such as information sheets about their company. The semi-structured nature of the interviews provided some guidance to the interview process but also enabled more open and more personal discussion. Certain reactions or comments of the consultants during the interviews thus enabled secondary questions. The interview questions focused on the individual perceptions of management consultants of their teamwork as discussed in the survey. This provided more in-depth and 'rich' data which allowed for an interpretation of how engaged

the individuals felt in shared leadership in the team, how they personally experienced team task disagreements and how they believed task conflicts led to an increase in team innovation. Following each interview, the audio data were transcribed into written text.

Table 4.8: Individual information about interviewees

MC	Age	Consultants in org.	Experience in years	Specialisation*	Work in teams	Interview duration	Type of data
MC1	65-74	Sole-proprietor	10 or more	O, T&C, QM	1-9%	58 min	Audio, text, docs
MC2	55-64	100 or more	5-9	GM, M&S, T&C, S, T	25-49%	40 min	Audio, text
MC3	65-74	100 or more	10 or more	S, T	25-49%	46 min	Audio, text, docs
MC4	55-64	6-8	10 or more	GM, T&C, S, SM	10-24%	50 min	Audio, text
MC5	65-74	4-5	10 or more	GM, F, HR, L, M&S, T&C, S, T	50-74%	50 min	Audio, text
MC6	45-54	Sole-proprietor	10 or more	GM, HR, M&S, T&C, S	90-100%	41 min	Audio, text
MC7	35-44	10-49	10 or more	T&C	75-89%	40 min	Audio, text
MC8	55-64	10-49	10 or more	T&C, S, T	90-100%	56 min	Audio, text
MC9	55-64	Sole-proprietor	10 or more	GM, T&C, S	50-74%	46 min	Audio, text, docs
MC10	55-64	Sole-proprietor	10 or more	F, T&C	90-100%	46 min	Audio, text
MC11	55-64	Sole-proprietor	10 or more	GM, HR, O, T&C, QM	1-9%	48 min	Audio, text
MC12	55-64	2-4	10 or more	GM, HR, T&C	1-9%	47 min	Audio, text
MC13	65-74	Sole-proprietor	10 or more	GM, M&S	25-49%	54 min	Audio, text
MC14	55-64	Sole-proprietor	10 or more	GM	10-24%	40 min	Audio, text
MC15	65-74	10-49	10 or more	GM, O, T&C, S	50-74%	45 min	Audio, text
MC16	75+	10-49	10 or more	GM, M&S	50-74%	56 min	Audio, text, docs
MC17	55-64	Sole-proprietor	10 or more	GM, M&S, T&C, S	50-74%	50 min	Audio, text, docs
MC18	65-74	Sole-proprietor	10 or more	GM, F, O, T&C, QM, S	1-9%	42 min	Audio, text
MC19	55-64	Sole-proprietor	10 or more	S, T	25-49%	51 min	Audio, text
MC20	55-64	Sole-proprietor	5-9	GM, M&S, O, T&C, S	90-100%	40 min	Audio, text
MC21	55-74	Sole-proprietor	10 or more	GM, M&S, T&C, S	25-49%	43 min	Audio, text
MC22	55-64	Sole-proprietor	10 or more	GM, M&S, T&C, S	10-24%	59 min	Audio, text
MC23	35-44	10-49	10 or more	T&C	75-89%	42 min	Audio, text,
MC24	35-44	10-49	5-9	T&C, S	75-89%	45 min	Audio, text
MC25	45-54	Sole-proprietor	10 or more	GM, HR, T&C, S	25-49%	40 min	Audio, text

*General Management = GM; Finance = F; Human Resources = HR; Legal = L; Marketing & Sales = M&S; Operations = O; Transformation & Change = T&C; Quality Management = QM; Strategy = S; Technology = T

4.5.5 Data Analysis Process

4.5.5.1 Causal Mapping

For analysing the qualitative interview data, the causal mapping technique was employed. Importantly, it is now widely accepted that qualitative research methods can be used to identify causal relationships and develop causal explanations (Maxwell 2004). The objective of qualitative research is to be meaningful and to provide theoretical generalisation and understanding of social units. Similarly, as regards causal mapping, the belief patterns and action tenancies of management consultants are of interest. With such maps being defined as ‘an aggregation of interrelated information’ (Vo et al. 2005, p. 144), links between concepts represent cause-effect relations, capturing the structure of human cognition from texts (Narayanan and Armstrong 2005). A concept can be defined as a perceived regularity in events or objects, or records of events or objects, designated by a label’ (Novak and Cañas 2008, p. 1).

The causal mapping technique is useful ‘for addressing situations where thinking - as an individual or as a group - matters’ (Bryson et al. 2004, p. xii). Furthermore, causal mapping is employed when studying cognition and cognitive structures of individuals within a field, often from interview generated text (Narayanan and Armstrong 2005). According to Markóczy and Goldberg (1995, p. 305) causal mapping has been used for ‘gaining insight into the belief systems of managers’. The technique is sometimes named cognitive mapping, due to the thinking or ‘cognition’ of an individual being mapped (Bryson et al. 2004). Laukkanen (2012, p. 2) further specifies cognition as ‘social actors’ knowledge and belief, their formation, attributes and impacts in social contexts such as organizations or cultures’. Bryman and Bell (2007) believe that reflective thinking about a problem that enables steps to be taken towards its solution is the primary function of what they term ‘cognitive mapping’. In this study the term causal mapping is used. Although the term is often used interchangeably with concept mapping and cognitive mapping, its focus lies on influences between concepts, which is of main relevance for this study.

Causal knowledge, and thus an understanding that phenomena exist and how they influence each other, is essential for predicting as well as influencing purposes (Laukkanen 2012). According to Laukkanen (2012, p. 5) it is essentially ‘about how some actors perceive a domain’s or issue’s structure and internal causal influence mechanisms’. Furthermore, Laukkanen (2012) emphasises that these cognitive contents can be captured, represented and analysed through nodes and arrows in causal maps. Compared to a textual description this gives the advantage

that a holistic understanding of belief patterns and their implications is supported. Since data are interpreted differently by each and every person, problems will be understood in different ways. Examining the cause-effect relationships that participants attribute to issues, such as conflicts in their teams, is imperative for this research. Causal mapping enables a focus on management consultants' knowledge and beliefs as regards the main concepts as well as the underlying mechanisms. Casual maps allow for:

- Summarising information;
- Organising and revealing patterns in data;
- Making sense of data and pattern; and
- Evaluating data and patterns. (Bryson et al. 2004, p. 299)

According to Bryman and Bell (2007, p. 431) the interviewer should explore 'why concepts are important to the individual and how they are related'. Drawing up a cognitive map then allows the identification of how concepts are related to each other and recognises an overall structure. **Figure 4.6** showcases the steps of the causal mapping process which, in simple terms, can also be described as:

1. Identifying causal statements;
2. Constructing raw causal maps;
3. Developing a coding scheme; and
4. Recasting raw maps into revealed causal maps. (Narayanan and Armstrong 2005)

The newly developed map can finally be analysed and provides rich insights into the meaning embedded in the map. Specialist academic software such as *CMap* or commercial software such as *Cognizer™* enables displaying and analysing of causal maps (Bryman and Bell 2011). For this research, the non-commercial academic software *CMap* was used due to its support of both qualitative inductive and quantitative hybrid comparative causal mapping (CCM) approaches (Laukkanen and Eriksson 2013).

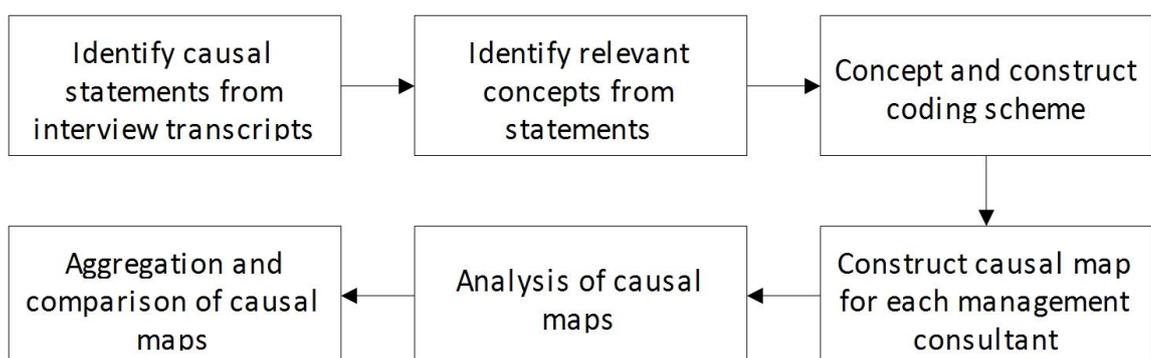


Figure 4.6: Stages of causal mapping process (adapted from Armstrong et al. (2010))

According to Hodgkinson and Clarkson (2005) individual causal maps can be analysed along their content and structure. Laukkanen (2012) name idiographic and comparative as causal mapping types. While idiographic causal mapping focuses on the ideas of a single person or a collective, comparative cause mapping (CCM) allows for comparing several individuals' knowledge patterns. The technique is mostly used for qualitative studies with a small or medium number of cases while using original natural data acquired through interviews. CCM is concerned 'with eliciting and representing people's subjective belief systems about what entities and causal relationships they perceive in a given domain or issue' (Laukkanen and Eriksson 2013).

For this research, the causal knowledge and beliefs of individual management consultants as expressed in individual interviews are of importance. Thus, for analysing collective beliefs using the CCM method, common elements among different causal maps that link participants' beliefs require identification. Similar terms are then identified and standardised and incorporated within a higher-level map which depicts the collective view of participants (Hodgkinson and Clarkson 2005; Nadkarni and Nah 2003). As a first step, maps of causal statements as expressed in individual interviews by management consultants are constructed. Following this step, these maps are then compared to create a more holistic picture. Laukkanen (2012, p. 6) emphasise that all CCM-methods must solve three interrelated tasks:

1. Eliciting substantively valid and relevant causal data that also enable valid comparison of respondents' expressed beliefs;
2. Comparison of respondents' expressed causal ideas, embedded in the data, to determine their similarity or dissimilarity; and
3. Converting the raw data into analysable, causal map data and appropriate presentation forms.

According to Laukkanen and Eriksson (2013, p. 127) key to the comparison of semi-structured CCM, as conducted in this study, is 'studying the emerging concepts and causal belief patterns' as well as 'analysing their meanings and action implications, as guided by the research questions'. This requires an 'interpretative analysis of the causal maps' substantive contents, understood as representations of how the actors themselves conceptualize the domain and its mechanisms' (Laukkanen and Eriksson 2013, p. 127).

4.5.5.2 Coding Process

Each interview was mapped from the causal statements made by the interview participants. Since the interviews revolved around the core concepts of shared leadership, conflict and innovation, these concepts and sub-concepts were listed in a concept dictionary beforehand, as they had been found within the literature and discussed in the conceptual framework. However, much of the coding was done inductively, with concepts emerging in an iterative process (Laukkanen and Eriksson 2013). Following each interview, newly emerged concepts were added to the concept dictionary, or 'pool of concepts' and could be drawn on for the following analyses of interviews, thus providing similarity for later comparison of maps (Markóczy and Goldberg 1995). This participant to theory centred CCM approach allowed for building on earlier theory while also creating new categories embedded in the elicited data (Laukkanen and Eriksson 2013). As regards to ensuring validity of the method, validity in this qualitative sense referring to the credibility and transferability of results, the three aspects of validity named by Laukkanen and Wang (2015) of a) authenticity, b) sincerity and c) accuracy/ truthfulness were addressed in this study through:

- a) Documented transcripts of interviews with management consultants and the ability to demonstrate the origins and creations of this data;
- b) Clear instructions for management consultants and trust as well as confidentiality between researcher and participants, providing data that reflected respondents' knowledge. This was demonstrated through the emergence of many shared concepts and causal beliefs among participants; and
- c) The factual correctness of causal statements which, due to the study concerning social phenomena and, as emphasised by Laukkanen and Wang (2015), are varying probabilistic tendencies, and are, thus, relative and volatile.

The coding of interviews was similar to the approach of Landoli and Zollo (2005) who, as a first step, identified and listed relevant concepts and in a second step analysed explanatory relationships among concepts. This example quote from an interview demonstrates how concepts were identified and interlinked:

'We would say that in our leadership team of three people we share the leadership. But everybody is accountable for the decisions they take. Any decisions taken - although we all might agree with it - one person is accountable for those things.' (MC7)

The coding would thus involve concepts (A) 'shared leadership' (B) 'individual decision-making' and (C) accountability. Thus, (A) shared leadership —requires—> (B) individual decision-making.

The word 'requires' would be used as the linking phrase and placed between the arrow leading from 'shared leadership' to 'individual decision-making'. Following that, (B) individual decision-making — requires clear—> (C) accountability. The statements causally linked contained two concepts (A → B; B → C), sharing the concept 'B' (A → B → C).

In order to create more comprehensive maps of the interviews, some of the concepts shown were linked through phrases such as 'with', 'requires' or 'toward'. This was done to ensure that the researcher was provided with a more detailed depiction of the interview. Furthermore, it was essential to include important concepts linked to the main concepts. As described by Laukkanen and Eriksson (2013), this information can be displayed in data tables or in causal maps consisting of nodes (referring to concepts in the focal situation) and arrows (depicting the causal relationships between concepts) connecting them. Thus, as discussed, to clarify the relationships in the graphical depiction, linking phrases were placed between most concepts. The relationships between concepts as detected from the interview transcripts were first placed on a coding sheet that contained the number of concepts, participant ID, the location of the statement in the interview transcript, the cause concept, the effect concept and the linking phrase. These coding sheets then aided in the graphical construction of the causal maps.

Following the development of each coding sheet, using the specialist concept mapping software *CMap*, a causal map of each individual interview could be constructed. Each map contained concepts from the concept dictionary as well as new concepts which might have been identified from the interview transcript. All statements were collected in the causal mapping coding sheet. The maps were all similarly constructed with the three main concepts surrounded by other concepts and placed in similar locations on each map with shared leadership at the top, innovation to the right and conflict at the bottom, as it was clear that the interview content evolved around these concepts. This not only allowed for simpler cross-comparison between maps, but also provided some similarity to the way the maps were constructed. **Figure 4.7** displays an example of a concept map developed from a coding sheet (see Appendix E).

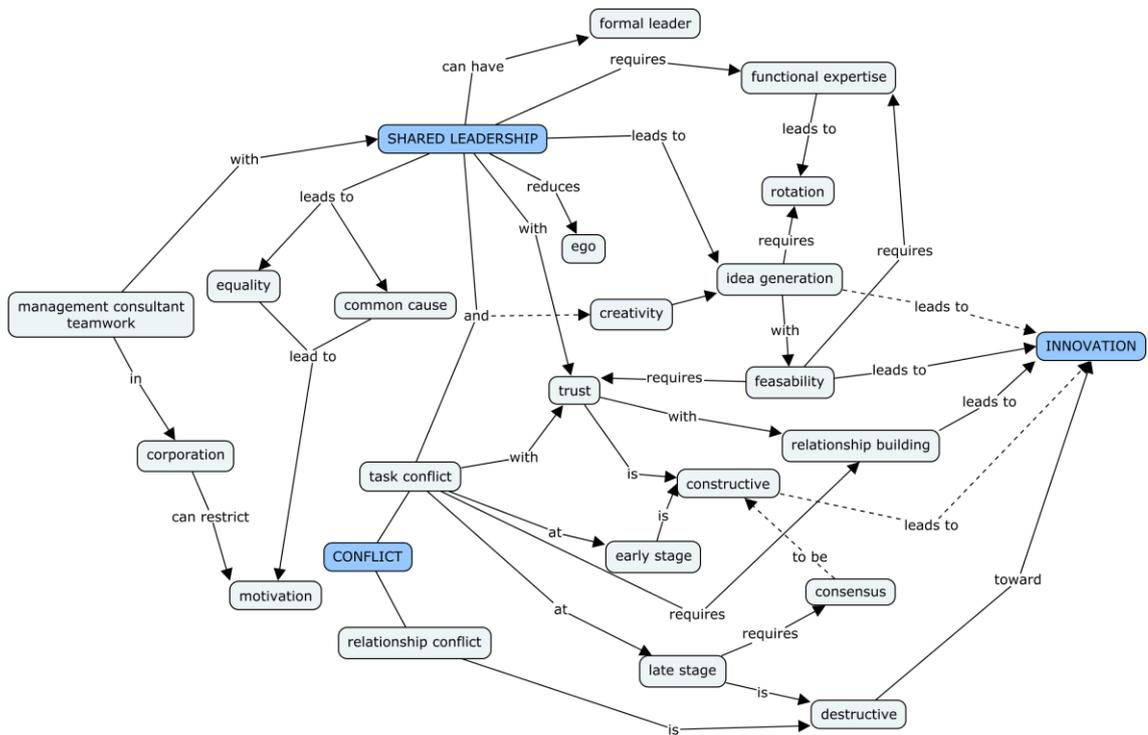


Figure 4.7: Causal map for interview participant 17

Following the construction of causal maps for each individual interview, the maps were first compared to merge concepts that had the same or similar meanings and finally to construct an overall causal map. According to Hodgkinson and Clarkson (2005), to accomplish this, participants' judgements of common causal relations can be added. Furthermore, although such an aggregate map does not necessarily reflect the views of every individual, it can be insightful as it enables the detection of overall group tendencies in terms of to what extent a concept is influenced by others. The core processes of the aggregate method involve joining and merging maps through common concepts. According to Vo et al. (2005) it is good to pool information from participants' individual maps when groups are relatively homogeneous, as is the case with the management consultants interviewed in this study. This type of mapping allowed for recasting the individual maps into an aggregate collective causal map, by merging concepts and calculating most common propositions in the software, depicting typical thought patterns shared by participants (Laukkanen and Wang 2015; Nelson et al. 2000).

4.6 Qualitative Element 3 - Observations

Following the interviews with management consultants, real-life business meetings of a management consultant team were observed and video-recorded over a period of several months. The advantage of collecting such visual and audible data was that they enabled greater evidence and meaning, by observing whether occurrences from the survey and the interviews would be present within a management consultant team in action. Furthermore, by collecting video data, the researcher was not only present at the meetings but had proof of his presence. The observation of one relevant team over a longer period of time thus provided in-depth knowledge regarding the processes in this team, in particular regarding the development of innovation. Therefore, the overall aim of employing video to capture a management consultant team's meetings, was not only to support the results from the previous methods of data collection, but to see what the data could tell further.

4.6.1 Sampling and Access

As regards sampling, the team was chosen due to its relevance to the study and due to its willingness to be video-observed. This adheres to the process of theoretical sampling which, according to Wilson and Chaddha (2009, p. 550), 'is crucial to theory testing and very appropriate for ethnographic research: the selection of natural cases that include the necessary conditions for the application of theoretical arguments that steer the research and are used to interpret the findings'. The relevance of the team was determined both through the survey and interview responses of one of the management consultants. In the survey, this consultant indicated that there were high levels of task disagreements in his team, which shared leadership functions, and the team also scored high on innovative team outcomes. Furthermore, the interviewee indicated verbally that his team tended to have high levels of disagreement:

'What is he going to think if you keep coming up with ideas that are tangential to the project objectives. And he says "ahh, I think the client really likes it" and I say "I don't think he does, I think you're going to worry him, you're going to rattle him". And so we have a lot of this - we really disagree with each other.' (MC5)

In terms of team innovation, the interviewee indicated that there were high levels of creativity and innovation in his team:

'We've got too much of it, we've got too many ideas actually. Avalanche of them. We're all ideas people and it's really difficult getting it under control. Because I mean if he's taking you on to find something quite singular and you keep popping up and say "hey, I've had another idea, what about this and what about that" the guy gets quite rattled by it. And so controlling innovation actually is a challenge for us, we have to keep saying "well, hold on a minute".' (MC5)

Therefore, these statements in combination with the survey responses provided an indication of the likelihood for the researcher that both conflict and, in particular, task conflict, as well as innovation, would be observed in this management consultant's teamwork. The team would therefore be relevant in terms of observing the relevant issues. Naturally, the willingness of the management consultant to participate with his team played a major role as regards sampling and eventually obtaining access. Although further reasons, such as, potential disruptiveness, could have played a role, the reason cited mostly by management consultants, when asked whether they would be interested in participating in team observations, was client confidentiality. Naturally, most of the consultants' work would involve work with clients, whose permission would have to be obtained as well. This, as well as the sensitivity of their work, deterred most consultants in allowing for observations of their team:

'No, not with the work that we do. As much as I would like to, it's something that is very very customer sensitive. And it's done on a very very different scale, so that's the reason for it. It wouldn't be permitted from an organisational scale.' (MC2)

'All our work is done with clients so we'd have to get the clients' permission. Because it wouldn't just be our stuff, it would be the clients' stuff as well, so that would be the sort of challenge. But you might find that a lot of our clients would say no, for confidentiality. The level we're working at with our clients. It's not the piece of paper that you sign it's more the - how do they personally, you're asking a senior level person and sometimes their view is - "actually I'm not comfortable with it".' (MC7)

Nevertheless, the researcher provided transparency in interviewing participants by explaining the process of observing teamwork and clarifying the benefits of the study. A leaflet providing a rough outline of the study as well as information regarding the benefits of participation and anonymity as well as confidentiality was provided (see Appendix F). These steps contributed toward a management consultant agreeing to allow for regular observation of his team on the condition that a non-disclosure agreement regarding confidential information would be signed by the researcher:

'Yes you can do it with us. You would obviously need to sign a non-disclosure agreement. You'd be hearing about clients and their inner secrets and so forth, obviously it's a sensitive issue because we have to sign NDAs with them. So yes I would have thought. Under the circumstances it will be fine. Probably the most useful thing for you would be to attend some of the Wednesday project meetings we have.' (MC5)

4.6.2 Observation Design

As emphasised by Patton (2014, p. 28), 'the purpose of qualitative observations is to take the reader into the setting observed' which is achieved through 'depth and detail' of the data. Furthermore, in this current research, observations allowed for a fuller understanding of the complexities of working in a 'live' management consulting team. When discussing tools of observation, it is important to consider the difference between participant observation and non-participant observation. Participation refers to the researcher being present and positively interacting with the event being observed, whereas in non-participant observation the researcher can be present but does not engage in the event. Although it is noted that the researcher may participate through his presence alone. Regarding the validity and reliability of observational data, Patton (2002, p. 567) states that the presence of an outside observer, or the fact that an evaluation is taking place, can distort the findings of the study. Looking at this study the risks, which were addressed, could be:

1. Reactions of the team members to the presence of the qualitative fieldworker;
2. Changes in the measuring instrument during the course of the data collection;
3. The predispositions, selective perceptions, and/or biases of the inquirer; and
4. Researcher incompetence (lack of sufficient training).

Apart from the subjective analysis stage (3.), video observation could lead to potential bias during the observation of consultant team meetings. As well as the researcher being present, the presence of the video recording device itself may have an effect on the unfolding interactions between participants and thus influence the teams being observed. Although observations have been conducted successfully in shared leadership studies in the past, it is important to consider the possibility that less task conflict may arise among participants when they are being observed. Nevertheless, in contrast to relationship conflicts, task conflict or task disagreement can be seen as essential for the functioning of the project team. Thus, if participants were not displaying any type of micro-conflict, the project team would be unlikely to have an adequate amount of discussions related to problem-solving.

Compared to traditional observation, the videoing of meetings does not necessarily require the researcher to be present, which can reduce observation bias. Furthermore, video recording in non-participant observation can improve the credibility of research as selective bias and memory limitations can be reduced given the ability of replaying the recording (Caldwell and Atwal 2005). It further provides the researcher with richer and more transparent data than field notes would (Shrum et al. 2005). Cotton et al. (2010) also believe that audio and video recording

in itself enables an accurate and detailed record of events and may reduce prior biases of the observer. Nevertheless, they emphasise the greater risk of reactivity in the presence of a device, as participants may act differently or be less direct or honest. This is refuted by Clarke (2011), who finds that reactivity can be reduced since, over time, participants become more accustomed to the video-camera, particularly when it is small and unobtrusive.

Thus, to minimise any potential effects the video observations may have, this current research ensured that participants had time to become accustomed to the device and the researcher. Furthermore, past research on teams has not found evidence of real-time observation generating a 'Hawthorne effect' (Dooley and Lichtenstein 2008). Patton (2002) emphasises that observation over a longer time-frame increases trustworthiness, which supports credibility both within and outside the study setting. However, different reactive responses are possible which is why 'the evaluator has a responsibility to think about the problem, make a decision about how to handle it in the field, attempt to monitor evaluator/ observer effects, and reflect on how reactivities may have affected findings' (Patton 2002, p. 568). This issue was overcome through prolonged engagement and the monitoring of behaviours of participants.

Importantly, past studies confirm the richness of video data in capturing human interactions and the context in which activities are studied (Xiao et al. 2004). In particular, Burke et al. (2011, p. 80), emphasise that observational techniques offer the possibility of observing leadership directly rather than through the 'potentially distorting lens of questionnaire or interview accounts of leadership from leaders themselves or their followers'. Video recording management consultant team meetings thus enabled the capturing of verbal data, while also allowing for the observation of visual behaviour and interaction during and after these meetings. Both forms of data played an important role when addressing the research aims and objectives and enabled a novel approach to addressing the gaps of prior research.

4.6.3 Management Consultant Team

As can be seen in **Table 4.9**, the core management consultant team consisted of three team members, two of whom were senior and highly experienced management consultants and one more junior management consultant. Furthermore, two additional management consultants joined the team for temporary support. An assistant was employed at a later stage to assist with the company's marketing and day-to-day operations and was therefore present at the final six meetings. The core consultancy team, as well as one visiting consultant, Thomas, had high levels of familiarity due to having worked together on various projects. Due to their familiarity with

the project, it became clear that the core consultancy team were more involved during the teamwork than the visiting consultants. The core project discussed at the team meetings consisted of the development and implementation of training programmes aimed at supporting organisations in developing additional streams of commercial income.

Table 4.9: Management consultant team members, functions, level and meetings attended

Name*	Function	Level	Meetings attended
Paul	- Business management - Product development - Partner engagement	Senior consultant	16
George	- Change management - Sales and marketing - Strategy	Senior consultant	16
Sarah	- Marketing - Client management	Junior consultant	16
Thomas	- Finance - Strategy	Senior consultant (visiting)	5
Anne	- Operations assistant	Assistant (employed later)	5
Claire	- Business coaching	Senior consultant (visiting)	3

*All names changed to maintain anonymity of participants

4.6.4 Observation Process

The management consultant team had weekly team meetings during which the development of a novel management consultant programme was at the core. The researcher would arrive shortly before the meeting and sit quietly in a corner of the room, so as not to disturb the interaction of the team members. A small digital video camera was quickly and quietly placed in the same corner of the room, next to the researcher, at the start of each meeting. A tripod was not required. The state-of-the-art digital camera was a 'Canon LEGRIA Mini Camcorder', battery driven and measuring no more than 76 x 22 x 96mm, making it very small and unobtrusive. The recordings were made in high definition (HD; 25p: 1920x1080, 24Mbps), thus easily capturing subtleties, such as facial expressions. The data were digitally stored on a Micro SD card in MP4 format, enabling simple transfer to a computer for analysis. Furthermore, the specialist, 160° wide angle lens allowed for all team members to be captured on video, even when sitting further apart in the meeting room.

The researcher himself was not captured in the video. The integrated microphone provided high quality audio data, capturing conversations in the room with ease. Material displayed and discussed on the large, flat-panel, TV screen of the meeting room was also captured. Naturally, the participants were aware that the video recording was being made and had each signed a consent form agreeing to the observation of their professional activity, including video

recording. The consent form further outlined issues such as voluntary participation, the procedure as well as confidentiality and data security. Participants were also aware that they could stop the video-recording at any time (see Appendix G).

Regarding the presence of the researcher and the camera potentially influencing the behaviour of the participants, such an effect was not directly observed. Due to the camera being small and battery run, it could be placed discretely within seconds, not disturbing the meeting or making participants too aware of the recording. This ensured that the camera was largely ignored by participants and evidentially never commented on. Furthermore, the researcher was never asked to turn off the video camera, as occurred with Clarke (2014) when conflict in a team of entrepreneurs was being observed. After two or three meetings, the researcher felt that the participants had become accustomed to him and his presence. However, it could be argued that the researcher detaching himself completely from the research participants was not possible, as this would have alienated participants. Therefore, although the researcher's presence was ignored throughout the meetings, the researcher would chat to the participants before and after the meeting which had the benefit of facilitating familiarity and trust.

The team meetings would usually last for about two hours and all team members would contribute regularly to the discussion. The observation was conducted on a weekly basis for approximately five months. The reason for conducting the observation over a longer period was that it was important to see the project completed and how innovation would emerge over time. Overall, a total of 16 weekly team meetings were observed, resulting in approximately 36 hours of digitally recorded video. The observation was completed once the researcher had collected sufficient evidence on all three aspects of shared leadership, conflict and innovation and the core team project neared its completion.

4.6.5 Data Analysis Process

4.6.5.1 Ethnography

Ethnography, according to (Kramer and Crespy 2011, p. 1026) 'is a method for providing an in-depth understanding of the taken-for-granted, mundane aspects of a group'. It enables 'the telling of a story of how people, through collaborative and indirectly interdependent behaviour, create the ongoing character of particular social places and practices' (Katz 1997, p. 414). Furthermore, ethnography allows for showing how work is organised by capturing descriptions of human behaviour occurring in real-life situations (Rosenberg 2001). Gordon (2002, p. 47) finds

that in ethnographic research the researcher needs to 'gain an intimate understanding' of the 'informal ways of doing things', allowing one to experience 'deeper forms and structures that unobtrusively constrain people's behaviour in the setting'.

According to Gobo (2008), the pivotal cognitive mode and, thus, main source of information in ethnographic methodology is observation. Regarding the study of shared leadership, Wassenaar and Pearce (2012) emphasise that by using ethnography, the interactions and interplay between group members can be observed in their natural setting. This allows for a 'holistic understanding of the group and its dynamics' although an extensive amount of time is required by the researcher (Wassenaar and Pearce 2012, p. 376). Further, relating to conflict, the research of cognitive styles and thus 'consistent individual differences in ways of perceiving, organizing and processing information' requires more ethnographic studies to confront real-life situations with conceptual theories (Cools et al. 2013, p. 1). This is of importance due to non-observational studies, such as self-reported questionnaires, not taking micro-conflicts into account, which could make brief, moment-by-moment disagreements, difficult to remember (Paletz et al. 2011). In terms of studying innovation processes, Hoholm and Araujo (2011, p. 936), emphasise the usefulness of real-time ethnography by studying innovation as 'an emerging object or practice from the inception of an idea to its successful realisation'. This involves studying interactions of the actors involved and investigating how ideas, knowledge and meaning gradually get transformed and embodied in a variety of media. Therefore, in order to effectively research issues such as micro-conflict and innovation development, the inclusion of ethnography was essential. It was part of an overall approach with a preliminary survey and interviews exploring initial relationships and processes among concepts.

There has been much discussion of whether theory in ethnographic research should be used inductively or deductively, although Wilson and Chaddha (2009, p. 562) emphasise that 'good ethnography is theory driven'. Ethnography is often used in the context of discovery to uncover relationships, which may then be tested through quantitative research. However, Wilson and Chaddha (2009, p. 550-551) emphasise that ethnography can also be used in the context of validation to 'test, advance, or explain empirical assumptions' derived from theoretical arguments. Furthermore, there is a possibility of testing theoretically derived arguments deductively with observational techniques and ethnographic data. However, theory could also play an inductive role as theoretical insights inform the interpretation of data uncovered. This occurs through new empirical findings being integrated with theoretical arguments by using theoretical knowledge to make sense of the data uncovered by the ethnographer in the field

research. Wilson and Chaddha (2009, p. 550-551) note the possibility of combining deductive and inductive elements by starting with deductive theory and ending up with integrating new, inductively generated, theoretical arguments with old ideas based on data from the field research.

This current research, which studies a management consultant team in action, is therefore clearly theoretically informed, in particular through the previous phases of data collection and data analysis. Ethnography, as part of the overall research methodology allows for capturing of subtleties and occurrences in a real-life team. Therefore, the approach provides further explanation as well as a validating role. This does not suggest that inductive theoretical insights are not considered. Therefore, both elements are combined to uncover important nuanced behaviour not consistent with prior theory (Wilson and Chaddha 2009). Illes (2010) emphasises the danger of missing features when entering the field with preconceived ideas. Thus, it is important to note that the researcher approached the setting with an open mind, ready to uncover issues not found in prior theory.

Considered an approach of visual studies, ethnography may include participant observation, information from documents, comments from interviews and discussions as well as video data (Knoblauch 2009b). According to Pink (2013), any video footage of ethnographic interest or used to represent ethnographic knowledge can be referred to as ethnographic video. Also called 'videography', and part of the field of visual ethnography, the approach allows for capturing that which cannot be described in words and is required when the data present are not effectively captured without formal recording (Veer 2014). Analysing the digital video through ethnography was therefore identified as not only promising but essential to adequately capture the dynamics of the team. Rather than merely coding videos systematically, visual ethnography further allowed for an understanding of the associations between visual displays and the participants' underlying beliefs (Clarke 2011; MacDougall 1997). 'Visual' not signifying a purely visual approach, but rather paying particular attention to visual aspects of culture (Pink 2013).

It is important that issues of interpretation, impact and validity are considered when conducting visual ethnographic research. The researcher was aware of his subjective interpretations of the interactions which, however, is recognised in ethnographic research and does not imply that the method cannot be performed with necessary rigour. Regarding the validity of the ethnographic method, and whether constructs 'accurately and authentically represent or measure the categories of human experience' both internal and external validity have been taken into

account (Schensul and LeCompte 2013, p. 327). Internal validity is a strength of this ethnographic research with the researcher 'living' with the management consultant team for some time, and getting to know them well. Furthermore, the video represents the reality in which the team was studied live (Schensul and LeCompte 2013). As regards external validity and thus comparability, it is important to note the uniqueness of the team under study. However, terminology and interpretations are comparable to other studies, and, theories, constructs and methods are well explained, further making the study translatable (Schensul and LeCompte 2013). Regarding reliability of the ethnographic method, replicability is not its purpose. Rather, exploratory information should lead to more valid instrument development and explanation of the results obtained in the previous phases of this research (Schensul and LeCompte 2013).

4.6.5.2 Coding Process

Veer (2014) proposes that the three elements of focus in videography are the body, the environment and time. Regarding the analysis of video environments, Rosenberg (2002) emphasises the importance of analysing the dialogic structure and organisation of communicative events, such as how contact is made and maintained, what is made visible, the characteristics of the environment, as well as contextual cues, such as physical orientation, posture or uses of space. Furthermore, as this research uses video ethnography, analysing detailed physical and verbal interactions and looking closely at actions, action sequences and interactions was of importance (Knoblauch 2009a). Using the approach of Pratt and Kim (2012), the following was examined in this study:

1. Non-verbal cues;
2. Relationship between non-verbal cues, utterances;
3. Interactive relationship between physical settings and human interactions; and
4. Verbal communication.

Morse and Pooler (2008) emphasise the importance of interpreting data inductively, validly, and meaningfully. Incorporating a theoretical framework into the analysis can threaten validity as the researcher may focus only on what is relevant. However, Clarke (2014) emphasises that due to the large quantity of data which are collected through a visual ethnographic approach, the researcher should use the research question to focus on the relevant material, while remaining open to unexpected or surprising results. Thus, the focus on shared leadership, task/relationship conflict and innovation, as relevant for the research, provided the researcher with the parameters of the problem, while also enabling him to work inductively, potentially discovering new concepts and relationships.

For data analysis, verbal communication and interactions were most relevant to achieve the objectives of this research. However, as discussed, non-verbal cues and interactions were also important, in particular with regard to discovering micro-conflict. Thus, non-verbal communication was interpreted in the light of the speakers' words, focusing on the utterances closest in time to the gesture (Cornelissen et al. 2012). However, non-verbal conduct was transcribed very selectively, keeping the analytic aims of the research in mind (Jenks 2011). McNaughton (2009) provides a useful classification category for analysing non-spoken or written interaction which was used as a 'scaffold' (see **Table 4.10**).

Table 4.10: Six classification categories of nonverbal discourse (McNaughton 2009, p. 37)

Classification Category	Description
1. Facial expression	Surprise, anger, fear, happiness, disgust/contempt, sadness
2. Gaze	Threat, intimacy, interest
3. Gesture	Pointing, waving arms, palms facing forward, face-touching
4. Posture	Crossed legs/arms, leaning toward/away from, slumped/straight, posture related to character being portrayed
5. Touch	Affection, affiliation, understanding, aggression, greeting
6. Spatial behaviours	Intimate zone, personal zone, social-consultative zone, public zone

As regards the observation and coding of conflict in the team, it is important to note that conflict is defined as disagreement between two or more people. Adhering to the coding guide of Paletz et al. (2011, p. 348) conflict was coded:

1. At the first sign of disagreement, not the first sign of an opinion;
2. As being amongst people present, not discussion of conflict;
3. 'No' as in asking a question and receiving an answer not constituting a conflict;
4. Contradicting someone else counting as conflict, adding/ clarifying not; and
5. A question potentially being classified as conflict, when challenging or sarcastic.

As discussed in previous sections of this research, the differentiation between task conflict and relationship conflict is of relevance, although this current research mainly focuses on potentially beneficial task conflict. Since the researcher had prior knowledge of the meetings, which he attended in person and during which he had taken field notes, he was aware that most conflict would constitute task conflict, with few personal conflicts occurring.

Once the recordings were made, both the visual and verbal data were coded by the researcher. As discussed, the scaffold provided a solid base for classifying non-verbal discourse. However, verbal interactions between team members were of central importance. The video was first

watched and coded for relevant discussions, behaviours and interactions potentially relevant to the concepts of shared leadership, conflict and innovation. Following that, the relevant sections containing the codes were re-watched and transcribed. The qualitative data analysis software NVivo10 was identified as relevant for coding the data and for detecting patterns. Furthermore, with codes being linked to the video file, relevant sections could be re-watched to provide an in-depth understanding of occurrences in the team.

Due to the large amount (36 hours) of video data, a systematic approach toward the analysis of this rich source of data was essential. The video data was analysed in four stages:

(1) Initial viewing and identification of relevant scenes

The video was viewed using the playback function of the qualitative data analysis software NVivo10. This allowed for situations relevant to the research question to be time logged in the software. Furthermore, descriptive annotations regarding the activity, people involved and relevance were made. Since preliminary notes were fixed to the corresponding time frames in the video, the researcher could go back to relevant scenes with ease or conduct a search for relevant notes.

(2) Coding of relevant scenes

The relevant scenes from Stage 1 were coded in NVivo10 with regard to the team members involved, the type of involvement, the type of interaction (e.g., planning, negotiating, information giving (McNaughton 2009)) and the subject matter. The researcher's field notes were also taken into account at this stage. Layers and sub-layers of codes were thereby created. Relevant non-verbal communication was considered regarding the categories discussed in **Table 4.10** and notes were provided as required.

(3) Transcription of relevant scenes

Relevant scenes as found in Stages 1 and 2 were transcribed from audio into text. This provided a more time-efficient transcription of relevant scenes, rather than transcribing the entire video. Thus, the relevant video scenes were annotated with verbal interactions in written text, as well as relevant nonverbal discourse and other relevant information or observations. Due to confidentiality, video data could not be made accessible, for instance, through web links. However, video stills - or still images were made to illustrate examples of the set-up of the team, with participants' faces being pixelated. Sample images are displayed in the observation analysis section in Chapter 5.

(4) Interpretation of interactions

Interactions between team members were interpreted in terms of behaviour and dialogue to describe relevant scenes of the teamwork. Relevant themes and codes were added to the sections. The information coded in NVivo10 was placed into tables, displaying information such as length of the interaction, verbal dialogue, non-verbal discourse, description/interpretation of the interaction as well as themes/codes. Thus, written data to all activities deemed relevant in the original video and audio data were made available. A detailed analysis of the findings is provided in the data analysis in Chapter 5.

4.7 Conclusions

This chapter identified the methodological approach which has been adopted in this study to achieve the research aim of examining the effects of conflicts in shared leadership management consultant teams and the subsequent research objectives. A number of philosophical approaches were outlined and due to the importance of including both inductive and deductive approaches in the examination of conflict in shared leadership teams, a critical realist stance was undertaken. The chapter further discussed the research strategy and the appropriateness of utilising a mixed methods approach to test, not only the conceptual framework in Chapter 3, but also to provide a more in-depth and subjective explanation of the findings. The employment of a sequential explanatory mixed methods design was discussed and justified, which begins with a quantitative survey element, followed by a qualitative interview and then by a qualitative observation element. The importance of including qualitative methods into the study was emphasised, in particular with regard to the observation of conflicts in action. The ethnographic approach provides validation of occurrences identified in the previous survey and interviews, as well as further explanation by examining team member behaviours. All three elements were discussed in depth regarding their sampling, data collection and data analysis strategies. The following Chapter 5 and Chapter 6 will describe, analyse and discuss the data collected in the three different research elements.

Chapter 5 - Data Analysis

5.1 Introduction

With the previous chapter discussing methods and procedure of data collection and data analysis, the following chapter conducts the analysis of the quantitative and qualitative data collected. The analysis of the quantitative data includes descriptive statistics, correlations between variables, and multiple regression analysis. This approach is followed by the qualitative analysis of interviews using causal mapping, which aims to explore further issues from the survey. The subsequent ethnographic analysis of observational video data of team meetings aims to validate and to provide additional depth to findings made both in the survey and the interviews. The discussion and explanation of the findings with regard to the overall empirical results can be found in Chapter 6.

5.2 Quantitative Element 1 - Survey Analysis

This quantitative empirical section discusses the analysis of the data collected from management consultants through an online survey. The hypotheses, as outlined in the conceptual model in Chapter 3, were tested and validated. As mentioned in the previous chapter, a total of **372** responses to the online questionnaire were collected. Furthermore, the questionnaire included a question about respondents' occupations as management consultants at the beginning of the survey in order to ensure that all responses collected were from people working as management consultants. In total, **329** respondents identified themselves as management consultants at the beginning of the survey. All other cases were deemed irrelevant and deleted from the dataset. The following analysis of the descriptive statistics of the survey is based on this number of responses. Missing data will be discussed later in this section. Following this, the data are analysed using correlations and regression analysis.

5.2.1 Descriptive Statistics

5.2.1.1 Management Consultant Characteristics

Participants provided demographic information about their working backgrounds as well as information regarding their current work. This information is displayed in **Table 5.1**.

- Management consulting experience: As shown in the table, a large percentage of management consultants had 10 or more years of experience. This was followed by those who had 5 - 9 years of experience and, lastly, those who had 3 - 4 years of management consulting experience.
- Current employment of management consultants: The results showed that a majority of management consultants were self-employed (60%), whereas 31% worked for a company and 9% were both self-employed and employed by a company.
- Type of organisation: A vast majority (92%) of management consultants worked in the private sector, whereas a small percentage (4% each) worked in public or not-for-profit sectors.
- Occupation as management consultants: As expected, most management consultants worked full-time in their occupation (80%), whereas some worked part-time (20%).
- Size of organisation: In terms of the number of employees in their organisation, 53% of management consultants were sole proprietors with no employees, 20% had 2 - 4 employees, 10% had 5 - 9 employees, 11% had 10 - 49 employees and 6% had 50 or more employees.
- Formal position in company: A large percentage of management consultants (87%), classified themselves as working in senior management (87%), management (8%), and non-management positions (5%).
- Area of consultancy specialisation: The top three areas of specialisation were strategy (52%), transformation and change (51%) and general management (50%). This was followed by operations (31%), marketing and sales (27%) and quality management (18%).
- Demographics (age and gender): More than two thirds of the sample were male (72%), whereas the minority were female (28%).
- Level of education: A vast majority of management consultants had high, above degree levels of education (92%). While 31% possessed a degree or equivalent, 51% had achieved a post-graduate degree and 10% a doctorate.

Table 5.1: Descriptive information on management consultants

Management consultant information	Number	Percentage
<u>Consulting experience</u>		
3 - 4 years	32	10%
5 - 9 years	47	15%
10 or more years	241	75%
<u>Employment</u>		
Company	102	31%
Self-employed	193	60%
Both	25	9%
<u>Organisation type</u>		
Private	302	92%
Public	14	4%
Not-for-profit	13	4%
<u>Occupation</u>		
Part-time	65	20%
Full-time	255	80%
<u>Organisation size</u>		
Sole-proprietor	172	53%
2 - 4 employees	64	20%
5 - 9 employees	31	10%
10 - 49 employees	36	11%
50 - 99 employees	3	1%
100 and more employees	16	5%
<u>Formal position</u>		
Senior management	279	87%
Management	26	8%
Non-management	15	5%
<u>Area of specialisation (multiple options)</u>		
General management	164	50%
Finance	51	16%
Human resources	65	20%
Legal	11	3%
Marketing & Sales	90	27%
Operations	101	31%
Transformation & Change	169	51%
Quality management	59	18%
Strategy	172	52%
Technology	52	16%
<u>Gender</u>		
Male	194	72%
Female	74	28%
<u>Age</u>		
25 - 34 years old	11	4%
35 - 44 years old	20	8%
45 - 54 years old	65	24%
55 - 64 years old	119	44%
65 - 74 years old	47	18%
75 years or older	6	2%
<u>Education</u>		
GCSE, GCE 'O' level, or equivalent	2	1%
GCE 'A' level, or equivalent	5	2%
Higher education, below degree level	12	5%
Degree, or equivalent	84	31%
Post-graduate degree (Masters/MBA)	138	51%
Higher degree (Doctorate)	27	10%

5.2.1.2 Management Consultant Teamwork

Management consultants were further asked to provide information on the amount of teamwork which they conducted, as well as their most recent experience of management consultant teamwork. The results are depicted in **Table 5.2**.

- Amount of teamwork: While 9% of the management consultants sampled stated that they did not conduct any work in teams, the rest of the sample indicated that at least some of their work was conducted in management consultant teams. A total of 58% stated that less than half of their management consultant work was conducted in teams, whereas a total of 33% stated that more than half of their management consultant work was conducted in teams.
- Size of team: A large percentage of management consultants (63%) indicated that they worked in a small team of 2 - 3 people during their most recent management consulting teamwork, whereas 22% worked in teams of 4 - 5 people, 8% in teams of 6 - 8 people and 7% in teams of 9 and over.
- Frequency of team meetings: More than half (54%) of management consultants indicated that their team met weekly, 25% indicated that they met monthly, 14% daily and 7% quarterly.
- Length of team meetings: A total of 47% of management consultant meetings lasted for approximately 31 - 60 minutes, 22% up to 3 hours, 21% between 15 - 30 minutes, 5% less than 15 minutes and 5% more than 3 hours.
- Functional diversity: 78% of management consultants indicated that their team was composed of people with functionally different areas of expertise.
- Type of client: In total, 47% of clients were large enterprises, 27% medium-sized enterprises, 16% small enterprises, 6% micro enterprises and 4% sole traders.
- Length of consulting project: Most projects (36%) lasted up to three months, 25% up to six months, 17% more than 12 months, 12% up to 12 months, and 10% up to one month or less.
- Consulting project focus: The area of focus of most projects was 'solutions' (57%) or 'strategies' (53%).

Table 5.2: Descriptive information on management consultant teamwork

Teamwork information	Number	Percentage
<u>Amount of teamwork</u>		
0%	29	9%
1% - 9%	50	16%
10% - 24%	69	21%
25% - 49%	66	21%
50% - 74%	65	20%
75% - 89%	20	6%
90% - 100%	23	7%
<u>Team size</u>		
2 - 3 people	170	63%
4 - 5 people	59	22%
6 - 8 people	21	8%
9 and over	20	7%
<u>Meeting frequency</u>		
daily	38	14%
weekly	146	54%
monthly	65	24%
quarterly	18	7%
annually	3	1%
<u>Meeting length</u>		
less than 15 minutes	14	5%
15 - 30 minutes	56	21%
31 - 60 minutes	128	47%
up to 3 hours	60	22%
more than 3 hours	12	5%
<u>Functional diversity</u>		
Yes	210	78%
No	60	22%
<u>Client type</u>		
Sole trader	9	4%
Micro enterprise (2 - 10 people)	14	6%
Small enterprise (11 - 50 people)	39	16%
Medium-sized enterprise (51 - 250 people)	67	27%
Large enterprise (More than 250 people)	116	47%
<u>Project length</u>		
Up to one week	4	2%
Up to one month	20	8%
Up to three months	86	36%
Up to six months	59	25%
Up to 12 months	29	12%
More than 12 months	42	17%
<u>Project focus (multiple options)</u>		
Products	46	19%
Procedures	109	44%
Solutions	141	57%
Strategies	134	54%
Systems	68	27%

5.2.1.3 Qualitative Survey Data

A word frequency query was run with NVivo10 in order to identify the reasons most frequently mentioned regarding the implementation of shared leadership in respondents' teams, resulting in a large number of responses. Similar responses were then grouped in order to provide a ranking order for the most important reasons for implementing shared leadership. Respondents named a wide range of reasons for implementing shared leadership in their teams. As expected, the main reason named was the different skills and expertise which team members brought to the table. This was followed by the diverse experience of consultants as well as the belief that this way of working would deliver the best results. The top 15 responses can be seen in the list below. The share of each point in relation to all responses is provided. In addition to providing an overview of the most common issues mentioned, the responses provided themes for further investigation in the qualitative interviews.

1. Different skills/ competencies of team members (14%)
2. Diverse experience of consultants (6%)
3. Most effective, delivers best results (5%)
4. Exchanging different ideas/ views/ opinions (5%)
5. Idea generation and creative thinking (5%)
6. Company or team working culture (5%)
7. Increasing participation/ involvement (4%)
8. Similar levels of knowledge and/or qualifications (4%)
9. Desire for egalitarianism/ equality (3%)
10. Mutual respect amongst team members (3%)
11. Related to client needs (3%)
12. Improving decision-making (3%)
13. Increasing commitment to decisions (3%)
14. Learning and personal development (2%)
15. Increasing motivation (2%)

5.2.2 Missing Data

A total of 291 respondents indicated that they conducted management consultant work in teams. Since the survey was conducted in order to find out about the work management consultants conducted in teams, other respondents were not relevant for inclusion in further analysis and thus were redirected to the end of the survey at the time of data collection.

According to Osborne (2012), missing data can occur for many reasons. Participants can fail to respond to questions, data collection mechanisms can fail, data entry errors can occur and subjects can withdraw from studies before they are completed. In the case of this research, responses were required for most questions on the online questionnaire for the respondents to proceed to the following section, apart from some voluntary information requested, which could be given at the end of the survey. Furthermore, due to data having been collected automatically through the online questionnaire, which was piloted, and due to responses having been directly downloaded into the SPSS software, these types of missing data could be ruled out. Thus, missing data would only occur when respondents withdrew from the study.

The dataset was checked for missing data using the SPSS frequency function. Another 50 responses and thus 17% contained more than 20% of incomplete respondent information. The Little MCAR test was run with SPSS to test the null hypothesis that the data were missing completely at random. The expectation maximisation means table resulted in a significance value of 0.8 and thus above 0.05, not making the value statistically significant. Thus, the null hypothesis was not rejected and the missing values were identified as missing completely at random (MCAR). This test clarified that missing values were unrelated to any variable and the absence of values could be completely explained as being missing at random. Therefore, 'missingness' had no systematic relation to any of the variables present and there were no systematic differences between individuals with complete and incomplete data (Osborne 2012). Due to the missing data being MCAR, the analysis of the data remained unbiased through the list-wise deletion of cases with missing data (Howell 2012). This resulted in a complete case analysis of **241** management consultant cases, which were included for further analysis.

5.2.3 Distribution of Data

The normality of the distribution of scores was assessed through measures of skewness (distribution symmetry) and kurtosis (distribution peakedness) as well as by checking for outliers. Due to the sample being above 200 cases the risk of underestimating the variance of Kurtosis was reduced. As can be seen in **Table 5.3** skewness for all four variables is more than -1 and less than +1, and thus within the required threshold (Tabachnick and Fidell 2012). Furthermore, the absolute values of skewness are less than three times the standard error and can thus be considered within the acceptable range. Shared leadership, task conflict and innovation are all slightly negatively skewed (distribution to the right), whereas relationship conflict is slightly positively skewed (distribution to the left). Similarly, distributions for kurtosis are all in the acceptable -1 to +1 range, and again had an absolute value of less than three times

the standard error. Shared leadership has normal distribution, innovation slightly positive kurtosis and relationship conflict as well as task conflict slightly negative kurtosis. Thus, the values from **Table 5.3** demonstrate that there were no kurtosis and skewness issues within the data. Furthermore, the histograms for each variable showed approximately normal distributions for the z-scores (see Appendix H).

As expected, minimum and maximum values for the different variables were relatively high and low, due to the variation in responses people were expected to give regarding their team experience. Due to the mean being easily influenced by potential outliers, the median and thus the middle score of the data were additionally reported as a measure of central tendency. As can be seen, the values for mean and median are very similar, further indicating that the data are close to symmetric.

Table 5.3: Descriptive statistics (Kurtosis and Skewness)

	N	Min	Max	Mean	Median	Std. Dev	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error						
Shared Leadership	241	2.29	5.00	3.91	4.00	.592	-.237	.157	-.143	.312
Relationship Conflict	241	1.00	5.00	2.65	2.50	.950	.344	.157	-.633	.312
Task Conflict	241	1.50	5.00	3.28	3.25	.700	-.235	.157	-.461	.312
Innovation	241	2.17	5.00	3.80	3.83	.569	-.444	.157	.621	.312
Valid N (listwise)	241									

No outliers were observed for the concepts of task conflict and relationship conflict through the SPSS boxplots and the distribution of scores in the histogram was normal. When examining the innovation and shared leadership variables on the boxplots, a number of cases extended more than 1.5 box-lengths from the edge of the box. However, some moderate outliers were expected due to the size of the dataset and also since levels of innovation and shared leadership in the management consultant teams varied. However, none of the outliers identified were extreme outliers and thus none were displayed as more than three box lengths from one hinge of the box in SPSS. Thus, after checking the data it became clear that the outliers were not due to data entry errors or instrumentation errors. The scores for the variable were distributed normally in the histogram. Furthermore, since the innovation and shared leadership variables contained Likert-type scales, the variable was considered metric, allowing calculation of standardised values or 'z-scores' for the innovation variable in SPSS, measuring the distance between the observation and the mean. Using the common cut-off value of ± 3 , all z-scores were between

the common threshold of -3 and +3 and, therefore, no cases had to be removed (Mendenhall et al. 2012).

5.2.4 Measures

As shown in **Table 5.4**, for the seven items of the shared leadership scale a Cronbach's Alpha coefficient of 0.79 was measured in SPSS, demonstrating good internal consistency. Good internal consistency was further reported for the four-item relationship conflict scale with a Cronbach's Alpha coefficient of 0.86. This is in line with research by Thatcher et al. (2003) and Jehn et al. (1997), who found high internal consistency scores of 0.92 and 0.81, respectively. According to Thatcher et al. (2003), the Task Conflict Scale can show low but acceptable internal consistency as they report a Cronbach alpha score of 0.7. Cronbach (1951) notes that for scales with a small number of items the score can be low. In this study the Cronbach alpha coefficient for the four-item task conflict scale was 0.66, thus demonstrating sufficient internal consistency, as values above 0.6 are considered acceptable (George and Mallery 2003; Hair 2006). Lastly, the six item innovation scale demonstrated high internal consistency at 0.83. Moreover, high values for inter-item correlations suggested a strong relationship among the items.

Table 5.4: Cronbach Alpha's (Reliability Statistics)

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Shared Leadership	.79	.81	7
Relationship Conflict	.86	.86	4
Task Conflict	.66	.63	4
Innovation	.83	.83	6

5.2.5 Analysing Relationships

5.2.5.1 Correlation Analysis

To assess the associations (both magnitude and direction) between shared leadership, relationship conflict, task conflict and innovation, scales were calculated using Pearson product-moment correlation coefficient r . **Table 5.5** shows Person (r) correlations between these main variables ranging from -1 to +1. The sample being $N = 241$. Significance levels (listed as Sig. 2-tailed) were assessed in order to demonstrate confidence in the correlations obtained, and, thus the probability that the observation occurred by chance. Relationships between (1) shared leadership and relationship conflict, (2) shared leadership and innovation, (3) relationship

conflict and task conflict and (4) task conflict and innovation were all significant at the 0.01 level (flagged as ** in table). Nevertheless, no significant relationship was found between shared leadership and task conflict ($p > 0.05$) as well as relationship conflict and innovation ($p > 0.05$).

Table 5.5: Correlations shared leadership, task/relationship conflict and innovation

		Shared Leadership	Relationship Conflict	Task Conflict	Innovation
Shared Leadership	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	241			
Relationship Conflict	Pearson Correlation	-.256**	1		
	Sig. (2-tailed)	.000			
	N	241	241		
Task Conflict	Pearson Correlation	.056	.371**	1	
	Sig. (2-tailed)	.384	.000		
	N	241	241	241	
Innovation	Pearson Correlation	.493**	-.058	.168**	1
	Sig. (2-tailed)	.000	.369	.009	
	N	241	241	241	241

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

A small but highly significant negative relationship ($r = -.26$, $p < 0.01$) was found between shared leadership and relationship conflict, following the effect size conventions of Cohen (1988). The scatterplot suggested that a decrease in shared leadership led to an increase in relationship conflict and vice-versa. Although the strength of the relationship was small it is important to note that statistically significant correlations with low effect sizes demonstrate relationships worth further exploration. A small positive relationship was further found between task conflict and innovation ($r = .17$, $p < 0.01$), with an increase in task conflict leading to an increase in innovation. In terms of the relationship between shared leadership and innovation, the strength of the positive relationship could be classed as moderate to large ($r = .49$, $p < 0.01$), with shared leadership leading to an increase in innovation. Lastly, as expected, a positive and moderate relationship was also found between relationship conflict and task conflict ($r = .37$, $p < 0.01$).

Regarding the associations between these variables it is important to note that causation cannot be demonstrated. According to Sweet and Grace-Martin (2011), establishing causality requires association, time order and non-spuriousness. Although correlations and regressions of cross-sectional data can reveal associations, they cannot document time order. Thus, the correlation of two variables does not necessarily mean that one causes the other, in particular, due to the possible influence of a third variable. However, one of the strengths of multiple linear

regressions, which will be further applied, is that factors can be included that can control for spurious effects, although some may remain untested (Sweet and Grace-Martin 2011).

5.2.5.2 Regression Analysis

To assess the relationships between the variables of shared leadership, relationship conflict, task conflict and innovation, and thus to predict the value of the dependent variable from one or more independent variables, three hierarchical multiple regressions were conducted. This allowed for examining multiple factors contributing toward the dependent variable and controlling for the influence of spurious effects, to ensure internal validity. Therefore, team size and functional diversity were entered in each regression as first step. The first regression model was constructed with relationship conflict as the dependent variable and shared leadership as the predictor. The second model included task conflict as the dependent variable and shared leadership as the predictor. The third regression model included innovation as the dependent variable. Team size and functional diversity were again entered as first step and secondly shared leadership, thirdly task conflict, and fourthly relationship conflict were entered.

In the coefficient Table in Appendix H, values for Tolerance and VIF are displayed in order to assess multi-collinearity and, thus, the degree to which the predictor variables are correlated among themselves. Tolerance is an indicator of the percentage of variance in the independent variable that cannot be accounted for by other independent variables (the higher the tolerance the lower the overlap) (Howell 2012). The rule of thumb indicates that tolerance values of less than 0.10 suggest multi-collinearity and, thus, require further investigation (Hair 2006). The variance inflation factor (VIF) is the reciprocal of tolerance and values above 10 require further investigation (Pallant 2010). Tolerance and VIF values were at acceptable levels for each of the three regression models, thus the multi-collinearity assumption was not violated.

Homoscedasticity assumes that the dependent variables exhibit equal levels of variance across the range of independent variables, thus residuals should be equally distributed along the regression line (Stamatis 2002). Homoscedasticity was assessed through the visual examination of scatterplots showing the relationship between the standardised residuals or the error and the values for the dependent variables or standardised predicted value and thus innovation as well as task conflict and relationship conflict. A consistent relationship was observed through all three scatterplots and the flat linear fit line (see Appendix H). Thus, there was homoscedasticity not heteroscedasticity, as the error variance was constant with varying variables in the predictor variable (Stamatis 2002). Overall, for all three regression models, assumptions of

homoscedasticity, linearity and collinearity were met (see Appendix H). Furthermore, as discussed before, outliers, and thus cases with standardised residual values above 3.3 or below -3.3 were not detected from the scatterplots.

Hypothesis 1 posited that management consultant perceptions of shared leadership have a negative relationship with relationship conflict. This was supported by the data that showed a small but significant relationship between these variables ($r = -.26$, $p < 0.05$). The higher the perceived level of shared leadership, the lower the level of relationship conflict. Hierarchical multiple regression analysis or sequential regression was used, allowing the statistical control for team size and functional diversity. Thus, team size and functional diversity were entered in the first block of the model and shared leadership was entered in the second block. The histogram and normal P-P Plot of standardised residuals suggested no major deviations from normality. Furthermore, the scatterplot showed that assumptions of homoscedasticity and linearity were met. The ANOVA table (see Appendix H) and thus the analysis of variance testing the significance of the regression, indicates that, using both predictors, the correlation coefficient is significantly different from 0 and the model as a whole is statistically significant ($F = 12.94$, $p < 0.01$). As can be seen in **Table 5.6**, team size and functional diversity were entered in Model 1 and explained 8% of the variance in relationship conflict ($R = .28$).

After perceived shared leadership was entered in Model 2, the total variance explained by the model was 14% ($R = .38$; $F = 12.94$, $p < 0.01$). Therefore, shared leadership explained an additional 6% of the variance in relationship conflict, R Square Change being .062 (F change = 17.2, $p < 0.01$). It is important to note that the R-square values were expected to be low, due to this study being linked to the prediction of human behaviour. Importantly, predictors were statistically significant and related to the response. Looking at the final Model 2 in the Coefficients table (see Appendix H), the data met the assumptions of collinearity (Tolerance above .1; VIF below 10). Furthermore, all variables were shown to make a unique, statistically significant contribution in the second model ($p < 0.05$), the most important being shared leadership (beta = $-.25$), followed by team size (beta = $.22$) and functional diversity (beta = $-.13$). The hierarchical regression analysis therefore revealed a negative relationship between shared leadership and relationship conflict. Results further showed that functional diversity was positively related to relationship conflict and team size was negatively related to relationship conflict. The results therefore supported Hypothesis 1.

Table 5.6: Hierarchical regression analysis (team size, functional diversity [Model 1], shared leadership [Model 2] on relationship conflict)

Model Summary ^c									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.280 ^a	.079	.071	.91540	.079	10.142	2	238	.000
2	.375 ^b	.141	.130	.88581	.062	17.165	1	237	.000

a. Predictors: (Constant), Functional diversity, Team_size

b. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership

c. Dependent Variable: Relationship Conflict

To test **Hypothesis 2** that management consultant perceptions of shared leadership have a positive relationship with task conflict, a hierarchical multiple regression analysis was conducted using the same controls as in the previous regression (see **Table 5.7**). In terms of bivariate correlations, the relationship between task conflict and shared leadership was non-significant. However, both team size and functional diversity had small/moderate, but significant relationships with task conflict. Team size was positively related to task conflict ($r = .19, p < 0.01$), with an increase in team size associated with an increase in task conflict, whereas functional diversity was negatively related to task conflict ($r = -.24, p < 0.01$), with a decrease in functional diversity associated with a decrease in task conflict. As expected, the regression results mirrored the bivariate correlations. Shared leadership was not a significant predictor of task conflict. Although the overall model was statistically significant ($F = 7.71, p < 0.01$) and team size and functional diversity were identified as significant predictors ($R \text{ Square} = .09, p < 0.01$) in Model 1, in the final model only the two control variables were statistically significant. Therefore, Hypothesis 2 was not supported.

Table 5.7: Hierarchical regression analysis (team size, functional diversity [Model 1], shared leadership [Model 2] on task conflict)

Model Summary ^c									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.294 ^a	.087	.079	.67160	.087	11.271	2	238	.000
2	.298 ^b	.089	.077	.67213	.002	.626	1	237	.430

a. Predictors: (Constant), Functional diversity, Team_size

b. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership

c. Dependent Variable: Task Conflict

To test for **Hypotheses 3, 4, 5, 6** a hierarchical multiple regression model was constructed with innovation as dependent variable, again entering team size and functional diversity into the first block, shared leadership in the second block, task conflict into the third block and relationship conflict into the fourth block (see **Table 5.8**). Looking at the normal probability plot (see Appendix H), the distributions from the linear trend line were minimal, indicating a normal distribution. Team size and functional diversity were not found to be significant predictors of team innovation in any of the four models.

Table 5.8: Hierarchical regression analysis (team size, functional diversity [Model 1], shared leadership [2], task conflict [3], relationship conflict [4] on innovation)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model Summary ^a				
					Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.102 ^a	.010	.002	.56814	.010	1.256	2	238	.287
2	.498 ^b	.248	.238	.49644	.237	74.710	1	237	.000
3	.513 ^c	.264	.251	.49220	.016	5.105	1	236	.025
4	.513 ^d	.264	.248	.49320	.000	.042	1	235	.838

Looking at **Hypothesis 3**, that management consultants' perceptions of shared leadership have a positive relationship with team innovation, the ANOVA table demonstrated the significance of the Model ($F = 26$, $p < 0.01$). A large significant correlation was found between shared leadership and innovation ($r = .5$, $p < 0.01$), indicating an increase in shared leadership leading to an increase in innovation. Furthermore, the R Square Change statistic for the increase in R Square associated with shared leadership as an added variable toward team innovation was .24 ($p < 0.01$), shared leadership could therefore predict 24% of the variance in innovation (**Table 5.8**). The beta value for shared leadership was .49 ($p < 0.01$). Thus, Hypothesis 3 was supported.

Hypothesis 4 was concerned with management consultant perceptions of task conflict having a positive relationship with team innovation. Therefore, task conflict was added to the regression model (Model 3), which, as demonstrated through the ANOVA table, was significant ($F = 21.11$, $p < 0.01$). A small positive, but significant correlation (.17, $p < 0.01$) was found between task conflict and team innovation, indicating an increase in task conflict being associated with an increase in innovation. Furthermore, the R Square Change statistic was low, but significant, at .016 ($p < 0.05$), F change = 5.1. However, although this value was low, a significant and positive relationship was identified between the variables. The beta value was .11 ($p < 0.05$) (see Appendix H). This was of further interest regarding Hypothesis 5.

Hypothesis 5 stated that management consultants' perceptions of (a) shared leadership and (b) task conflict have a positive relationship with team innovation. The R Square value for the model including team size, functional diversity, shared leadership and task conflict was therefore .26 ($p < 0.05$). However, since only shared leadership and task conflict were significant in this model, they explained 25% of the variance in innovation. In order to identify the variables contributing to the prediction of innovation, Beta values were once again assessed. The Beta value for shared leadership was .49 ($p < 0.01$), demonstrating a strong contribution to explaining innovation, while the statistically significant unique contribution of task conflict was lower (beta = .13, $p < 0.05$) (see Appendix H). Both Hypotheses 4 and 5 were therefore supported.

Hypothesis 6 posited that management consultants' perceptions of (a) shared leadership and (b) relationship conflict have a negative relationship with team innovation. Thus, relationship conflict was added to the model as a final variable. The ANOVA table indicated that the model as a whole was statistically significant ($F = 16, p < 0.01$). However, the correlation between relationship conflict and shared leadership was not significant at the 0.05 level. The Sig. F change value indicated the R Square value was not significant, thus the variables in combination did not predict innovation. Furthermore, looking at the individual beta values in the Coefficient table in the final model, only shared leadership and task conflict were statistically significant and relationship conflict did not produce a significant contribution toward the prediction of innovation. Hypothesis 6 was not supported.

5.2.6 Hypotheses Testing Results

Table 5.9 shows the hypotheses that were proposed in the conceptual model and whether they were supported or rejected as regards the analysis of the quantitative results. A total of four out of six hypotheses were supported. It is important to note that these statistical results do not demonstrate causality.

Table 5.9: Research Hypotheses and analysis results

Hypotheses	Methods used	Results
<u>Hypothesis 1:</u> Management consultants' perceptions of shared leadership have a negative relationship with relationship conflict.	- Pearson correlation, Hierarchical regression analysis	Supported
<u>Hypothesis 2:</u> Management consultants' perceptions of shared leadership have a positive relationship with task conflict.	- Pearson correlation, Hierarchical regression analysis	Rejected
<u>Hypothesis 3:</u> Management consultants' perceptions of task conflict have a positive relationship with team innovation.	- Pearson correlation, Hierarchical regression analysis	Supported
<u>Hypothesis 4:</u> Management consultants' perceptions of shared leadership have a positive relationship with team innovation.	- Pearson correlation, Hierarchical regression analysis	Supported
<u>Hypothesis 5:</u> Management consultants' perceptions of (a) shared leadership and (b) task conflict have a positive relationship with team innovation.	- Hierarchical regression analysis	Supported
<u>Hypothesis 6:</u> Management consultants' perceptions of (a) shared leadership and (b) relationship conflict have a negative relationship with team innovation.	- Hierarchical regression analysis	Rejected

The results regarding the negative relationship of shared leadership with relationship conflict of Hypothesis 1 confirm the assumption that high levels of shared leadership can lead to a reduction of negative relationship conflict. This is an important finding regarding the effectiveness of shared leadership towards enhancing team cohesion, as relationship conflict can generally be considered detrimental towards team outcomes. Hypothesis 6 on the other hand, which concerned a negative relationship of shared leadership and relationship conflict with innovation, was rejected. No significant relationship was found among shared leadership, relationship conflict and innovation. This may be due to the differing experiences and perceptions of management consultants regarding relationship conflict in their teams. Although a negative relationship would be plausible, additional evidence is required.

The proposed positive relationship of shared leadership and task conflict could not be confirmed although a small positive trend was observed. However, as the results did not reach statistical significance, Hypothesis 2 was rejected. Therefore, higher levels of shared leadership could not be related to higher levels of task conflict as perceived by management consultants. As will be further debated in the discussion chapter, teams displaying higher levels of shared leadership may not necessarily have more task disagreements. However, this may also depend on the nature of the teamwork which is why further studies are needed for verification.

The third hypothesis regarding a positive relationship of task conflict with innovation was supported. Higher levels of task conflict could therefore be linked to higher levels of innovation, as perceived by management consultants. Similarly, a positive relationship was identified between shared leadership and innovation, thus providing support for Hypothesis 4. Both hypotheses are associated to Hypotheses 5 which concerns the relationship of shared leadership and task conflict with team innovation. A significant positive relationship of task conflict and shared leadership with team innovation was identified. Therefore, it is assumed that both task conflict and shared leadership play an important role in enhancing innovation.

The results from the quantitative element 1 will be discussed further in Chapter 6 in combination with the qualitative results from element 2 and element 3.

5.3 Qualitative Element 2 - Interview Analysis

The second empirical element of this research involved qualitative data which were collected through interviews with management consultants in order to research issues underlying the quantitative results. The key purpose of the qualitative study was to explain the results obtained from the quantitative study by researching management consultant perceptions. A total of 25 semi-structured, face-to-face interviews were conducted with UK management consultants who completed the survey and agreed to participate in further research. As discussed in the methodology, Chapter 4, each interview covered issues regarding the management consultant teamwork and including the main topics of shared leadership, conflict and innovation. The interviews were guided by an 'aide-mémoire' (see Appendix C). The interviews were coded using concepts from the conceptual framework as well as by coding the data inductively, similar to a thematic analysis. Furthermore, as discussed in Chapter 4, a causal map was developed from each interview (see Appendix I). The following sections start by discussing personal and organisational information provided by the participants. Following that, the aggregate causal map, developed from the individual causal maps is discussed. This is followed by a qualitative analysis of the variables of the model.

5.3.1 Management Consultant Background

The participants interviewed were 25 management consultants working as sole proprietors or as partners or employees of UK management consultant companies. In the following sections they are described as MC1 through to MC25 to maintain anonymity and confidentiality. Issues related to data sampling and data saturation were discussed in Chapter 4. Furthermore, Chapter 4 presented personal and organisational demographic information on each management consultant, which was obtained from the survey. Additional information on their current occupation as management consultants, as well as their teamwork experience, was obtained through the individual interviews and is presented in Appendix J.

The information shows that the majority of management consultants interviewed were sole-proprietors (14) and thus 'independent consultants'. Furthermore, the second largest number worked in medium-sized companies (6), followed by small (3) and large companies (2). All consultants worked in senior management roles and all consultants had a minimum of 5 years of consulting experience, with more than 80% having more than 10 years of consulting experience. In terms of specialisation, the most common areas were General Management, Transformation & Change, and Strategy. Their working life spent in teams varied significantly.

Regarding their consulting teamwork with other consultants, the management consultants interviewed for this research can be divided into five different groups. Firstly, sole proprietors who are independent consultants and, for instance, receive their assignments through personal networks, word of mouth or client recommendation. They often call in consultants known to them for projects or to collaborate in teams put together by, or for, the client. Secondly, many sole-proprietors acquire their work solely through management consultant consortia or partnerships. Examples for the UK are the Richmond Group or the Thames Valley Business Advisors. Consultants acquire assignments through their individual networks and teams are put together based on the needs of the project. It was indicated in the interviews that management consultants acquiring the assignment received about 20% of the revenue. However, taking over the client of another management consultant without permission is considered a taboo. Thirdly, there are small consulting companies consisting of several, often experienced, consultants. These were sometimes supported by administrative staff, who, factually, could also participate in assignments. Fourthly, there are medium-sized consulting companies who either employed a set number of management consultants or additionally relied on associates when carrying out assignments. Lastly, there are large consulting companies employing consultants with a wide array of expertise, as well as other staff. These different structures and their affiliation as regards the interview participants are listed here:

1) Sole-proprietors (7): MC1, MC6, MC9, MC14, MC19, MC21, MC25

- Collaborate through personal networks/ client requirements

2) Sole-proprietors working with consortia/ partnership (7): MC10, MC11, MC13, MC17, MC18, MC20, MC22

- Rely on work acquired by consortia/ partnership

3) Small consulting companies (3): MC4, MC5, MC12

- Group of consultants (can be supported by other staff)

4) Medium-sized consulting companies

- Partly work with an associate model (4): MC7, MC15, MC23, MC24

- Employed management consultants (2): MC8, MC16

5) Large consulting companies (2): MC2, MC3

5.3.2 Aggregate Causal Map

As discussed in Chapter 4, a total of 25 causal maps (see Appendix I for individual maps), one for each interview participant were constructed, containing a total of 190 unique concepts (see Appendix K for concept list). Each interview traversed the three themes of shared leadership, conflict and innovation, as their interconnectedness is of main concern for this study. As discussed in depth in the methodology chapter, there were different stages which led to the construction of causal maps. Relevant statements were identified from interview transcripts and, following that, relevant concepts were matched to each statement and were placed in a pool of concepts, available for further coding. This resulted in an Excel sheet for each interview containing the relevant statements, as well as their corresponding concepts and linking phrases in each row.

In order to provide clarity, rather than merging all maps and concepts, an aggregate map was constructed from the individual maps, depicting management consultants' typical thought patterns. Of the 25 maps constructed, the smallest map displayed 21 linkages or relationships, whereas the largest map contained 47. Naturally, the size of the map was dependent on the relevant relationships between concepts discovered from an interview as well as the interview length. A total of 389 relationships were extracted from the maps, including their linking phrases. As a first step, statements were extracted from the maps and displayed in Excel. This allowed for concepts and their relationships to be viewed both graphically and in Excel rows. Each relationship received a unique identification number in Excel allowing the researcher to discern easily both the relevant management consultant and relationship number. Following that, duplicate statements were collected and their total was added up in Excel. Furthermore, similar concepts and causal statements were merged. For instance, 'opinions' was merged with 'opinion sharing', 'idea generation' or 'new ideas' was merged with 'creativity', and 'personality conflict' was merged with 'relationship conflict'. This was performed by comparing statements in Excel and by comparing and contrasting the maps visually, using the concept search function and the map comparison function of the mapping software *CMap*.

As a result of this, the causal relationships could be reduced to 186 statements, providing a clearer picture of patterns emerging from the data. To minimise studying infrequently used and linked concepts, but also to ensure that a full and meaningful selection of data were obtained, all statements that were found in at least 20% of management consultant interviews, and were linked to another concept, were deemed relevant for further analysis. Appendix L shows the

main relationships extracted from the individual maps, as well as the number of times and the interviews in which they occurred.

The table depicting the main relationships between concepts was transferred into an aggregate map which, as discussed in the methodology chapter, is useful in detecting overall group tendencies and belief patterns. This map contains the key causal relationships that were discussed during the interviews and is depicted in **Figure 5.1**. A description of each of these concepts can be found in Appendix M. In the aggregate causal map, a positive causal relationship (e.g., 'leads to') is represented by an arrow, a negative causal relationship (e.g., 'reduces') with an arrow and a '-', while lines without arrows display relationships which, while not causal, were important for the study (e.g., task conflict 'at' late stage). Beginning with concepts surrounding shared leadership, the following sections will discuss the relationships between the concepts depicted in **Figure 5.1**, using quotes from the management consultant interviews and focusing on the interrelatedness of the three main concepts in capital letters.

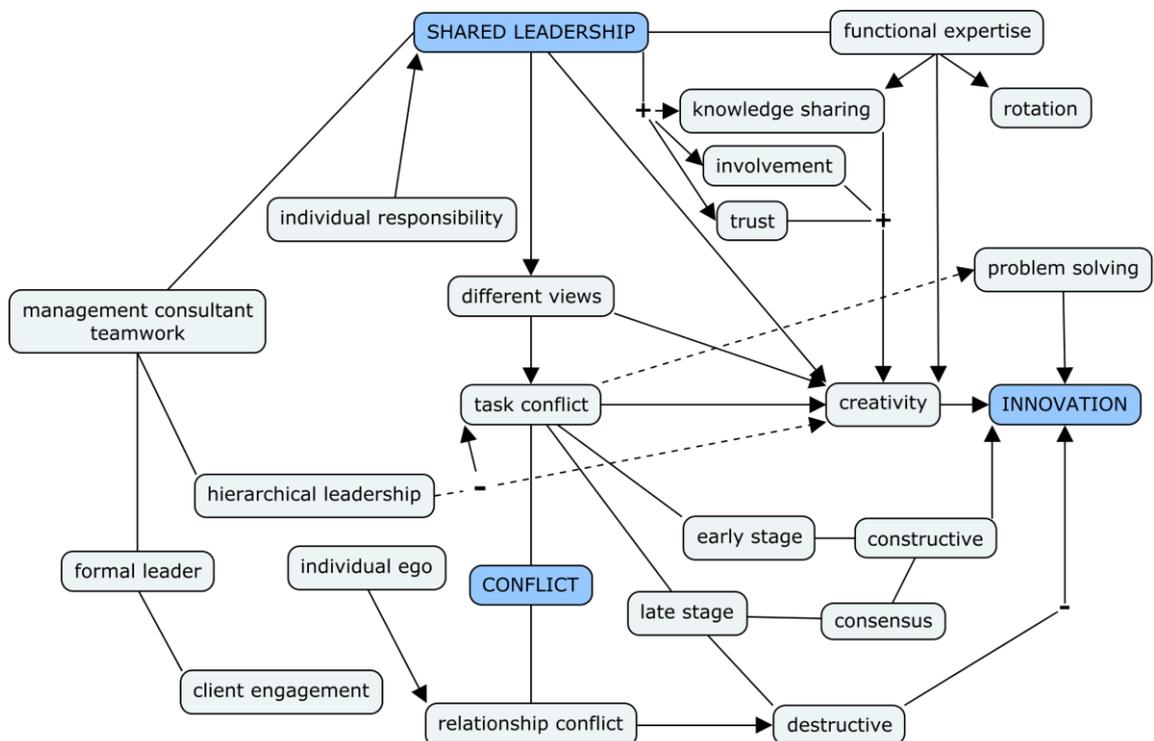


Figure 5.1: Aggregate causal map created from individual interview maps

5.3.2.1 Shared Leadership

Table 5.10: Linkages in aggregate causal map related to shared leadership

Concept 1	Link	Concept 2	Number	Management consultants
functional expertise	+	rotation	13	MC 2, 5, 11, 12, 13, 17, 18, 19, 20, 21, 22, 24, 25
SHARED LEADERSHIP	+	different views	10	MC 3, 4, 6, 13, 16, 18, 21, 22, 24, 25
SHARED LEADERSHIP	+	involvement	10	MC 2, 3, 7, 14, 15, 16, 20, 22, 23, 24
SHARED LEADERSHIP	+	creativity	10	MC 1, 2, 3, 4, 5, 12, 14, 17, 21, 23
SHARED LEADERSHIP	+	task conflict	7	MC 3, 4, 9, 10, 22, 23, 24
SHARED LEADERSHIP	+	knowledge sharing	6	MC 2, 4, 7, 15, 19, 20
SHARED LEADERSHIP	+	trust	5	MC 2, 4, 12, 19, 21
SHARED LEADERSHIP		functional expertise	15	MC 6, 9, 10, 11, 13, 14, 16, 17, 18, 20, 21, 23, 24, 25
mc teamwork		formal leader	14	MC 4, 5, 11, 12, 13, 15, 16, 17, 18, 19, 20, 22, 23, 24
formal leader		client engagement	13	MC 4, 5, 8, 11, 12, 13, 15, 16, 18, 20, 22, 23, 24

Functional expertise and rotation

Consultants with functional experience in a certain area can be considered experts in their area. Through the interview data it was shown that the shared leadership teams often contained consultants with diverse functional expertise and thus specialist knowledge of consulting areas, as shown in **Table 5.10**. The linkage between shared leadership and functional expertise is visualised in the aggregate map of **Figure 5.1**. Statements from a selection of management consultants demonstrating this linkage include the following:

'Everybody has subject-matter leadership and an opportunity to contribute to whatever conversations and decisions need to be made. It would be about expertise. If I am not working on my own, that's the reason that I got other people on board. They're not just there as a body, they are there because they bring some particular technical expertise.' (MC11)

'We all have different functions, it's a small operation obviously, but in terms of division of labour, I am the finance director, so I wear my finance director hat, so I do the books and the finance, I will tend to take a lead on anything to do with organisational culture, organisational development, structures, that sort of area. My business partner will always lead on things like recruitment selection and more HR type things. Maybe I take on the more theoretical stuff, the leadership, but there are areas of overlap where we have to be in a position where there are some programmes where we have to both run and where the benefits of working together come from as well.' (MC12)

The importance of complementing each other's skills regarding consulting work was particularly emphasised in light of the importance of **functional expertise** and thus of a team's functional diversity:

'We don't work in silos. Any job that comes along is likely to involve two or three of us at different points. Because I think any consultant that claims he is good at everything is a liar - I mean all of them do.' (amused) (MC5)

'For shared leadership I think it's important that the people who get together to run a big change effort understand each other and the nature of leadership that's likely come from those others and to be honest about what they can and what they can't - what their strengths and weaknesses are and to be a little bit flexible to fit around people.' (MC6)

'I would just describe it as being pragmatic. Everyone has got different skill-sets and capabilities that they bring to the table, and it is kind of recognising how to get the best out of those, together. Do we have a formula to do that -no, have people over the years become adept at working with other people, recognising how best to use the skill-set that we then have. And this we can do quite well within a flat leadership structure.' (MC23)

These statements demonstrate that team members having different skill-sets should be seen as highly relevant for shared leadership. Moreover, a causal relation was detected between functional expertise and **rotation**, and thus the possibility of the responsibility for guiding a group switching between team members, depending on the skills or the situation (Jackson and Parry 2011). This was recognised in interviews with assertions that management consultants rotated leadership roles:

'In our consulting team we have rotating leadership roles in terms of who is the sort of lead on various things, we also have a model that acknowledges people's expertise and specialisation.' (MC22)

'There are fairly clear roles regarding everyone's expertise. We tend to operate fairly flat structures. And we think that's very effective. For example, I might be the lead on the accounting but others would be the lead on another part. If necessary we would change the leadership roles, but there would always be one person who would be the face for the client.' (MC24)

Regarding this 'rotation', a prevalence of always having a leader at a given time was found which according to Carson et al. (2007) is based on skills, knowledge and expertise. This can be seen in the quote below. Nevertheless, it is important to note that this does not preclude the possibility of different team members exercising leadership roles at the same time (D'Innocenzo et al. 2014):

'In our team it is important that the person leads whose skills are of particular relevance and then sits back - so it would rotate on to somebody else. I think there is always a leader at a given time, but the leadership comes from others thinking 'oh my god they know what to do, they know more than we do, so we are willing to be the follower for now.' (MC25)

Knowledge sharing, involvement, trust

As will be discussed further in the innovation section, shared leadership was seen to develop knowledge sharing (MC7), involvement (MC16) and trust (MC21):

'I think the more hierarchical businesses work, the less likely they are to shared learnings. Because knowledge becomes power. You know 'I've been here 15 years I know this much better than you - you've only been here two years' sort of routine. So that hierarchical approach - the power in it is not sharing. It's usually short of sharing the information you can actually articulate in shared knowledge.' (MC7)

'And because we all take part in leading the team we all have our part to say. We all get very involved in these discussions in providing ideas and being creative. We are all interested in success and making the thing work.' (MC16)

'So our team is empanelled with the leadership and everyone can and will engage in leadership. The team is empowered as we trust each other.' (MC21)

Individual responsibility

Individual responsibility and thus individuals owing responsibility towards the teamwork was seen as an important precursor to shared leadership and thus as essential for successfully working within a shared leadership team. Involvement in decision making, accountability, sharing views were all mentioned as part of individual responsibility and of importance for shared leadership:

'Multiple people are involved in decision making and individuals would receive accountability towards senior clients. So they would be accountable for that part of the project. Joint decision making is present and everyone carries responsibility. Because of the model of working that we have it is good to involve as many people in decisions as possible. It is a lot about who has the expertise in a certain field or particular skills. One guy at the moment has skills in Lean and Six Sigma, he is not really applying those but what needed was somebody who had an eye for details, who was very logical even though he was not an engineer, he was the right person to lead us.' (MC24)

'Our decision making is made through consensus and is about having everybody's views, and again, on some of these assignments you might not meet very often, so conference calls, Skype conferences, those sorts of - on a regular basis to make sure we have those sorts of updates and conversations. Decisions and courses of action are joint decisions.' (MC11)

'I would interpret shared leadership as achieving a consensus among everybody that's involved in change or development around their responsibilities for taking the team forward. So the shared leadership would be that everybody would feel that sense of being responsible for the improvement in the team and leading the team forward. We have multiple people involved in decision-making processes. Each of the three partners also has a specific area of responsibility. Mine is marketing, although I am not exclusively responsible for marketing, one is responsible for finance and IT and one is responsible for HR and Facilities. So we do have a kind of conventional split of key areas of responsibility.' (MC8)

Client engagement

The aggregate map contains both the concepts of **formal leader** and **client engagement** which although not causally linked to shared leadership were identified as important regarding shared leadership in management consultant teams. A 'formal leader' was seen as crucial for management consultant teams, as demonstrated in the statement of MC24 above, in the sense that for client engagement the team needed a 'face for the client'. A client preference of dealing with one person in terms of accountability and relationship building was therefore emphasised by consultants, although there was no evidence that this influenced the leadership relationships within the team:

'The client will want to often only want to deal with one consultant. This person would be the formal leader by title. So you would say assignment, lead consultant or something.' (MC4)

'It's always important to have a client relationship manager or a client lead in our team. So whatever assignments you would do, there would be a single point of accountability for the relationship with the client.' (MC11)

5.3.2.2 Conflict

Table 5.11: Linkages in aggregate causal map related to task and relationship conflict

Concept 1	Link	Concept 2	Number	Management consultants
SHARED LEADERSHIP	+	task conflict	7	MC 3, 4, 9, 10, 22, 23, 24
different views	+	task conflict	7	MC 1, 3, 6, 16, 18, 21, 25
relationship conflict	+	destructive	7	MC 2, 7, 12, 13, 17, 24, 25
individual ego	+	relationship conflict	6	MC 7, 8, 10, 12, 15, 25
problem solving	+	innovation	6	MC 1, 16, 18, 20, 21, 22
constructive	+	INNOVATION	5	MC 12, 17, 22, 23, 25
task conflict	+	problem solving	5	MC 10, 18, 20, 21, 22
destructive	-	INNOVATION	6	MC 10, 12, 13, 14, 17, 18
hierarchical leadership	-	task conflict	5	MC 1, 3, 10, 12, 23
mc teamwork		hierarchical leadership	9	MC 1, 7, 8, 10, 14, 20, 22, 23, 24
late stage		consensus	7	MC 4, 13, 14, 17, 18, 23, 24
task conflict		late stage	7	MC 12, 13, 14, 17, 18, 23, 24
consensus		constructive	5	MC 8, 11, 17, 18, 24
early stage		constructive	5	MC 1, 12, 17, 22, 23
task conflict		early stage	5	MC 4, 12, 17, 22, 23

Task conflict

Many different terms were used for 'conflict' in the interviews. Terms used included 'challenging thinking', 'discussions', 'tensions', 'voicing opinions' and 'confrontations'. All management consultants had experienced task conflict to some extent in their teams. Importantly, task conflict refers to disagreements among team members about the tasks being performed, which stands in contrast to interpersonal and non-task related relationship conflict (Jehn 1995). Although task conflict was mentioned in the management consultant teamwork, it remained unclear if shared leadership in itself brought about task conflict. The view that there would always be disagreements in teams was prevalent. However, amongst management consultants it was seen that shared leadership also influenced the appearance of **different views** in their teams, which again was seen to influence task conflict:

'And so the flat structure allowed everyone to voice their opinions and provide important input with the challenge of eventually finding common ground which we did. And eventually it worked. Personality comes into it. Knowing we have the background as well. Not to be dissuaded by people saying 'this is simply not going to work' if you have an idea.' (MC19)

'People have different ideas and we don't always see things the same way through our spectacles, as a result of that it's important that you listen to other people, you give them the courtesy to talk about what it is that they want and from that we can maybe change our minds, change the direction we want to go in, if we agree as a group, or alternatively, we can agree with what we've agreed as a group and just listen to them. We challenge each other's thinking, we give our own thoughts, we sometimes give the group's thoughts and we discuss it. Because at the end of the day you have got to look at all options that are available. Particularly if you want to do something for a client, you know looking at the options that the client has, it also depends on how the client sees things in terms of the client's resources to deliver, the client's finances to deliver, the client's ability to deliver.' (MC18)

Therefore, it can be argued that a shared leadership structure allowed for the accommodation of task conflicts in teams. However, possibilities of there being less task conflict in non-shared-leadership teams were acknowledged. Management consultants found that **hierarchical leadership**, and thus less organic leadership structures could reduce task conflict:

'So because you've got a fairly flat structure you can accommodate those types of arguments. Whereas, if you're in a more hierarchical structure, people take their lead from their boss.' (MC10)

'Certainly people I enjoy working with are very open about style and constructive criticism. If we used a different style of leadership, there may very well be less confrontations. Of course you are always going to have differences of opinion within a team and I think the way we work of being open to criticism, accepting, coaching and encourage other people to offer each of us coaching, makes that constructive, so that you come up with better solutions for what you are doing.' (MC23)

Task conflict was seen to lead to enhanced **problem solving** in teams. This can be explained by management consultants discussing different views, in order to find the best solution to a problem and the right outcomes for the client, and was further linked to innovation:

'You could also call them competing views. If you are properly focused you are focused on coming out with the right outcomes for the client. There have been times where I may not agree with the way forward, because there was one view where I felt it was far too analytical and we wouldn't have time to do it.' (MC10)

'You always have disagreements. You have to have different views in order to find different ways to solve a problem even if you need some agreement as to which way you are eventually going to go.' (MC21)

Constructive and destructive conflict

Although task conflict was overwhelmingly seen as positive by management consultants, it was mostly seen as **constructive** and beneficial for the team during the **early stages** of projects:

'Well I suppose putting it crudely, my experience is, conflict is very beneficial up to the point where you have made a plan and you're actually going to try and deliver. Once the plan is in place constant kind of differences are actually quite unhelpful.' (MC12)

'These discussions would be at the beginning of the project, you would want to go through disagreements after you're half way through because you'd have scoped everything out, you know what you want to do. Conflicts would be disruptive later on.'
(M17)

The overall perception that disagreements or task conflicts would be disruptive at **late stages** of projects was emphasised. In relation to this, it became clear that **consensus** needed to be reached at later stages of projects:

'I think the danger is not that sort of ring-fencing time-boxing stuff, so actually the friction intention burns too much time. And that's about being realistic about the time you have to do stuff. And that's what experience will teach you. You know intuitively at what point has the positive friction gone and it's now when it's sort of becoming disruptive.' (MC7)

'At the end of the day it is trying to reach consensus but deferring to subject matter expertise. If people have done it before and they know the pros and cons and they know what will work and what will not work, you have got to be strongly guided by that.' (MC11)

'Also, in terms of having confrontation I don't think confrontation is beneficial towards the end of the project, because you want to be tying everything up. You don't want to suddenly reopen everything because of loads of disagreement about what you have done and the answers you have come up with. I think at the outset of the project it is very beneficial to challenge the kind of approach you are planning to take, the work plan itself, the assumptions you have made, the validity of the deliverables you are planning for the client, the expectations that have been set or are being set and so on.'
(MC23)

Regarding **relationship conflict**, which was often termed 'personality conflict', or 'discussions becoming personal', management consultants emphasised the danger of conflicts becoming personal as this would be **destructive** towards the team outcomes and with it innovation:

'It should not become personal because this would not be beneficial toward the team outcomes. Disagreements were beneficial because at the end of the day they produced what we all agreed was the way to go. We debated how to do things in order to get the job done.' (MC13)

'Discussions can become personal, you do get that and that would be detrimental toward a team innovating. Sometimes there is quite a lot of deviation in the beliefs of how we should take things forward. But at the end of the day we will find a way forward and come to a consensus of opinion. Sometimes it is personal, sometimes it is because of the age of the people, they don't want to do things the way they have done it before.' (MC18)

'Discussions could go into the negative by being personal. Somebody says 'that same crap idea' or 'that will never work', without actually tapping into that person's thinking and trying to really explore why there's that person that thinks it is going to work.'
(MC24)

Furthermore, team members' **individual ego** was frequently mentioned by management consultants as a problem in their teamwork, as it could lead to negative relationship conflict and thus needed to be managed:

'One of the challenges when people with high level of expertise come together is a classic ego problem which everybody will say 'no I don't have an ego' but people have an ego. (...) If something happens and someone loses face in front of other people then that's something which can cause problems and it's how they react to those situations. And for a lot of people that doesn't happen that often, so when it does happen it's quite fundamental. So just have to be able to put a sort of support framework around that for individuals when it does.' (MC7)

'There was an occasion when I had some consultants working for me, who had a clash between their own personal agendas and what I was trying to do. Trying to meet their personal development goals and what I was trying to do for the client. So that can become a problem.' (MC10)

5.3.2.3 Innovation

Table 5.12: Linkages in aggregate causal map related to creativity/ innovation

Concept 1	Link	Concept 2		Number	Management consultants
creativity	+	INNOVATION		20	MC 1,2,3,5,6,7,12,13,14,15,16,17,18,19,20, 21, 22, 23, 24, 25
task conflict	+	creativity		14	MC 1, 5, 6, 8, 9, 10, 11, 12, 14, 16, 19, 22, 24, 25
SHARED LEADERSHIP	+	creativity		10	MC 1, 2, 3, 4, 5, 12, 14, 17, 21, 23
different views	+	creativity		9	MC 1, 2,3 10, 15, 18, 19, 20, 22
involvement	+	creativity		9	MC 2,7, 15, 19, 20, 21, 22, 23, 24
trust	+	creativity		8	MC 1, 3, 6, 8, 12, 17, 20, 25
functional expertise	+	creativity		5	MC 1, 6, 15, 20, 22
knowledge sharing	+	creativity		5	MC 1, 3, 4, 5, 7
hierarchical leadership	-	creativity		7	MC 1, 12, 14, 20, 21, 22, 25

It is important to note that creativity and innovation, which despite their similarities are different concepts, were often used interchangeably by management consultants. Innovation firstly involves the generation of new ideas which should be referred to as creativity, a sub-process of innovation, and secondly the implementation of new ideas (West and Farr 1990). Nevertheless, the focus of management consultants, when referring to the innovative outcomes of their teams, was both on the process of generating new ideas, as well as on their implementation.

Shared leadership

As regards the influence that management consultants perceived shared leadership to have on creativity or idea generation, it was found that shared leadership positively influenced creativity and with it innovation, as an outcome of creativity:

'In terms of idea generation shared leadership is even more powerful, because when you share thoughts with your peers, your colleagues, the executive management people that are involved you come up with one thought and you put it on the table without really asking for it you could be receiving a thought or an idea which really broadens your thoughts and helps you significantly. You obtain a so-called 'light-bulb moment' that puts you in a different dimension. We have plenty of innovative outcomes and those usually arise from the fact that, as I said there's been a lot of good energy that has been built up when people are thinking collectively rather than separately. Those are the best moments that people innovate and really what comes out from each person is their real expertise in the field that they're in.' (MC2)

'Shared leadership influences creative outcomes. Because you've got people with new ideas who are not spoilt yet who are definitely not hindered in bringing their views forward.' (MC3)

'Shared leadership does lead to greater innovation. Because what happens is sometimes the classic thing is that leaders they can take on too long the role, they like status and often then get driven by other factors rather than the benefit of the organisation as a whole.' (MC4)

'It can be challenging not just to take control but to say 'I want you guys to do this' but it is the best way to ensure people come up with ideas which eventually leads to the team innovating.' (MC21)

The difficulty of controlling the large amount of creativity and innovation in a shared leadership team was however emphasised:

'We've got too much of it. We've got too many ideas actually. Avalanche of them. We're all ideas people and it's really difficult getting it under control. Because I mean if he's taking you on to find something quite singular and you keep popping up and say "hey, I've had another idea, what about this and what about that" the guy gets quite rattled by it. And so controlling innovation actually is a challenge for us, we have to keep saying "well, hold on a minute".' (MC5)

The finding that there was a positive causal relationship between shared leadership and creativity, went hand in hand with the view of management consultants that **hierarchical leadership** would reduce creativity:

'I think the more rigid the structure and the more authoritarian the leadership style, the more likely it will be that it will work as long as they have the right idea. If no-one is challenging and they are all 'yes' people, then you tend to get a very unhappy team. Some organisations you work with you go in and you can feel the atmosphere and it's not what I would call a creative atmosphere. It is an atmosphere that is trying to constantly produce ideas that will please the manager, the boss.' (MC12)

'I think it is the only way you are going to get them actually. I actually believe it is like a petri dish, you are culturing innovation, you are culturing newness, you are culturing us being able to see new ways forward. So it is like a precondition, not just an advantage. You can't do this without that. The hierarchical structure closes it down, always shuts it down because of the person who is the leader fearing that they are going to lose something. So they are constantly shutting it down' (MC25)

Knowledge sharing, involvement and trust

In terms of concepts influencing the relationship between shared leadership and creativity or innovation, the main concepts were found to be knowledge sharing, involvement and trust.

Knowledge sharing was related to management consultants exchanging information. It was important for learning and both were related to shared leadership and creativity:

'My colleagues and I, we do a lot of teamwork, so teamwork is the foundation of sharing information. So in the preparation stage that I do with clients or my colleagues do with clients we share information amongst us. I could share a proposal, I could share the challenge that a colleague has and work around it with him so that we can provide the right solution in the form of a proposal.' (MC2)

'I think generally speaking we were able to assure each other of our expertise. We were able to discuss our ideas and effectively communicate them. We had to understand which ideas would enable us to achieve our goals. The ability to communicate one's ideas was very important.' (MC19)

Involvement, in terms of individuals participating in activities or situations in the team, was seen as being stimulated by shared leadership and was identified as an important precursor to creativity:

'And because we all take part in leading the team we all have our part to say. We all get very involved in these discussions in providing ideas and being creative. We are all interested in success and making the thing work.' (MC16)

'The thing about this flat structure is that everybody gets involved. Innovation doesn't just happen. It's a managed event like anything else, I think you have got to be conscious also, but in managing an event, you are not managing it to the exclusion of an innovative outcome. People who are a little bit more wacky have got to have the environment to air their ideas and bring them out as well.' (MC24)

Trust, which can be defined as the belief in the truth and reliability of consultants and the willingness of team members to be vulnerable to the actions of other team members (Costa et al. 2001), was frequently mentioned as important for developing creativity and with it innovation, for example:

'So, if you can take ego out of the team and if you can replace that with a high degree of trust, it doesn't need to be transparency necessarily, though that's nice, but trust is the key thing. Trust and a low ego coefficient, that will make for an innovative and effective team.' (MC8)

'It's a question if you get the right people and somebody you feel comfortable with it becomes easier to share leadership. It is about relationship. A team will be more innovative if there is a trust, which you get by getting the right people together.' (MC17)

Task conflict and different views

As regards the highly relevant relationship between task conflict and 'creativity and innovation', management consultants clearly perceived there to be a link between the two concepts. Task conflict was generally seen as not only a desire but as a necessity in teams that wanted to innovate. It was further suggested that getting the right 'personality types' or 'people' together into the room was very relevant in terms of generating task conflict. The importance of not reaching consensus too early and having discussions and disagreements was emphasised:

'I think conflict and variety of personality type - deliberately getting different personality types in the room or different angles in the room is really important in terms of idea generation. You can get a lot of ideas very quickly by having a high degree of conflict and almost competition as well. Where consultants are very keen to have a better idea than someone else and so often I have been motivated to be part of a very bright group of people and to be holding your own and trying to come up with the next better idea is a very motivating thing to do.' (MC6)

'I think you have to have friction. If people say "we are completely about shared learning and we're about innovating" and all this stuff and you have no friction I would question do you either have the wrong people or are you in a very unique situation. Most sort of innovation in my view comes from a healthy level of friction because as you bounce off each other then you're more likely to come up with new ideas. If there is no friction, no tension then no it's not going to work.' (MC7)

'I think disagreements always are useful, it's only by getting people to express opinions, by calling upon their experiences and knowledge that the innovative ideas come forward. If you don't have that interaction, then I think it is very much more difficult to get innovation. I mean you would be surprised how sometimes a chance remark is the thing that gives you the spark that suddenly triggers an idea, so no I think it is essential that that happens.' (MC15)

'I don't think anybody comes in our team and says 'we are going to do it this way', if it is a good idea you do it, if it's the right way, if it's so blindingly good that you haven't seen it, then you have to say "well actually that's good". You have to chat and have discussions and disagreements to find new solutions to problems.' (MC17)

However, as mentioned in the previous section, it remains important to reach **consensus**, as well as facilitating or managing conflicts, carefully:

'I think having disagreements can lead to people coming up with different ideas and that's what has been happening with us, however, we have to manage them if we want them to ultimately benefit the team in terms of innovation. (...) Consensus has to be reached as early as practical. I think having creative conflict in our team is very useful, but the emphasis must be on creative, and if you have got someone who has put forward an idea or solution which the rest of the team either don't like or don't approve of, or think is nonsense, if that's not handled carefully, then you have got someone who is going to be very resentful and will interrupt and not contribute in other areas.' (M19)

'I think having disagreements or having occasional emotional output is part of the creative process. So long as it is done in a constructive way. And that is part of the ground rules that we talked about. So not only no idea is a bad idea, but you allow people, you listen to people as much as you speak, you build on ideas, you don't negate ideas, you don't put people down, you don't have some of those anti behaviours - maybe that's controlling people too much but you don't want people to get upset or not to express their ideas. So you do try and control the mood and control the behaviour as much as you should without being too controlling. But having a heated debate around something is quite often so long as it is facilitated well, quite often will result in a good outcome, that quite often will result in somebody changing their mind, that will build on somebody else's idea, that will create a better idea, that will turn the model on its head.' (MC24)

5.3.2.4 Further Influences

While all respondents were clear about the benefits of shared leadership, problematic aspects of using shared leadership in their teamwork were also noted. The three main issues related to **shared leadership** being:

1. More time intensive;
2. Financially inefficient; and
3. Lacking accountability.

'The most common downsides in my experience is that it takes more time. The command and control model goes to prominence because it is hyper efficient in terms of time, it's the traditional view of the armed forces. Do what your superior tells you to do and that's fine. This new approach of shared leadership and welcoming disagreements takes more time, and because you have to discuss the different perspectives, having diversity means acknowledging that people will have different opinions and so they want to discuss that.' (MC22)

'I'd say it's financially inefficient. Because you've got three heads on something which perhaps one head should be on. And so I would hate to work out our effective day rate on some of these projects because we all three end up working on it where only one should be.' (MC5)

'One of the things that are the downside of a (shared) leadership model is that everybody is so busy leading somebody else, the accountability gets lost somewhere. You can have shared responsibility but not shared accountability. And that I think is one of the downsides of the shared leadership model.' (MC22)

The importance of **self-leadership** as a precursor to shared leadership in terms of individuals using their skills to lead themselves and others has been previously discussed and was mentioned in the context of shared leadership and autonomy:

'So it's about inviting a different form of leadership which is kind of self-leadership which means to step in when we need to. And also sit back when you need to. And this I would say relates to sharing leadership.' (MC25)

'You need people to have their own autonomy and if you don't have that people will not be as motivated and think they might not be doing the right job or simply not do it. Self-leadership is important. You don't have long chains of people doing the same thing, making cars anymore. The overall view is that people should be able to manage their work.' (MC9)

Trust was further seen as important for **task conflict** as it ensured conflicts were carried out constructively and prevented conflict from turning from the positive into the negative:

'You have to be open to conflicts. If you want to do something different for the client; it was being really clear about what would we say we would do differently for the client than everybody else. And doing whatever it takes to do that. So I had to trust the other guys - I had no idea what was going to come out of this, which was quite scary.' (MC11)

'If you pick the right people, people that you like and trust, you can ensure that disagreements are carried out constructively. I can think of occasions where somebody said 'well we could try it this way round' and then I would say 'yeah that could work but I am concerned about xyz'. So we tend to discuss it and you get that agreement.' (MC17)

'It comes down to trust I think regarding whether disagreements become negative. Trust and vested interest. So within our consultancy we are fortunate in that we have a very high degree of trust I think. Certainly between the partners because we have worked together for a long time but I think generally, in fact I am sure generally. I'm pretty sure we have a very high degree of trust, which means that people can afford to declare things that perhaps otherwise they might keep secret.' (MC8)

Diversity was mentioned as beneficial in terms of **functional expertise**, but also as regards developing **different views** and in bringing people together:

'Diversity is a benefit in its own right because structurally the more diverse you make your team, you are structurally setting it up to acknowledge and recognise difference as opposed to commonality. And this is also where shared leadership can bring people together. Functional diversity. Cultural diversity. Different people can bring different cultural perspectives, and where I have seen tension of course is either in the fact that the team does not acknowledge its diversity and that it is a value in itself, and therefore starts to fight against it. It's a terrible way to go. The other sort of problem is where an individual brings a particular perspective and gets sort of stuck on that. This frame every problem is part of. And we all human beings create a pigeon hole in things. However, within our team we welcome different views which is one of the benefits of having everyone engaged in the team's leadership.' (MC22)

Equality, strongly related to shared leadership, was seen as relevant in terms of instilling **creativity**:

'Fairness and equality are very relevant to having equal status and thus creativity in teams. Fairness is that everyone on the team is treated fairly and equality is that everyone on the team has the opportunity to say their piece.' (MC1)

'If people have the freedom to believe that actually what they suggest will be listened to, and everybody has an equal voice, they're more likely to share their views and opinions. And I think it's very difficult again to do in a traditional organisation. Everybody says 'of course we'll listen to whoever comes up with the idea, we'll listen to it'. It's very rare that that is reflected in reality. Because that voice is just never heard. So because we're project based and because of the way we pull people together, we are a lot more set up for that.' (MC7)

5.3.3 Concept Interrelatedness

The empirical data collected through the interviews with management consultants allowed for analysing participant perceptions regarding the themes of shared leadership, conflict and innovation. Following the survey with management consultants, it was important not only to discuss in more depth the relationships between the concepts, as discovered through the survey, but also to identify further influencing factors. As a first overview, **Table 5.13** presents results from the Qualitative Element 2 concepts in relation to the variables and outcomes of their respective Quantitative Element 1 hypotheses. It is important to note that the results from the analysis of the interviews provided meaning for the quantitative results and further underpinned some of the relationships as found through the survey. However, as regards this data triangulation, although convergence of data might be found, data could also be inconsistent, thus not confirming but not contradictory, or completely contradictory (Mateo and Foreman 2014). The implications of these qualitative findings in combination with the

quantitative findings from the previous section, and the qualitative findings from the observations, will be further discussed and interpreted in Chapter 6.

Table 5.13: Results from Quantitative Element 1 and Qualitative Element 2

Hypotheses	Quantitative Element 1	Qualitative Element 2
<u>Hypothesis 1:</u> Management consultants' perceptions of shared leadership have a negative relationship with relationship conflict.	Supported	<ul style="list-style-type: none"> - Management consultants emphasise the importance of conflicts not becoming personal in shared leadership teams. - Personal relationship conflict would be destructive to the team's outcomes. - Shared leadership provides the ground for disagreements remaining positive. - It remains unclear whether management consultants feel there would be less relationship conflict in a SL team, this possibly being dependent on the team.
<u>Hypothesis 2:</u> Management consultants' perceptions of shared leadership have a positive relationship with task conflict.	Rejected	<ul style="list-style-type: none"> - Management consultants emphasise that conflict will always be present when working with people in teams. - There is not necessarily more task conflict in shared leadership teams. - SL does allow for the accommodation of task conflict. - SL provides the ground for people voicing different views. - Trust is important for TCs being carried out constructively.
<u>Hypothesis 3:</u> Management consultants' perceptions of task conflict have a positive relationship with team innovation.	Supported	<ul style="list-style-type: none"> - Task conflict increases the potential for generating ideas and innovative outcomes. - Different views are linked to task conflict and creativity and innovation. - Task conflict only remains beneficial during early stages of the project and is disruptive later on. Consensus therefore needs to be reached.
<u>Hypothesis 4:</u> Management consultants' perceptions of shared leadership have a positive relationship with team innovation.	Supported	<ul style="list-style-type: none"> - Shared leadership stimulates the sharing of thoughts and views that lead to higher creativity and thus innovation in teams. - Knowledge sharing, involvement and trust link both shared leadership and creativity/ innovative outcomes.
<u>Hypothesis 5:</u> Management consultants' perceptions of (a) shared leadership and (b) task conflict have a positive relationship with team innovation.	Supported	<ul style="list-style-type: none"> - Shared leadership, task conflict and creativity/ innovation are shown to be interlinked. - Management consultants find both shared leadership and task conflict to enhance their teams' creativity and innovative outcomes. - SL is shown to stimulate different views which again lead to disagreements about the tasks being performed. - Trust is important in facilitating the relationship.
Hypothesis 6: Management consultants' perceptions of (a) shared leadership and (b) relationship conflict have a negative relationship with team innovation.	Rejected	<ul style="list-style-type: none"> - The occurrence of relationship conflict is detrimental toward team innovation. - The negative effects of relationship conflict depend on the extent to which consensus is found. - Conflict needs to be facilitated to prevent negative effects.

5.4 Qualitative Element 3 - Observation Analysis

The third empirical element of this research involved the collection of visual data in the form of digitally recorded meetings of a management consultant team. The observation of the management team lasted over a period of five months and resulted in 16 meetings being video-observed. Overall, 36 hours of digitally recorded video data were collected. Verbal data as well as important visual occurrences were transcribed and analysed using the qualitative data analysis software NVivo10. As discussed in Chapter 4, these data were analysed qualitatively, using an ethnographic approach. This included the use of numerical data, so instances of conflict could, for example, be counted. Through an iterative coding process, relevant themes emerged from these data. The following sections start by discussing the management consultant project and observation. Following that, observations regarding shared leadership, conflict and innovation within the team are presented through an in-depth analysis of excerpts from discussions between management consultants.

5.4.1 Management Consultant Project

Due to its size, newness and nature, the company in which the observation took place can be seen as entrepreneurial and was described as a 'start-up' by team members. Meetings took place on a weekly basis and lasted for about two hours. As the core team represented the main members of the management consultant company, the team was completely self-managed. Thus, ideas generated and decided on by team members could be directly implemented without the need of consulting with other organisation members. The main project discussed by the management consultant team can be described as being of an innovative nature. It involved creating a training programme for organisations to enable them to develop new streams of business income. This included developing material for the programme in the form of a handbook with different modules as well as developing a corresponding website through which the material would be marketed. The progress of developing the training programme and website as well as marketing the relevant material were discussed each week and were central to the management consultant meetings and, thus, of interest to this current research.

Importantly, the video enabled the researcher to observe which team members were talking to each other, which was not always audibly clear, but would be visually more obvious. Furthermore, irony, sarcasm or disagreement was often expressed through facial expressions, such as grimaces or smiles. In particular, regarding conflict, team members would often gesticulate. Furthermore, statements would be made while pointing at paper documents or computer screens. Many of these interactions were deemed relevant for the transcription and

included in brackets. It is important to note that rather than logging every single visual interaction, the focus was placed on those deemed relevant in the context of the situation. For instance, during sequences of tension between team members, non-verbal discourse provided further evidence of potential agitation or annoyance.

5.4.2 Shared Leadership

As regards shared leadership and leadership responsibility being distributed throughout the team, this was frequently observed during the team observation. An important prerequisite for shared leadership is **self-leadership**, which may be defined as ‘the extent to which teams have the freedom and authority to lead themselves independent of external supervision’ (Stewart and Barrick 2000, p. 139). Due to the team being unsupervised and self-led, rather than receiving directions from a supervisor, it could decide itself which tasks to carry out and how this should be done. The sharing of leadership was continuously demonstrated as more than one member engaged in the leadership of the team and team members influenced each other. This way of working was also acknowledged by the team member who was interviewed prior to the observations. In contrast to observing conflict, it was more difficult to observe shared leadership during the teamwork directly. However, in addition to team members influencing each other, attributes of shared leadership were observed. **Joint or collective decision-making** for instance was identified as an essential trait of a shared leadership team. In the first discussion below, Paul asks the team if they agree on elements of the project stages, demonstrating an instance of joint decision-making. George makes some suggestions to which Paul agrees. Similarly, the second discussion below shows an instance where a joint decision is made by Paul and Sarah regarding the training modules.

P: Do we agree that those are the things that we need to get back on? (referring to project stages)

G: Yes, I guess they are, the only caveat is that we got feedback from doing something else. (pointing at paper with pen)

P: Yes.

G: We've gotta make sure that we transfer the relevant bits. (smiling, gesticulating a curve from one point to another)

P: Yeah, yeah, it's true. (Looks at paper). Yeah, so process consultancy is relevant now that we are trainers. Although we will need to be I think quite processy in the way that we do it as a trainer. (shaking hand - gesticulating continuity)

(Meeting 1)

S: There's problems with the module. But hopefully we'll perfect it in the process of implementing it ourselves.

P: Are we all agreed by the way that operationally with both companies we need to end up with everything modularised? Everything we do?

S: I think so.

(Meeting 6)

As regards **participation and input** of team members, in particular regarding the core consulting team of George, Paul and Sarah, this was continuously demonstrated due to their presence in all of the meetings observed. **Table 5.14** below shows the percentage of involvement in tasks of each team member as well as the number and task categories in which they were involved. Naturally, the 'core' team displayed the highest levels of involvement, led by Paul and then George and Sarah and most tasks concerned planning, production (includes creativity) or problem-solving tasks. The participation of the visiting consultants Thomas and Claire and the assistant Anne was lower, due to the lower number of meetings attended, which was further linked to lower levels of knowledge regarding the core project. Therefore, when present, they mostly acted as observers regarding the project development. Similarly to De Dreu and Weingart (2003) and following the task classification scheme of McGrath (1984), episodes concerning the project were coded as one of the four categories of planning, production, intellectual and decision-making tasks. This allowed for distinguishing between the tasks exercised by the team although some episodes were coded into more than one category. Planning tasks involved generating plans and emphasises action-orientation, production task involved generating ideas or brainstorming tasks, intellectual tasks referred to solving problems with a correct answer and decision-making tasks dealt with the team selecting a preferred answer (McGrath 1984, p. 63).

Table 5.14: Project involvement of team members

	Total involvement	Production	Decision-making	Planning	Problem solving
Total tasks	104	38	7	39	20
Paul	91%	36	6	35	18
George	79%	27	7	31	17
Sarah	55%	19	4	23	11
Thomas	10%	2	0	6	2
Claire	10%	5	0	3	2
Anne	4%	1	0	2	1

An important aspect of shared leadership was identified as that of **social support**. Responsibilities towards achieving the aims and objectives of the team were shared rather than being delegated to a single leader. This enabled a feeling of ownership and team members would engage and collaborate across, rather than merely in, their individual functions. Collaboration was recognised as team members were never restricted regarding voicing their views. Furthermore, team members continuously encouraged each other and recognised each other's achievements. This was for instance phrased in team members appreciating ideas:

S: Then we've got events at the bottom. I thought this was a good place to put definitions in.

P: Oh yeah, good idea.

Shared purpose was visible by team members, for instance, regarding problem solving. Each team member had functions or tasks assigned to them which were decided collectively by the team, but would also occur naturally due to team members having functional diverse areas of expertise. Furthermore, the team had collective goals which they worked toward and thus shared purpose. This was also visible as team members had a stake in the outcomes of the team and a large emphasis was placed on reaching common goals, as outlined in the project plan. In terms of sharing responsibilities, it was observed that this was an important factor when the problems or failures of the team were discussed. In the discussion between Paul and Thomas below, negative feedback from a client is discussed. The first person, plural pronoun 'we' is constantly used here and in further instances when referring to failures. Furthermore, Paul refers to fundamental decisions not having been made by the team (corresponding video still in **Figure 5.2**).

P: Oh, our internal process didn't work at all. We didn't actually follow our own process.

T: So you didn't do agreed steps like - ? (pointing - one, two, three)

P: We didn't, we didn't sort roles out which things was George gonna do, which things was me and Sarah gonna do. We didn't do that.

T: You didn't discuss without the clients.

P: Yeah, we didn't make fundamental decisions around how many people do we need to interview in this place in the first place. Secondly, what questions do we need to ask them, what data do we need to gather? We rushed in, carried along by their demand for urgency.

(Meeting 1)



Figure 5.2: Management consultant team debating failures (Thomas, George, Sarah and Paul - from left to right)

As regards the issue of shared leadership in terms of team members **rotating** the responsibility of guiding the group which would depend on the demands of the situation and the particular skills required (Jackson and Parry 2011), this was routinely exercised by the consultancy team. Although it was often not obvious who was leading the team, instances in which a team member could be considered to be leading the team were characterised either by a team member possessing the relevant functional expertise or guiding others regarding the project schedule. Such instances mostly occurred fluently and could often be very brief. However, rather than having a continuously rotating leader, many of the meetings were structured by actions which were distributed to team members based on their functional expertise and/or joint decisions of the team. The conversation below provides an instance in which Sarah asks Paul to provide an update regarding the content schedule for a training event. In the second instance, Paul leads the team on how he believes the team should move forward.

S: Actions for the event. How's the content schedule coming along? (asks Paul)

P: Well I'm doing about 30 minutes every day on the train. It's quite a big project. In fact a very big project.

S: Mmh, but are you designing the whole thing or are you just designing a schedule?

*P: No, well at the moment I'm designing all of it but I've only gotten into small bits.
(Meeting 11)*

*P: Let's not spread ourselves thinly with a series of activities. Let's give this two or three months and really shove it, and based on the feedback that we get, start to make some decisions about whether we need to back it with other stuff, or do some things differently. (holding programme brochure)
(Meeting 2)*

Trust, which in the context of this current research can be described as the willingness of team members to be vulnerable toward the actions of team members, was depicted in terms of management consultant team members believing in the competences and reliability of each other. This was visible throughout the teamwork, as each team member had preassigned functions and tasks agreed on by the team. Team members were trusted to carry out tasks based on both managerial and technological competence. Therefore, team members were confident that tasks could be carried out, reducing uncertainty within the team. High levels of familiarity in particular between core team members played a role in developing trust. Furthermore, the presence of shared leadership made team members willing to share information and comfortable with each other. The high levels of task conflict within the team could therefore be related to the perception of team members that they could speak and voice their objections openly, which is visible in the section on task conflict.

5.4.3 Conflict

Conflict was defined as disagreement between two or more team members and was coded as conflict episodes. A conflict episode would begin with an utterance indicating disagreement with something a team member previously said and would end with the discussion moving to another topic (Wood et al. 2011). Each conflict episode was coded either as task conflict or relationship conflict. The decision to limit the theorising to task and relationship conflict in this current research was reinforced, as, similarly to Ayoko et al. (2014), potential overlap of process conflict with task conflict was identified during the coding process. Task conflict was classified as disagreements about the task being performed and conflicts concerned the distribution of resources, procedures, policies as well as judgement and interpretation of facts (De Dreu and Weingart 2003; Jehn 1995). Relationship conflict was classified as conflict about personal issues such as personal taste, political preferences, values and interpersonal style (De Dreu and Weingart 2003; Jehn 1995). During the coding process, it was found that the duration of conflict episodes observed varied significantly, which is why they were identified as being short, medium and long instances of conflict. Short episodes were less than two minutes in length, medium episodes between two and five minutes, and long episodes of conflict took longer than five minutes to end.

5.4.3.1 Relationship Conflict

As regards instances of relationship conflict and, thus, personal conflict, tension or friction in the team, this type of conflict was observed quite seldom (13%) among team members due to a large majority of conflict (87%) being task focused (see Appendix N). Furthermore, relationship conflicts only occurred among the core team, which could be linked to the team's high levels of familiarity. However, as discussed in the literature section of this study, task conflict and relationship conflict can overlap, as teams with high levels of task conflict also display levels of relationship conflict, the two therefore being interrelated. Professionalism or other instances such as the familiarity of the management consultant team observed may have prevented direct relationship conflict. However, it was observed that the conflicts which could be regarded personal, emerged from one team member being ironic toward another team member or from longer instances of task conflict. The following demonstrates two instances of conflict which can to some extent be considered personal:

P: George is doing a project which is identifying the skills and knowledge and behaviour needed to be an effective trainer.

S: Oh, that is in the plan. (pointing at computer screen)

P: A few surprises here, you keep thinking you are doing things that are not in the plan. (to George)

***G: Well I kind of knew they were. (other two laugh)** But it is the level that I have been doing it. (gesticulating - explaining) I mean - I don't think our plan said go to the library and spend three hours rooting around, taking out a pile of books.*

P: Sure the plan can give you enough authority to make decisions. (slightly ironic tone)

(Meeting 2)

The above discussion demonstrates two short instances of conflict. First, Sarah and Paul can be seen to laugh at George, even though the tone could be considered friendly. Furthermore, Paul's remark about George's authority can further be described as a personal instance of conflict. This short discussion below again demonstrates an instance of conflict which can be interpreted as personal, as Paul's 'Oh dear' implies his dissatisfaction with the way George is going about his work, in particular with the change of tone implying sarcasm.

G: I have been periodically reviewing various situations of the brochure. And I have now got a couple of pages of observations.

P: Oh dear. (sarcastic)

(Meeting 4)

In the quote below Paul implies that Sarah's position regarding the digital marketing approach is 'emotional rather than logical' which can be seen as a personal type of conflict.

*P: Well I understand Sarah's concern about not losing our position, but I still think that's **emotional rather than logical**.*

(Meeting 2)

Apart from relationship conflict being related to irony, the second occurrence of relationship conflict was observed when conflicts lasted for a longer time-frame. This heightened the risk of conflicts becoming negative. The following discussion involves a long lasting instance of disagreement between Sarah and George regarding working out the best route for the marketing of the brochure in organisations. Since the length of the discussion was over 20 minutes, only an excerpt is displayed here. The full discussion can be found in Appendix O (corresponding video still in **Figure 5.3**).

(abstract below follows long sections of task conflict on how to market the training brochure)

P: I would have thought (turns toward George looking at ceiling and placing hand on own mouth - wondering; see video still), if you are going to visit 112 companies, I bet there is mapping software that can do this...

*S: **(interrupts; loud)** Yeah that's what I'm saying!*

P: You could say: I want a route plan from one to 112 (gesticulating plan), and you go along and you see the first two, the third one is not there and then jump to there.

(pointing steps with fingers)

G: But you are making the assumption that I'm gonna be starting at the same point.

*S: **(annoyed)** No! We are not making the assumption - we are making the assumption that - so let's do this literally*

(...)

*G: **Well that's a waste of time isn't it?***

S: No. (shakes head)

G: Yes it is. If the next one for some reason is a long way away...

*S: **(interrupts, loud, agitated)** It's not going to be a long way away, that's what somebody is going to map out. The next company is always, always, always, going to be the nearest company to the one you are sitting at. That's the point of the map.*

(gesticulating)

G: I can't see it's the effort doing it - if you guys want to do it that's fair enough. I see where you are coming from but the logistics of actually doing it I don't think it's going to benefit me relative to the things you could be doing otherwise.

*S: (...) The only reason I suggested you take the support from the office was because I think your time is more important than spending the day planning the itinerary or a couple of hours - but **if you think you've got the time for that be my guest (laughs sarcastically)**.*

(discussion continues...)

(Meeting 13)



Figure 5.3: Instance of relationship conflict within team (corresponding text sequence marked; Anne, George, Sarah and Paul - from left to right)

As can be seen in the discussion, Sarah displays annoyance several times, which was observed both through the tone and the level of her voice. This instance of relationship conflict followed a longer-lasting phase of disagreement between her and George. This was further recognisable in the video through her agitated tone of voice and gestures. Her sarcastic laugh further indicates how, to her, the conflict has become personal. George's previous statement of Sarah's

suggestions being 'a waste of time' can further be seen as a personal rather than task related comment. Overall, more than two thirds of relationship conflicts occurred at a late stage of long conflict episodes, which were first task focused (see Appendix N). Therefore, long episodes of task conflict can be seen as carrying the risk of turning negative by entailing more personal aspects. No positive effects could be directly observed through personal or relationship conflicts and there were no instances in which creativity arose following such conflicts.

5.4.3.2 Task Conflict

Overall, 52 episodes of task conflict and, thus, episodes of disagreements between team members about task-relevant ideas, issues, and content were identified during the coding process. As discussed, these episodes of task conflict in the management consultant team were classified as short, medium or long. Conflicts would begin with two team members being involved but could extend to additional team members becoming involved. Furthermore, conflict episodes could introduce a range of disagreements. As mentioned, due to the familiarity of the core team of Paul, George and Sarah, and due to their attendance at all team meetings as well as their knowledge of the training project their engagement in task conflict was highest. **Table 5.15** shows that 85% of conflicts were among the core team, first between Paul and George (41%), followed by Paul and Sarah (25%) and then George and Sarah (18%).

Table 5.15: Individual conflicts between team members as percentage of total conflict

	Paul	George	Sarah	Thomas	Claire	Anne
Paul	-					
George	41%	-				
Sarah	25%	18%	-			
Thomas	3%	1%	0%	-		
Claire	1%	4%	1%	0%	-	
Anne	0%	4%	0%	0%	0%	-

Misunderstandings

The shortest episodes of task conflict often included misunderstandings which were quickly resolved, as can be seen in the following discussion in which there is some confusion regarding the person who would complete the training website:

S: The website is in the plan due to completion by the 30 of June, because the plan says we need to start mailing these brochures by the 1st of June.

P: And that's a question of jumping on Steve, "are you doing this, yes or no?", isn't it?

S: Well no, I thought we were getting James to do it.

P: Oh sorry, yeah. I forgot. Yes, absolutely let's do that.

(Meeting 2)

The discussion below shows another short instance of task conflict which again was triggered by a misunderstanding between team members.

P: Most of my time has gone on the famous training brochure
S: Which we need ready by Thursday, so we can send it on the Monday.
P: I thought you told me it was going to be ready by Monday? Oh you mean this Thursday, tomorrow?
S: Yeah, tomorrow.
(Meeting 3)

Conflict behaviour styles

During the analysis process, differences regarding task conflict were observed. In some instances of task conflict team members seemed to cooperate more than others, which was more likely to result in conflict resolution or positive outcomes. Therefore, a classification for task conflict in terms of different behaviour styles of team members was required for the coding process. Task conflict was coded using the Thomas and Kilman (1974) typology of five conflict behaviours (see **Figure 2.1**) which include (1) accommodating, (2) avoiding, (3) collaborating, (4) competing, (5) compromising. They are placed on the dimensions of cooperativeness, ‘the degree to which one party attempts to satisfy the other party’s concerns’ (high: collaborating, accommodating; medium: compromising; low: competing, avoiding) and assertiveness, ‘the degree to which one party attempts to satisfy his or her own concerns’ (high: competing, collaborating; medium: compromising; low: avoiding, accommodating) (Ferrell and Fraedrich 2016, p. 322).

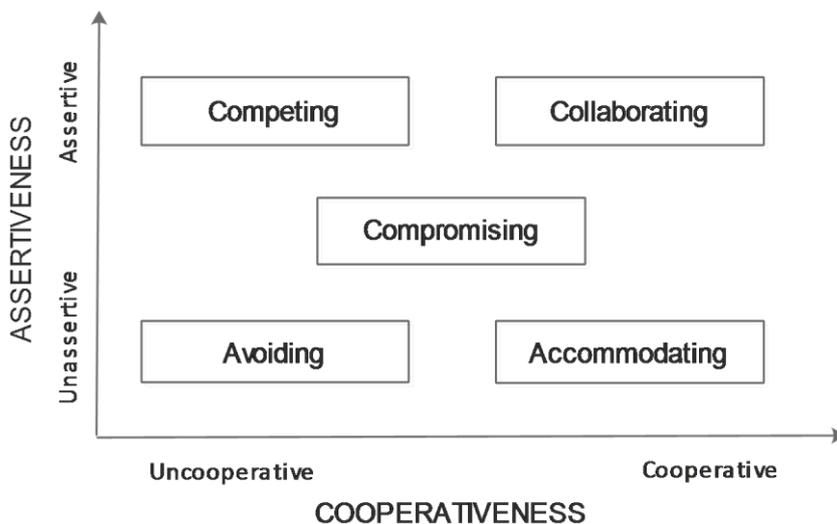


Figure 5.4: Five conflict behaviour style scale (Thomas and Kilman 1974, p. 7)

Table 5.16 shows the results from the coding process as regards episodes of task conflict and the corresponding conflict behaviour style. Overall, 54% of conflicts were of somewhat cooperative nature, corresponding to 38% that were uncooperative and 9% that were mid-range. Creativity was found to occur to a large extent in cooperative task conflict episodes (73%). More than half (56%) of competitive task conflict episodes were long, while a large percentage of collaborative or accommodative task conflict episodes were either short or medium in length. Importantly, more than 90% of long episodes of conflict were uncooperative. As regards the team members who engaged in cooperative or uncooperative conflict, Paul engaged to 57%, George to 50% and Sarah to 49% in cooperative conflict, whereas they engaged equally (8%) in compromising conflict with the rest being uncooperative.

Table 5.16: Task conflict episodes with conflict behaviour styles, creativity and length

Cooperativeness	Conflict behaviour style	Total	Creativity	Short	Medium	Long
Cooperative	Collaborating	38%	64%	33%	67%	0%
	Accommodating	16%	9%	33%	56%	11%
Mid-range	Compromising	9%	14%	40%	60%	0%
Uncooperative	Avoiding	9%	5%	40%	40%	20%
	Competing	29%	9%	6%	38%	56%

Collaborative conflict behaviour

Instances of task conflict were observed in which the team members worked together to find a solution that satisfied the team members concerned. This would often lead to the task conflict being resolved rather than remaining unresolved and/or deferred and could be linked to cooperative conflict behaviour. Collaborative conflict is of particular interest as it was linked to 64% of creative outcomes, as can be seen in **Table 5.16**. The following short episode of task conflict provides an example in which Sarah, Paul and George are involved. The discussion concerns an event to which members of organisations would be invited and at which the training programme would be presented. There is some disagreement between the team members as to whether to have a fixed date for the event. However, the team finds a solution that seems to satisfy everyone involved. The example further demonstrates that several team members are engaged in leading the team.

S: By the way are we all in agreement that we agree to move the date from 2 October, because it is much too soon?

P: We that's pretty ambitious isn't it? Shall we leave it at that until we can come up with another one?

S: I mean it sort of helps to have a date because then it helps the marketing. If we just keep saying "date TBC, date TBC"...

G: I think we should keep it as it is and...

S: (interrupts) My only concern is George, that if you're doing it on 2 October and there's no way the website can go live before Monday in reality, then you can't start distributing the leaflets.

G: Well let's leave it until such time as becomes clearly a no - we can't do it. Because otherwise we are going to keep slipping.

P: Yeah, but the date is going to have to be in the leaflets.

S: Yes.

(Meeting 11)

The discussion below once again demonstrates an instance of task conflict where team members collaborate and exchange ideas (see video still in **Figure 5.5**). Paul and Sarah discuss the structure of the website and there is some short conflict regarding the structures of graphics and their relating content. However, the collaborative nature of the content results in a solution quickly being found.

(everyone looking at graphic on website displayed on monitor)

P: Yes I'm not sure about the relevance of that one.

S: I quite like the idea. **(pointing at screen)** You could get the holding image to just - you could replicate the top level menu. So it could just go through all the pages.

P: Yeah, but rather than having those hands and those leaves, (stands up and points at screen; others: Sarah hand on lips, George hand on cheek - seem interested) you might be better off to have the graphic there and not popping up. Because that doesn't actually have an automatic relevance. This does (points at other image), because it has a story. The other does not make a story. (sits back down)

(Meeting 5)

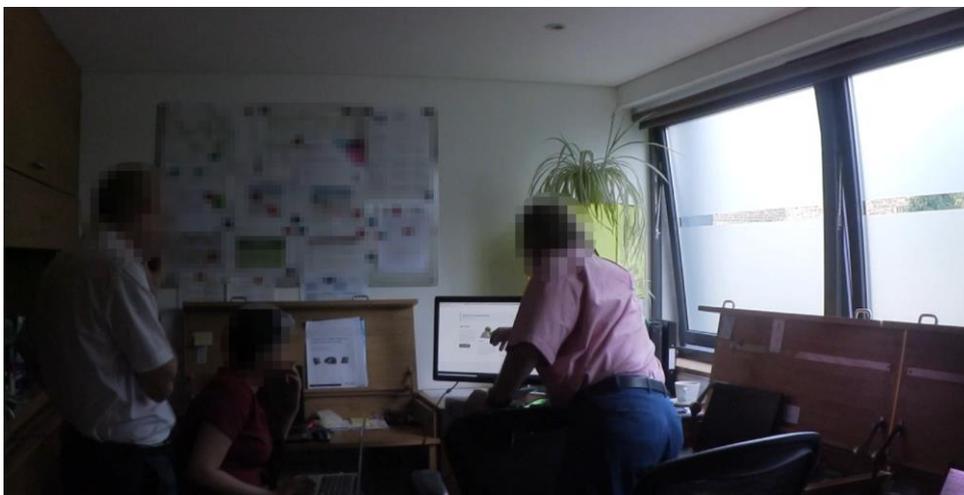


Figure 5.5: Team looks at screen displaying training website (corresponding text sequence in bold; George, Sarah and Paul - from left to right)

Competitive conflict behaviour

In contrast to episodes of task conflict which were collaborative, it was found that during other instances task conflict was more confrontational and uncooperative (38%). Particularly during competitive task conflict behaviours (29%) team members would force or persist on their viewpoints. It was found that, in contrast to collaborative task conflict, competitive task conflict was less likely to result in positive outcomes such as creativity (14% of creativity uncooperative). The discussion below demonstrates an instance of competitive task conflict between George and Sarah in which there is disagreement regarding the costing of training courses and both team members persist on their view:

G: There's about 6,000 delegates in the sector that we could approach. And so at just £300 a go that's 1.8 million. And if you include further enterprises then there's about four million.

S: That's wonderful but I was talking about this thing that you built initially (pointing in air), where it said that's the layout, that's the cost and that's sort of the cash flow. That's the sort of thing we need to look at because if based on that we have a look at the venues, any revisions we need to do to this, we need to do them before we send the thing out (referring to brochure holding in hands). It won't look terribly professional if three weeks from now we decide to increase or decrease the price of the courses by £400.

G: Well, I mean (puffing noise, seems to disagree), I'm not that worried about it because we're not going to resend and let's assume there's some feedback and as a result of that feedback there are some changes, maybe we change our mind. We are not going to resend to the original people.

S: No we are not going to resend, but assume that the courses can be booked online, you can't have price A for one person and price B for the other person. Unless they have a different site. And that's another thing we have to consider.

(Meeting 4)

Long phases of conflict

Task conflicts with a long duration were often found to be most disruptive to the team progress, as they revolved around the one topic of disagreement on which team members could not come to an agreement. As discussed in the previous section on relationship conflict, it was further found that team members would be annoyed easily following long phases of conflict. Long conflict phases often required a neutral member of a team to get involved in order to mediate and to end the conflict. This stood in contrast to phases of conflict which were resolved by team members involved in the debate themselves. The following is an excerpt from a long episode of conflict regarding whether to market the training programme via social media, in which Paul and Sarah disagree. George ends the conflict by mediating and demonstrating his understanding of both sides of the argument (see bold).

P: I think the huge seduction of the internet has been the opportunity for people to spend time doing all this stuff. Because it's fun and it's nice and you can link to lots of people, but you know what. I had supper with the managing director of car company X. Four weeks ago. And he said: "We've spent millions on internet and you know what - total waste of money, didn't sell a single car. The only thing that sells cars is people going to the dealer showroom. And get converted by a guy standing on the showroom floor."

S: I'm not sure I agree with that. From a marketing point of view.

(...)

G: I think at some point. If you're right (talking to Paul), then happy days, we don't have to worry with anything else.

P: Well no, we can certainly develop it.

G: Yeah, if at some point we need the software then we can get it going. *I think it would be foolish for the sake of doing a tweet sitting on the tube or something it would be foolish to just not keep tickling the instruments that we've got. Because it always looks bad if someone drops something.*

(Meeting 2)

In particular, following long phases of conflict, it was observed that the team endeavoured to avoid further conflict and to find common ground. It was observed in the analysis of the video, that long phases of conflict were often followed by long phases of agreement and, thus, team cohesion. The following excerpt of such a long discussion demonstrates how the team moves on from a long episode of conflict. George describes the team as having 'gone around in circles' after which the team seems to agree to move on.

G: I don't think anybody has any disagreement about this, I think a minimum amount of work has to be done on the website. Because without the website being...

P: The website is critical.

(...)

P: Have we finished the subject then?

G: Well I think we've finished it and gone around in circles a couple of times.

P: Well I understand Sarah's concern about not losing our position, but I still think that's emotional rather than logical.

S: Well we're not selling anything now, but if Steve does what he said he's do that we will hopefully be selling stuff in a couple of months. (others seem to agree)

(Meeting 2)

Number of conflicts and creativity

The graph in **Figure 5.6** shows that during earlier stages of the management consultant project higher instances of task conflict were observed. These data must be interpreted with caution, as the researcher joined the management consultant team while the project was already underway. However, it was clearly observed that there were fewer instances of task conflict once the project of developing the training programme neared completion. As a matter of fact, 60% of task conflicts occurred during the first half of the observation. What was further observed was that discussions involving task conflict were longer during early and mid-stages of the observation, while during the later stages of the project task conflicts were of short or medium

duration. Episodes of creativity were spread equally in the first and second half of the observation. Task conflict was generally present in meetings that involved creativity as can be seen from the graph and the extent of this relationship is further discussed in the following section.

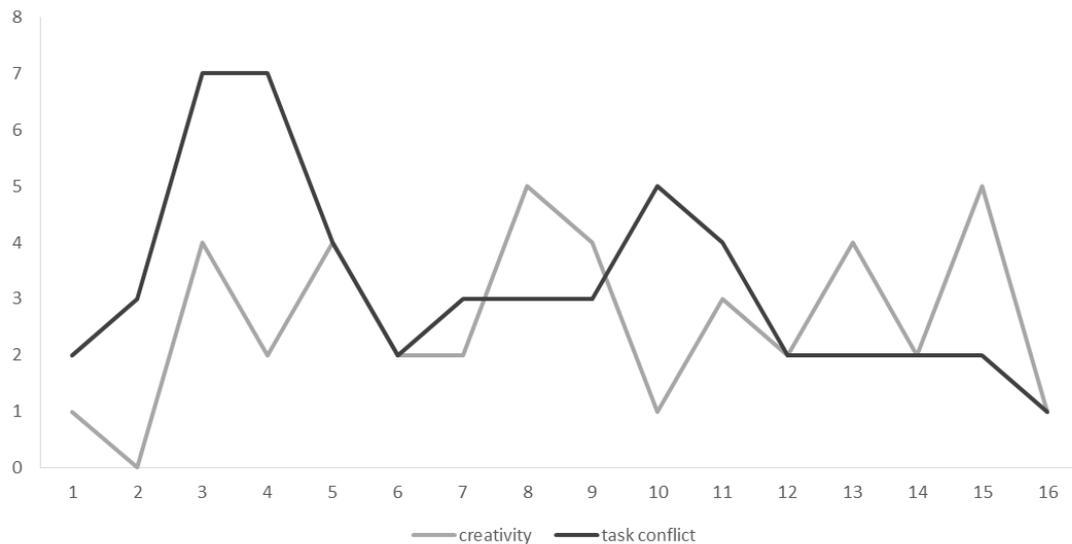


Figure 5.6: Episodes of task conflict (y-axis) as observed in team meetings (x-axis)

5.4.4 Innovation

Innovation was studied at the management consultant team level in terms of the instances in which team creativity was displayed. Innovation was considered to be the implementation of ideas new to the team. Although the implementation would be agreed on by the team during the meetings, it would mostly be carried out outside of the team meetings. This was observed as implementations of ideas were referred to or visible in subsequent team meetings. Therefore, innovation was observed during meetings when team members:

1. Agreed that an idea would be implemented;
2. Discussed an idea that had been implemented; and
3. Depicted material demonstrating that an idea had been implemented.

As shown in the Table in Appendix N, there were 42 episodes of teamwork in which creativity was displayed among team members. These episodes of creativity were further coded into the subcategory of individual ideas generated during these episodes. An idea was coded as a thought that was new to the team. Ideas could be expressed very briefly and could, possibly, be discarded or adopted. **Table 5.17** below displays the number of ideas generated during the teamwork, categorised by team participants involved. The idea involvement row shows the total instances

in which participants are involved in generating ideas. This means that they were active participants of a discussion in which another team member had an idea. The 'ideas in non-conflict' row displays instances in which ideas were generated in episodes that did not display any instances of conflict. The number of ideas generated in episodes that displayed instances of conflict is displayed further (see Appendix P for a detailed list). The analysis shows that a majority (61%) of ideas were generated during episodes of teamwork that displayed some type of task conflict. Paul displayed the highest number of ideas generated both during episodes of conflict and non-conflict, followed by Sarah and then George and Claire.

Table 5.17: Ideas generated by team members

	Total	Paul	George	Sarah	Claire
Meetings attended	16	16	16	16	3
Idea involvement	63	28	19	16	0
Ideas in non-conflict	18	8	3	5	2
Ideas in conflict	28	11	7	8	2
% of ideas in conflict	61%	58%	70%	62%	50%

A total of 83% of ideas that originated in non-conflict were taken forward. The innovations ranged from technical aspects (33%) which, for instance, related to website development, programme development (28%) which involved ideas related to the development of the training programme and modules as well as novel aspects of marketing (39%). Below is an example where George develops an idea in terms of creating a core module for the training programme.

G: I think we have got to have a core module, for want a better word for each one of these elements, and then it can be delivered by us in consulting mode, bus in training mode, bus in mentoring mode, by us in coaching mode.

P: And as a workshop.

*G: And as a workshop. Because there are going to be in each one of those things, a number of key things "you must do this, you've gotta do this, once you've done that, then this follows on". There's a sequence of actions that need to be performed, we need to agree what those are. And once that library is built it will be very powerful.
(Meeting 6)*

In this example of an idea related to marketing, Claire voices an idea of creating a LinkedIn group for engaging with members of organisations that could be of potential interest for the training programme. Paul confirms the implementation of the idea:

C: Entrepreneurs Group if you can bag that name then you can set up a page in LinkedIn that says that and set a group.

P: That is a good idea. We will do that. I mean we can call it that anyway. We can go into an intellectual property office and we can actually register it.

C: It's just a thought because that could be quite useful. You could put different stats up there, something to share.

(Meeting 15)

As can be seen in the discussion above, team members often received recognition or agreement from fellow team members for having an idea deemed useful, in fact the phrase ‘that is a good idea’ was phrased in almost a third of creativity episodes that did not include conflict (see sample episode above). This reconfirms the importance of social support. Furthermore, both of the discussions above demonstrate the collaborative nature of the discussions, enabling team members to contribute with their expertise and thus to engage in the leadership of the team. In most instances of creativity that resulted in innovation such collaborative interactions of this nature were observed that can be attributed to shared leadership.

Creative conflict behaviour

Table 5.18 below demonstrates that a majority of creative conflicts, and hence conflicts that resulted in the generation of individual ideas by team members, were collaborative. It is further shown that in terms of individual ideas generated, a large majority of 78% were generated during collaborative or accommodative conflict (both cooperative) and merely 11% in uncooperative conflict. A total of 18% of creative conflict was short, and 82% medium in length. As can be seen, the four team members that contributed to the generation of ideas during conflict, mostly displayed collaborative conflict behaviour. Overall, 82% of ideas generated during phases of creative conflict resulted in implementation and innovation. Of these innovations, 37% were related to the development of the training programme, 21% were of technical nature and 42% were related to marketing the programme. Furthermore, all innovations generated during episodes of task conflict had their origin in cooperative or somewhat cooperative conflict behaviours and none in uncooperative behaviours. As regards shared leadership, in 64% of creativity phases that entailed task conflict and resulted in innovation, involvement and thus several team members engaging in the discussion was prevalent. Additionally, 39% represented instances where there was a decision-making process in which several team members were involved.

Table 5.18: Creative conflict behaviour, innovation and team members

Creative conflict behaviour	Total	Innovation	Paul	George	Sarah	Claire
Collaborating	71%	82%	65%	70%	71%	100%
Accommodating	7%	9%	9%	10%	0%	0%
Compromising	11%	9%	13%	10%	7%	0%
Avoiding	4%	0%	4%	0%	7%	0%
Competing	7%	0%	9%	10%	14%	0%

The discussion below displays an example of an episode of task conflict where there is disagreement between team members regarding the type of events required. George then has the idea of giving attendees the task of going through the process with other attendees. Paul agrees with the idea and has a further idea of putting a business template on the training website that event attendees would complete during the event. The episode is classified as collaborative and is eventually resolved as team members explore the disagreement and satisfy each other's concerns. Involvement to solve the issue is demonstrated by all three members. The constant use of the personal pronoun 'we' is a further indicator of how responsibility is shared by team members, and all three team members are involved in reaching a decision.

S: Yes, I think we need to have at least three or four public events.

P: Well we'll have to think about that because if that is the case we'll have to revisit this catalogue. Because this is only set up at the moment with one public event.

G: I think the audit could be a public one.

P: That involves going into the organisation.

G: It is. But it could involve giving you the final answer. Because you could go through the process with somebody and they could say "we've got no-one here that knows about... managing commercial people or whatever". I think it could lead people through the basic steps, but it clearly wouldn't be the same as...a consulting assignment where people actually went in and spent two or three days going through an organisation's documents.

P: Well alright. How difficult would it be to put that template up on the website.

S: Pretty difficult, because you would need a platform.

P: It's just because - that could really be pretty powerful. If people bring their laptops and they log in to our site and each one of them completes their own template, we capture some really golden data.

(Meeting 3)

The following discussion between Sarah, Paul, George and Thomas shows a further instance of collaborative task conflict where shared leadership is displayed (see video still in **Figure 5.7**). Leadership can be seen to have rotated to Paul at first, who provides some direction by inquiring about the status of the work. However, then all four team members are involved in the discussion. Shared effort is visible as participants figure out the best way of developing the process templates for training and all are involved in the decision-making process. The text highlighted in bold indicates instances of task conflict. The phase of task conflict is followed by an idea from George regarding a trial implementation and from Paul regarding the implementation of an exercise.

P: Process templates for training - I think we are getting to that. Actually, what is our plan for that day, have we put it in here somewhere? (points at screen with project management software)

S: Yes.

G: What is the date by the way?

P: Yes, what are the deadlines on it? (pauses, all look at screen) Okay, we haven't got any steps in between have we?

S: We had a planning session, we did that last week.

P: We haven't got the actions that were between last week and October 2nd, have we?

G: Because we have got to develop a system to schedule stuff now.

P: Well I think we have got the schedule bit in the handbook, what we have got to do really, is assigning a sheet of paper for each stage that we are going to take people through. So at one side of it you have got an explanation and then on the other side of it you have got the exercise.

G: We need to get the templates.

P: Well make them I think. Because I haven't really done anything like this before.

There's nothing I can do about it.

G: I think we need a planning day to develop this stuff... (points at screen)

P: I think so, yeah.

G: And then we need a practice day in which we try and implement it. One of us accesses an organisation person...

T: What is the subject again?

P: It's all the stages of creating a new venture. So you are sort of starting with - you know - how to do the criteria, how to identify the new opportunity there is. And each file will be a 20-minute exercise let's say.

(Meeting 11)

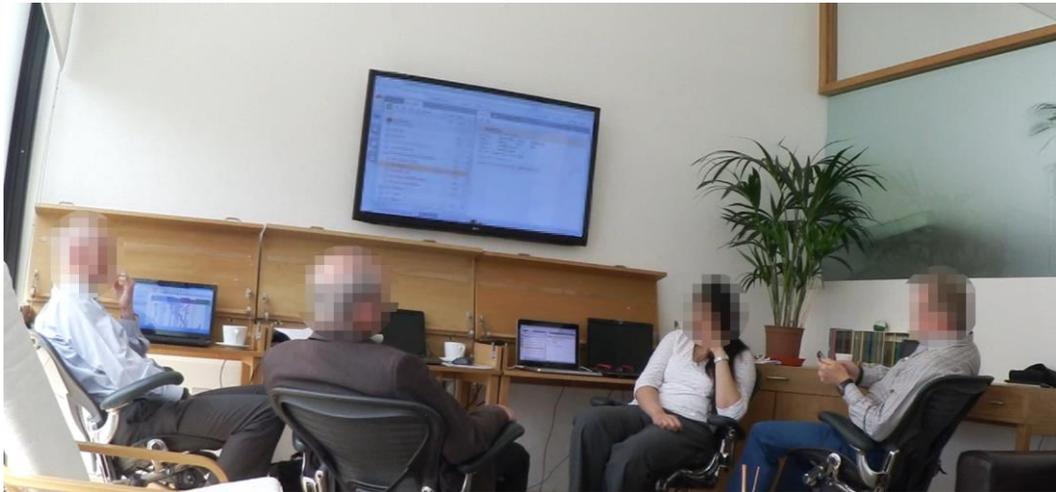


Figure 5.7: Team looks at screen with project management software and discussing training programme (George, Thomas, Sarah, Paul - from left to right)

5.4.5 Further Influences

A further observation regarding the occurrence of conflicts in the management consultant team was that humour was found to play an important role in preventing conflicts from being extended and thus defusing them. The following discussion provides an example of a debate between George and Paul during which conflict seems to arise from Paul regarding George's observations on the brochure. George prevents the conflict from escalating through a joke, which both find amusing.

G: I have been periodically reviewing various situations of the brochure. And I have now got a couple of pages of observations.

P: Oh dear. (irony)

G: And I have tried to rank them...

P: (interrupts) You promised me one sentence. (points at George)

G: Well, it's a long sentence (Paul starts laughing) with lots of semi-colons in it.

(George laughs, Paul laughs)

(Meeting 4)

As can be seen here, disagreements between team members were jokingly acknowledged and taken for granted by team members:

G: I've got as far as I can go on my own and I think it's now got to be shared - what I am almost certain, some of my thinking doesn't chime exactly with yours and vice versa, it would be a miracle if it did. (laughing)

P: Yeah. (laughing)

(Meeting 4)

Humour often followed longer phases of conflict and partly functioned as a means of conflict resolution. The two discussions below are examples of humour which followed longer phases of conflict.

P: One of the guys I saw yesterday said "oh I've seen this yellow brick road before". And that's the first time anybody, when I got the flyer out and gone to the middle centre, has actually expressed any recognition of it.

S: Maybe he was referring to Oz. (smiles, joking)

P: I was gonna say, perhaps he was at the cinema (laughs).

(Meeting 16)

P: You know the reality in business is cash in the bank. If what you do in business does not put cash in the bank, you shouldn't be doing it. And I know there are lots of reasons we can think about, but that parts a sign of reality isn't it? And that's why I said last week in our planning session, the vast majority of stuff that makes money is boring, is stuff you don't like doing, it's either boring or unpleasant

G: Usually both. (George and Paul laugh shortly)

(Meeting 2)

5.5 Conclusions

This chapter presented an analysis of the empirical data collected for this current research. Following the methodological approach outlined in Chapter 4, in three different elements three types of data were analysed. The analysis allowed for an assessment of the conceptual model developed in Chapter 3, which explained the relationships between shared leadership, conflict and innovation.

The first quantitative element collected data from 329 management consultants to test the hypothesised relationships between the concepts as depicted in the conceptual framework. The relationships between variables were assessed with correlation and regression analysis. An interesting result was the rejection of a positive relationship of shared leadership with task conflict. On the other hand, a positive relationship was found between shared leadership and innovation. All in all, four of the six hypothesised relationships were supported.

The findings from the quantitative element required further explanation through a second qualitative phase consisting of 25 face-to-face interviews with survey participants. The analysis of the data was conducted by constructing a causal map of each interview, as this would provide an understanding of experienced management consultants' perceptions regarding the relationships between the main and their surrounding concepts. An aggregate causal map was constructed depicting participants' typical thought patterns and uncovering the importance of further relevant concepts such as knowledge sharing, involvement and trust.

A third qualitative element provided an analysis of the video observation of a management consultant team in action, to assess findings from the previous elements and provide in-depth knowledge regarding the processes of the team. Overall, video data from 16 team meetings was analysed and coded using an ethnographic approach. Instances of conflict and creativity/innovation as well as the distribution of leadership were regularly present in the team. The findings demonstrated features important for the shared leadership team such as joint decision-making and involvement of team members. Furthermore, the importance of collaborative conflict to achieve innovation was outlined.

Chapter 6 will discuss the findings from the data analysis, while taking the previously discussed literature and conceptual framework into account.

Chapter 6 - Discussion of Findings

6.1 Introduction

The previous chapter presented an analysis of the quantitative and qualitative data collected in the three different elements of this research. Following the three objectives of this current research, as stated in the introduction of the study, this chapter is divided into three main sections. The first section discusses the results regarding the interrelatedness of shared leadership, conflict and innovation and provides a revised conceptual framework. The second section discusses practical implications for management consultants and provides a model and guidelines that can be used by management consultant teams. The third section evaluates the benefits of the research techniques employed in the study and presents recommended steps toward their utilisation.

6.2 Assessment of Conceptual Framework

The conceptual model developed in Chapter 3 was assessed both through quantitative and qualitative techniques. Individual hypotheses were first tested in a large-scale survey conducted with management consultants. This was followed by individual interviews with survey respondents and an in-depth observation of a management consultant team. In the following sections the results from the previous chapter are discussed regarding the relationships between the concepts of shared leadership, task conflict, relationship conflict and innovation and set into context. An overview of the results and subsequently revised conceptual model is further provided.

6.2.1 Shared Leadership Processes

Due to shared leadership being at the core of this investigation, it was important to consider its underlying processes as perceived by management consultants and as observed in the management consultant meetings. As discussed, the term 'shared leadership' is used to refer to leadership enacted by multiple individuals in a team. Therefore, instead of leadership being a top-down process between a formal leader and team members, multiple leaders emerge in a team (Mehra et al. 2006). For this, the team as a whole must be empowered and have the authority to lead itself (Perry et al. 1999, p. 38). This applied to the management consultant team observed for this current research, as decision-making power lay directly within the team.

As discussed previously, shared leadership can develop when team members with relevant knowledge, skills, or abilities, offer their views in specific situations (Ensley et al. 2006). This is linked to the concept of functional expertise which was identified as essential for developing shared leadership. Indeed, 'different skills and competencies of team members' were named as the top response in the survey as to why management consultants implemented shared leadership in their teams. This response was directly followed by the 'diverse experience of consultants'. The importance of selectively using skills and expertise of team members is further emphasised in the Friedrich et al. (2009) definition of shared leadership. Functional expertise was considered an important feature of shared leadership by management consultants in the interviews. One management consultant described the ability to contribute and lead dependent on expertise as 'subject-matter leadership'. The utilisation of different skills and capabilities as well as strengths and weaknesses, was seen to work best within flat leadership structures. Thus, Friedrich et al. (2009) emphasise the importance of strategically utilising the diverse areas of expertise for shared leadership. Indeed, it was observed that instances during which a team member could be seen as leading the team were characterised by a team member possessing relevant information or skills and, thus, guiding other team members. Often, leadership was provided by a team member expressing an opinion on how the team should move forward. However, importantly, in most instances project tasks were distributed to team members possessing the relevant skills.

The importance of utilising diverse expertise is linked to the relevance of rotation in shared leadership teams. Management consultants emphasised that leadership roles would be changed depending on the needs of the situation. The individual expertise of team members and their specialisation were therefore acknowledged during the teamwork. This notion of the responsibility for guiding a team rotating among its members, dependent on the demands, skills and resources required at that moment, is emphasised by Jackson and Parry (2011). Pearce (2004) further stresses the importance of selecting team members based on their technical, teamwork and leadership skills to develop shared leadership. As discussed, rotation of leadership was continuously observed during the team meetings. These changes could occur quite fluently and it was therefore often not possible to identify a clear leader. However, the observation made is that multiple leaders emerged harmoniously during the teamwork, rather than members fighting to control power, as discussed by Bergman et al. (2012). Although, as can be seen in the analysis section, an abundance of conflicts were observed, team members were free to lead the team when they found they could provide relevant input or skills. As assumed

by Bergman et al. (2012), this could be similar to a trust building- process. The importance of trust will be discussed in more depth later in this chapter.

Further relevant reasons for implementing shared leadership named were it being 'most effective and delivering best results', 'exchanging different ideas, views and opinions' as well as 'idea generation and creative thinking'. The latter is, of course, relevant regarding the relationship between shared leadership and innovation. Furthermore, the benefits regarding team results as perceived by management consultants are in line with previous research regarding the positive effects that the utilisation of shared leadership in teams can have on team performance (e.g., Bligh et al. 2006; Contractor et al. 2012; Day et al. 2004). The exchange of ideas, views and opinions can be related, for instance, to the integration of these diverse views and furthermore to the making of high quality decisions (Bergman et al. 2012). Naturally, this is related to the development of task conflict in shared leadership teams, although it depends on the extent to which these conflicts are perceived as negative.

Negative aspects of shared leadership were further mentioned by management consultants, with regard to it being more time intensive, financially inefficient and lacking accountability. Although some researchers have identified negative effects of shared leadership on team performance, time efficiency and financial aspects have previously not been seen as an issue (D'Innocenzo et al. 2014). As regards accountability, this refers to management consultants being held accountable for producing results. Management consultants mentioned the problem of losing accountability, in particular regarding the risk of nearing deadlines. Bligh et al. (2006) find that for employees trained in traditional hierarchy structures, changes in accountability may be difficult to realise. Indeed, regarding shared leadership, Cope et al. (2011) emphasise the need for more people to take accountability, in particular in SMEs. Therefore, it should be stressed that accountability can be distributed to more team members. However, this does not imply that all accountability is shared and that deadlines for producing results cannot be met. Also, the negative aspects of shared leadership referred to here, concern management consultants, as priorities may differ in other domains of work. An emphasis on avoiding delays would for instance not imply that shared leadership cannot be implemented but that this aspect should be monitored particularly during the project.

Involvement of team members was not only found to be an important feature of a shared leadership team, but also perceived by management consultants as being increased in shared leadership teams. The observation of the management consultant team demonstrated that

there were differing levels of involvement amongst team members, mostly related to areas of expertise, among the core management consultant team. Involvement, also referred to as participation and input, is thought to create an environment where people engage in mutual leadership (Carson et al. 2007). Regarding involvement of team members Weingart and Jehn (2009) emphasise that a team member is more likely to engage and collaborate when motivated toward improving team outcomes. Motivation can be further traced back to being developed through shared purpose, as discussed regarding the precursors to shared leadership (Carson et al. 2007). Being part of a 'bright' shared leadership team was mentioned by management consultants as motivating for coming up with different ideas. Naturally, amongst other, creativity is predicated upon individuals feeling motivated to perform tasks and engage in teamwork (Gilson and Shalley 2004).

As regards shared purpose of team members, the management consultant team had clear objectives and goals, to which team members felt committed. Objectives were continuously revisited, agreed on and updated by the team. It was important that team members felt they had a stake in the outcomes, as this would imply higher levels of motivation and commitment being displayed (Avolio et al. 1996). Team members demonstrated social support in encouraging each other and recognising each other's contributions. According to Carson et al. (2007), this creates an environment where team members feel their input is valued and appreciated. Importantly, responsibility for team outcomes was continuously placed not only with one, but with multiple individuals. This sense of shared responsibility amongst team members could, for instance, be observed with the determination of all team members to achieve their targets and aversion when these were missed. Furthermore, trust, mentioned as important for shared leadership teams by management consultants, can be seen as playing a part in the social support dimension, as it can provide the 'interpersonal glue' named by Carson et al. (2007) as important for cooperation and development of shared responsibility for team outcomes.

6.2.2 Shared Leadership and Relationship Conflict

In the conceptual framework discussed in Chapter 3, a negative relationship was predicted between management consultants' perceptions of shared leadership and relationship conflict. The relationship between shared leadership and relationship conflict is of importance due to the negative effects of relationship conflict towards team outcomes. Relationship conflict has been shown to decrease team productivity in terms of creativity, innovation and overall effectiveness and to reduce team member satisfaction (Badke-Schaub et al. 2010; De Dreu 2008; Yong et al. 2014). Similarly to this study, Yang and Mossholder (2004) find that egos of team members can

lead to detrimental relationship conflict. Overall, it is of interest to reduce detrimental relationship conflict as much as possible in teams. Shared leadership has been found to be potentially useful for such a reduction of relationship conflict. Due to its link to power equality in teams, which has been shown to enhance the resolution of negative conflicts, shared leadership could reduce relationship conflict and thus 'tension, animosity, and annoyance' among team members (Jehn 1995, p. 258). Furthermore, some previous research has found a positive effect of team leadership in reducing negative conflict in teams, as trust and understanding between team members are enhanced (Solansky 2008; Gupta et al. 2010). Nevertheless, the opposite could also be true as more team members engaging in the leadership of the team could signify the potential for greater levels of interpersonal tension.

The results of the present study provide evidence that management consultants employing shared leadership in their teams experienced lower levels of relationship conflict. The results of the survey show a negative relationship between shared leadership and relationship conflict. Effectively, the higher the level of perceived shared leadership, the lower the level of relationship conflict. Trust was repeatedly mentioned as important by management consultants working in shared leadership teams and could play a role in reducing relationship conflict in teams, while individual ego was seen as one of the main causes of personal conflicts. Furthermore, trust was seen as essential in preventing task conflict from turning into negative relationship conflict. During the observation of the management consultant team relationship conflict was observed quite seldom. Only 13% of conflicts that occurred during the observation were relationship conflicts. This again points toward the positive effects which distributing leadership functions can have on a team. The relationship conflicts that did emerge during the teamwork arose through comments that were personal in nature and involved sarcasm or the questioning of the judgement of another team member. In particular, long episodes of conflict were shown to turn personal in terms of individual team members displaying annoyance and also becoming more personal in their comments. The majority of relationship conflicts occurred in long episodes of conflicts, where first task related conflict turned personal. No positive effects in terms of creativity were observed to directly follow episodes of relationship conflict. Overall, the possibility of all team members being able to engage in the leadership of the team not only reduced relationship conflicts but also enabled all team members to intervene individually and provide leadership in resolving conflicts.

The findings support previous research that demonstrates the effectiveness of shared leadership in reducing relationship conflict in teams. Bergman et al. (2012), for instance, report less

relationship conflict in teams with shared leadership, but greater consensus and cohesion. Although the Bergman et al. (2012) study included video recording and independent raters for leadership engagement as well as conflict, it was conducted in a laboratory setting and considered only one task by several teams over an average duration of 45 minutes. Similarly, the Solansky (2008) study of work teams was also conducted in a laboratory setting. Such a setting can have the disadvantage that roles within the team are often assigned arbitrarily rather than based on the knowledge of team members (Gallenkamp 2011). In addition, students, who receive incentives for participation, rather than real-life management teams, are often used as research participants (e.g. Badke-Schaub et al. 2010; Bergman et al. 2012; Solansky 2008). Therefore, the strength of this current research and field study is that it captures the perceptions of real-life management consultants individually, and that it provides an in-depth video analysis of a management consultant team in action.

The importance of power dispersion and ways of ensuring equality in teams for facilitating conflict resolution is emphasised by Greer and van Kleef (2010), and shared leadership is seen as a particularly effective tool for this. However, due to the focus being on the resolution of all team conflict, the importance of maintaining task conflict to some extent should be considered. At this stage it is important to note the relevance of the individuals with whom this study was conducted. Teams that are self-managed and higher in the hierarchy of an organisation are more likely to successfully implement shared leadership for conflict resolution than entry-level teams such as junior factory line workers (Greer and van Kleef 2010). The importance of the research having been conducted with consultants, mostly senior and working in management teams as well as with a management consultant team is therefore underlined. Overall, the findings regarding the relationship between shared leadership and relationship conflict are consistent with previously published work. Since some studies find all types of conflict to be reduced by shared leadership, the importance of assessing task conflict separately once again becomes apparent.

6.2.3 Shared Leadership and Task Conflict

A positive relationship was predicted between management consultants' perceptions of shared leadership and task conflict. Assessing this relationship was relevant due to the potential positive effects that task conflict could have on team performance. As discussed, there have been conflicting results regarding the positive effects of task conflict and, thus, about disagreements of the content of the tasks being performed (Jehn 1995). The relevance of shared leadership regarding task conflict can be seen in a shared leadership team promoting more open

discussion as several team members engage in the leadership of the team. Therefore, due to their equal relationships they feel freer to disagree with one another. This could be seen as conflicting with previously mentioned research that finds shared leadership teams to have reduced levels of conflict. However, the effects of shared leadership on task conflict could be somewhat different due to debates regarding team tasks being enhanced. Notably, such constructive conflict has been identified as key for shared leadership environments with high levels of power distribution (Paulson et al. 2009). Therefore, teams displaying higher levels of shared leadership were thought to also display higher levels of task conflict.

However, the results from the survey did not support the proposed positive relationship between shared leadership and task conflict, as perceived by management consultants. Evidence did not suggest that there was a significant relationship between the two variables although a slight positive trend was observed. These results were somewhat supported through the interviews where the view that some task-related conflict would always be present in teams was prevalent. Therefore, an increase of shared leadership would not necessarily have to be related to a rise in task conflict. However, management consultants did comment in interviews that flat structures allowed team members to voice their opinions, give their thoughts, and provide discussion.

Therefore, individual management consultants expressed the view that shared leadership influenced the appearance of different views in their teams which would again influence the appearance of task conflict. Nevertheless, a direct causal relationship between shared leadership and task conflict was not identified through statements made by management consultants in the interviews, although shared leadership seemed to allow for the accommodation of task conflict. Regarding the observation of task conflict during the videotaping of team meetings, it was not possible to demonstrate a direct causal relationship between shared leadership and task conflict, as leadership was a fluent, constantly occurring phenomenon. However, it was observed that, particularly following long phases of conflict, a team member would step in to lead the team and provide moderation between team members that were disagreeing. This demonstrated the potential positive effects that shared leadership can have regarding conflict resolution.

The findings did not support a positive relationship between shared leadership and task conflict, which is relevant in terms of whether task conflict should be promoted in teams. The observation of a shared leadership team showed large amounts of task conflict to be present

during the teamwork. However, this could have also been the case had the team employed hierarchical leadership. There was no evidence that individuals working in teams that displayed high levels of shared leadership exhibited lower levels of task conflict as found by Bergman et al. (2012). The assumption of Bergman et al. (2012) being that the more team members participate in the leadership of the team, the more effectively conflict can be managed. However, the effect of reduced conflict in teams exhibiting shared leadership, as identified by Bergman et al. (2012), was smaller for task conflict than for relationship conflict. Furthermore, the ad-hoc nature and short-term nature of their laboratory teams could have led to the team experiencing fewer task conflicts, possibly due to the lack of trust amongst team members (Bergman et al. 2012). The possibility remains that shared leadership teams and therefore teams displaying equality and low power dispersion (differences in the concentration of power among team members) have higher levels of conflict resolution, as suggested by Greer and van Kleef (2010). This was noted in particular as conflict resolution was observed during team meetings when individual team members provided leadership in solving conflicts between two or more parties. Additionally, the possibility of a relationship between certain conflict behaviour styles, such as collaborative conflict and shared leadership, will be assessed further.

An interesting result from the interviews was that management consultants repeatedly mentioned trust as being facilitated by shared leadership. Although not tested, Bergman et al. (2012) suggested that there could be a relationship between trust and shared leadership, in that trust would make team members more comfortable in participating in the leadership of the team. Therefore, shared leadership teams would also display higher levels of trust. In fact, Hulpia and Devos (2009) explicitly mention trust as an element of their definition of cooperative leadership and Bligh et al. (2006) believe in the potential of shared leadership fostering trust. Trust was further seen by management consultants as essential in ensuring that task conflicts were carried out constructively and would not turn negative. Several management consultants working in shared leadership teams emphasised the importance of high levels of trust for their team. This is mirrored by De Dreu and Weingart (2003) who found within-team trust essential for ensuring positive effects of task conflict on team performance.

6.2.4 Shared Leadership and Innovation

The benefits of shared leadership regarding team performance have been demonstrated in past research as shared leadership has been shown to enhance information sharing within teams, to increase team motivation and to provide more active engagement in teams (D'Innocenzo et al. 2014; Hooker and Csikszentmihalyi 2003; Mehra et al. 2006). For instance, participation and

shared effort of team members in shared leadership teams has been linked to creative team outcomes and team innovation (Gilson and Shalley 2004; Small and Rentsch 2010). The involvement of several team members in the leadership of the team and thus the sharing of responsibility and joint decision-making is seen to benefit creativity, as input from multiple individuals is provided (Pearce 2004). This is in line with Contractor et al. (2012) who believe that greater power dispersion in teams may provide teams with greater access to information, translating into higher levels of creativity and innovation. Similarly, Paulson et al. (2009) suggest that flat power structures provide autonomy for team members, which enhances creativity. Furthermore, Clarke (2012b) emphasises that shared leadership enables the bringing together of different skills to generate innovative and novel responses. Overall, a majority of studies propose a positive relationship of shared leadership with team performance.

The results from the survey of this current research also demonstrate a positive relationship of management consultant's perceptions of shared leadership with innovation. However, the size of management consultant teams, or the team's functional diversity, was not found to be related to team innovation. The results from the survey were supported through the interviews conducted with a selection of management consultants. These management consultants repeatedly mentioned the positive influence which shared leadership had on the creative outcomes of the team. This was attributed to team members not being hindered in, for example, 'bringing views forward', 'sharing thoughts' and 'coming up with ideas'. Interestingly, management consultants emphasised the difficulty of managing the large number of ideas in their shared leadership team. Hierarchical leadership structures or authoritarian leadership styles were viewed by management consultants as providing lower levels of creativity and innovation.

Three important concepts were found to influence the relationship between shared leadership and creativity and innovation. Firstly, knowledge sharing was found to be stimulated by shared leadership involving information exchange and learning and was seen as increasing creativity and innovation. Secondly, involvement in terms of participating in team activities and situations such as decision-making was further found to be stimulated by shared leadership and to influence creativity and innovation. Thirdly, trust and the belief in the truth and reliability of each other and with it a willingness to be vulnerable toward each other's actions, was mentioned as important regarding the possibility of developing creativity and innovation. The importance of functional expertise in developing creativity and subsequently innovative outcomes was noted.

The results of this study are in line with previous assumptions made regarding the relationship between shared leadership and creativity. However, the importance of knowledge sharing, involvement and trust regarding the relationship was further identified. Similarly as discovered in this current research, D'Innocenzo et al. (2014) emphasise shared leadership as generating higher levels of trust and these are found to be linked to higher levels of team performance (Day et al. 2004). The assumption of higher levels of trust in shared leadership teams is also made by Bligh et al. (2006) and Bergman et al. (2012) who propose that the relationship between shared leadership and trust may be cyclical. Furthermore, Döös (2015) notes the importance of team members trusting in the ideas of each other. Therefore, the assumptions of previous studies regarding the importance of trust as fostered through shared leadership as well as trust increasing team performance, which was examined in terms of creative and innovation, can be seen as being supported.

The relevance of involvement of team members in shared leadership teams, as discovered in this current research, is similarly discussed by Ensley et al. (2003), who expect shared leadership teams to experience greater amounts of coordination, collaboration and commitment. Furthermore, Mehra et al. (2006) propose that with many leaders in a group, participation is enhanced which in turn enhances team performance. Involvement is positively related to team and organisational learning and can reduce negative processes such as knowledge dissipation and avoidance, therefore increasing innovative performance (Mariano and Casey 2015). The fact that shared leadership could make the work of team members more meaningful and enjoyable, is discussed by Hooker and Csikszentmihalyi (2003) in the context of increasing creativity and innovative practices. This once again can be linked to the involvement of team members and the team becoming more creative and more innovative.

Knowledge sharing was found to be important regarding the development of creativity and innovation in the teams. Gu et al. (2016) similarly identify knowledge sharing as mediator regarding the relationship between shared leadership and creativity. Gu et al. (2016) suggest that knowledge sharing develops through greater team empowerment, shared goals, motivation and learning. Furthermore, knowledge sharing is vital in developing creativity through different inputs, knowledge, skills and information. As mentioned, Contractor et al. (2012) believe power dispersion provides greater access to information and ideas in teams. Their assumption that this may translate into higher creativity and innovation is reconfirmed. Likewise, the presumption of Mehra et al. (2006) regarding a positive relationship of shared leadership due to increased

information sharing among team members could also be confirmed through analysis of the data. Day et al. (2004) emphasise the importance of team learning regarding team leadership, which should be seen as being related to knowledge sharing, and which influences the relationship between shared leadership and innovation. The results of this study can also be linked to those of Liu et al. (2014) who regard shared leadership as having a positive impact on team and individual learning. Integrating the knowledge of different individuals is, according to Bligh et al. (2006), highly important to create 'true' innovation.

6.2.5 Task Conflict and Innovation

The hypothesis that management consultants' perceptions of task conflict have a positive relationship with team innovation was formulated. As discussed in length in the literature review, one of the main debates regarding intragroup conflict concerns the potential positive effects of task conflict on team outcomes. Task conflict has been shown to increase task understanding, job satisfaction, decision-making, innovation as well as overall performance and effectiveness (Badke-Schaub et al. 2010; De Dreu 2008; Jehn and Bendersky 2003). In particular, the effects of task conflict on team innovation were of interest, as previous studies have provided conflicting results regarding this relationship (De Dreu 2006; Jehn and Bendersky 2003; Kotlyar et al. 2011; Troyer and Younggreen 2009). In addition, the extent to which task conflict can be useful in teams has been discussed. Farh et al. (2010) find task conflict to be mostly beneficial regarding team creativity during the early phases of a project. Furthermore, moderate levels of task conflict have been found to be most useful regarding team productivity (Parayitam and Dooley 2011). The review of the literature demonstrated the conflicting results regarding task conflict and creativity and innovation. The combination of research methods employed in this current research allowed for an examination of the relationship from a novel angle.

As predicted, a positive relationship between task conflict and innovation was identified in the survey. Higher levels of task conflict, as perceived by management consultants in their teams, were related to higher levels of innovation. These results were further supported through data collected from interviews with management consultants. A positive relationship of task conflict with creativity and innovation was further identified in the interviews. Management consultants found task conflict to be essential in their teams in order for the team to innovate. Large numbers of ideas were thought to be generated by a high degree of task conflict and task competition. Task conflict was further seen to motivate management consultants in coming up with 'the next better idea'. In addition, most innovation was seen to come from 'a healthy level of friction'. Conflicts were seen as useful in getting team members to express opinions,

experiences and knowledge which would lead to the development of team innovation. Nevertheless, an important issue identified from management consultants was their perception that task conflict would mainly be beneficial during the early stages of a project, up to when a plan had been developed. Task conflict was seen to become disruptive at later stages of a project. A concern was that task conflict could 'burn too much time' and be unhelpful toward positive team outcomes and developing innovation. It was found that task conflict at a late stage would require some sort of consensus in order to be constructive toward team innovation. Therefore, to result in a good outcome, task conflict would need to be facilitated and managed.

The observation of the management consultant team demonstrated that a large number of ideas were generated in episodes of task conflict. Naturally, a direct causal relationship could not be demonstrated through these observations. However, more than half of ideas and creativity were generated during phases of task conflict and a large majority of these ideas resulted in innovation. It was observed that episodes of conflict involved the expression of different views. These would result in disagreements regarding how to take the task forward or how to provide a solution to the problem, which again would require the generation of ideas in order to find an agreeable solution. It was further found that a large majority of creativity was generated during conflict episodes of medium length. These results suggest that short conflict episodes would possibly not provide enough time for team members to generate ideas. Although, naturally, ideas were also generated following phases of conflict. Furthermore, the absence of creativity in long phases of conflict would suggest that these provided no direct positive or observable effect toward team creativity and innovation. Importantly, different types of task conflict were found to differently benefit innovation in the management consultant team. Cooperative conflict behaviours, which involved collaborative and accommodative conflict, accounted for more than 90% of the innovation which resulted from conflict. This suggests an important differentiation between the behaviour of individual team members regarding the task conflict at hand and the subsequent results, which will be discussed further.

These results partly mirror findings from previous studies regarding the positive effects of task conflict toward team outcomes. The assumption of Jehn and Mannix (2001) regarding the importance of task conflict for innovation due to it promoting the generation of ideas and creativity is reconfirmed. Similarly to this current research, Wood et al. (2011) find in their observations of three project teams, that ideas emerge both outside of conflict as in it, while the team with the most conflict performed best. Furthermore, the positive relationship between task conflict and team innovation and team performance is in line with the more recent meta-

analysis of De Wit et al. (2012), rather than that of De Dreu and Weingart (2003). The results that the amount of task conflicts observed reduced over the course of the teamwork, and were mostly found during early stages of teamwork, can be compared to those of Farh et al. (2010). The highest levels of task conflict occurred during earlier stages of the project, and the highest levels of creativity occurred during team meetings with medium levels of task conflict, as also found by De Dreu (2006).

Naturally, these results need to be treated with caution, as a causal relation cannot be demonstrated. As regards the conflict behaviour styles of team members, the results of this study regarding the positive effects of collaborative conflict contradict previous findings. Badke-Schaub et al. (2010) find that uncooperative conflict behaviour styles such as competitive conflict are related to higher innovation in groups. However, this is contradicted by research emphasising the positive effects of collaborative conflict (Paulson et al. 2009). Furthermore, Badke-Schaub et al. (2010) admit that the short nature of the task observed during their study, as well as it being a laboratory study, limit the results in terms of the observation of conflict behaviours. Therefore, although differing, results of this study can be seen as relevant, in particular in light of research which proposes constructive, collaborative conflict as being key to knowledge sharing and development (Paulson et al. 2009).

6.2.6 Shared Leadership, Task Conflict and Innovation

Examining the interrelatedness of the concepts of shared leadership, task conflict and innovation has been at the core of this current research. A significant negative relationship was not found between shared leadership, relationship conflict and team innovation. However, a significant negative relationship was found between shared leadership and relationship conflict. Also, a strong negative relationship was found between relationship conflict and innovation. Importantly, the analysis of the survey data demonstrated a significant positive relationship of shared leadership and task conflict with team innovation as perceived by management consultants. The results were supported through interviews with individual management consultants in which relationship conflict was generally seen as negative toward team outcomes.

The individual relationships between the concepts have been discussed in the previous sections, where both collaboration and trust were identified as being of particular importance. Collaboration was found to be essential in terms of allowing for conflicts to occur constructively and to provide positive effects regarding creativity and innovation. In addition, trust was found to explain further the relationship between shared leadership and task conflict. Shared

leadership provides an environment in which trust is essential and can thrive, while delivering positive effects towards task conflict as well as team creativity and innovation.

6.2.6.1 Collaboration

Kramer and Crespy (2011) who study collaborative leadership and shared leadership, emphasise that one of the advantages of collaboration is the synergy developing among team members. The relationship between shared leadership and task conflict gains particular relevance in the light of breaking down task conflict regarding team member conflict behaviour styles. As discussed in the previous section, the differentiation proposed by Thomas and Kilman (1974) between the five conflict behaviour styles of collaborating, accommodating, compromising, competing and avoiding was employed for the analysis of task conflict in the management consultant team. Furthermore, it was found that a majority of conflict behaviour in task conflict episodes could be classified as cooperative and was a collaborating or accommodating conflict behaviour style. Paulson et al. (2009) similarly find that constructive conflict is key regarding knowledge sharing and team development for high performance within teams where power is shared. Their study of three organisational cases of shared leadership demonstrates the usefulness of collaborative conflict. In particular, they assume that collaborative conflict can help promote creativity and innovation. Although they do not use the distinction provided by Thomas and Kilman (1974), the examples of Paulson et al. (2009) highlight the key role that collaborative conflict plays in realising the benefits of shared leadership.

Due to the high levels of collaborating styles observed in the team, and with it high degrees to which team members attempted to satisfy the concerns of other team members, this conflict behaviour style required further investigation. The role of shared leadership in developing task conflict has been discussed in the previous section. Stewart et al. (2011) find that effectively resolved conflict and thus collaborative conflict management increases commitment to decisions and encourages self-reinforcement and self-goal setting. As discussed before, in contrast to previous research, Badke-Schaub et al. (2010) find that groups with higher innovation demonstrate lower collaborating conflict behaviour styles. However, the differing results, as found in this current research, may relate to the team observed being a real-life management consultant team in which team members had a stake in the outcome. Similarly to this current research, Weingart and Jehn (2009) find that the beneficial effect of task conflict can be maximised when collaboratively managed. Avoidance, or suppression of task conflicts interferes with team performance. Importantly, in this current research it was found that task

conflicts which were not managed through collaboration, but through competition, were more likely to turn into negative relationship conflict.

The proposal of Weingart and Jehn (2009) of collaboration regarding the management of team conflict can be closely linked to shared leadership. Cooperative orientation for instance is named as increasing collaboration among team members and positive outcomes. Although the danger of becoming too cooperative and compromising, which is described as deferring to rather than solving problems, can lead to suboptimal agreements (Weingart and Jehn 2009). Exchanging information, using packaging and trade-offs, and working to break the chain of conflict escalation are named as three tactics that can help team members in identifying and gaining from opportunities. In this current research, management consultants similarly found knowledge or information exchange to be enhanced through shared leadership. The findings of Weingart and Jehn (2009) therefore suggest that knowledge sharing is similarly beneficial for effectively managing task conflicts. Looking at the instances of collaborative conflict in the observations, high degrees of knowledge and information exchange were observed. Importantly, these discussions were carried out in a constructive way, as is the case with collaborative conflict behaviour, allowing for individuals to effectively engage in the knowledge sharing process. In contrast, it was observed that when displaying competing conflict behaviour, team members would persist in their views. Rather than being open to solutions and presenting additional information, which could potentially enhance collaboration and result in beneficial outcomes, the conflict was confrontational and less likely to generate innovative outcomes.

The results of this current research suggest that although a significant positive relationship between shared leadership and task conflict could not be identified, the possibility of a relationship between shared leadership and certain conflict behaviours warrants further investigation. A majority of task conflict observed in the shared leadership team involved cooperative conflict behaviour styles. Therefore, the involvement of team members in leadership functions may provide the foundation for more collaboration. Instead of all task conflict being reduced or increased, as discussed in previous studies, it is probable that collaborative task conflict is higher in shared leadership teams. On the other hand, uncooperative conflict behaviours may be reduced in shared leadership teams. For instance, it was observed, that during longer phases of conflict a team member would intervene and take over the leadership of the team. This effectively provided guidance to the team towards resolving the conflict. It was observed that within the shared leadership team the possibility of a team member taking over the leadership of the team could, when necessary, lead to the

resolution of conflict, which was similarly suggested by Greer and van Kleef (2010). However, engagement of team members in conflict resolution was mostly observed in instances where uncooperative conflict behaviours were displayed. In addition, these were mostly long instances of conflict. Therefore, the very nature of collaborative conflict in the shared leadership team meant that moderation of conflict by another team member was not required.

6.2.6.2 Trust

The importance of trust was named both regarding its enhancement through shared leadership and regarding its relationship with task conflict. Importantly, trust was named as an important factor in enabling the constructive use of conflicts by management consultants. The development of trust in shared leadership teams is confirmed by D'Innocenzo et al. (2014), who find levels of trust being increased through team members' openness toward the influence of each other. In addition, they find high levels of trust to be related to higher levels of performance. This may further explain the relationship of trust in cultivating creativity and innovation, as identified in this current research. This is similarly discussed by Hooker and Csikszentmihalyi (2003), who assume the task thereby takes on new meaning and significance. Furthermore, Döös (2015) finds trust to be a necessary condition for successful sharing, and Weingart and Jehn (2009) note trust influencing the willingness to share and receive information as being accurate.

Since high levels of information sharing were observed in the team, it is therefore likely that trust played an important role. Bergh et al. (2011) find the development of trust critical in order to achieve mutual sharing to exploit opportunities, and they name three, separate, trust-building processes of commitment, companion and competence trust. This distinction is similar to the distinction between cognitive and affective trust (Johnson and Grayson 2005). These processes are of relevance to the current study as they can further explain the development of trust in shared leadership teams. The precursors of shared leadership, of shared purpose, social support and participation and input, as found by Carson et al. (2007), can be linked to the development of trust. In addition, functional expertise, which is important regarding the rotation of the responsibility for guiding the group, requires cognitive or competence trust in terms of team members believing in the competences of each other.

The professional reputation of management consultants was further named as important regarding the development of trust. In particular, small-business consultants named working with another consultant effectively endorsing that person. This so-called 'co-branding' was seen

as a risk in that the own brand could 'get stamped' negatively. The common aim of producing results within a given deadline could only be met if management consultants did what they said they were going to do. Trust was effectively named as a function of intimacy, capability and reliability. Therefore, management consultants had to rely on the professional reputation of each other, essential for developing trust. Professional ethics were further important in the context of developing trust and maintaining and enhancing professional reputation, as each management consulting team has their own code of ethics and professionalism guiding their consultant work and behaviour. Enticing away a client of another consultant following a joint project for instance, was considered a taboo and seen as tarnishing the reputation of the management consultant responsible amongst colleagues.

The results of this current research suggest that trust plays an important role both in developing creativity and innovation, as well as in mediating task conflict in the management consultant team. It was visible in the observation of the management consultant team that team members relied on the knowledge and competences of each other. Confidence in the competences, responsibility, reliability and dependability of each other is emphasised as essential by McAllister (1995). This could be seen, for instance, when a team member would guide the team based on his or her functional expertise. The team members were therefore willing to be vulnerable towards their team members' actions, meaning levels of trust were displayed (Costa et al. 2001).

As discussed previously, management consultants also emphasised the importance of trust individually, for instance in the context of their belief that the competence of their team members and their confidence in conflicts was being applied constructively. This can be linked to the study of Khan et al. (2015) who differentiate between the impacts of cognitive and affective trust on team performance in innovative entrepreneurial teams. They recognised that cognitive trust is based on knowledge and competence and affective trust is grounded in feelings and emotions. Although their results do not find a positive relationship between task conflict and team performance, which may be related to the ambiguous environment of entrepreneurial teams, the importance of cognitive trust regarding team effectiveness is emphasised. The positive relationship of task conflict with team innovation in this current research, may further be explained due to the presence of affective trust which Khan et al. (2015) found to be absent in their research. Instances of team members displaying levels of affective trust and thus sensitivity to team members' needs, as well as spontaneous contribution and help were observed in the management consultant team.

The overall results suggest that the differentiation between cognitive and affective trust can be successfully transferred and further explain the results of the current study. The data demonstrate that both the presence of high cognitive and high affective trust are required in order for task conflict to provide beneficial outcomes in the form of team innovation. In particular, cognitive trust and team members trusting the competences of each other as professionals are highly important for team creativity and innovation. Furthermore, higher levels of functionality in terms of trust develop through the use of shared leadership. Trust can therefore be seen to provide an important connection between task conflict and shared leadership, enabling conflicts to be carried out constructively and providing collaborative conflict behaviour.

6.2.7 Conceptual Model

The information presented in **Table 6.1** presents an overview of the main findings for shared leadership, task and relationship conflict, as well as innovation, as discussed in previous sections. The development of each of the four concepts, as learnt from analyses of the data, is discussed, followed by columns presenting effects and outcomes, as part of which, relationships between the concepts are outlined.

Table 6.1: Overview of theoretical outcomes of study

Concept	Development	Effects	Outcomes
<p>Shared leadership</p>	<p>Shared leadership can be facilitated in management consultant teams in different ways. Several precursors to shared leadership are identified and confirmed:</p> <ul style="list-style-type: none"> • Individual responsibility and self-leadership are important for shared leadership. Team members rather than supervisors should have responsibility and authority for their behaviour. • Self-managed teams with high decision authority are best equipped for utilising shared leadership. • Shared purpose, social support as well as participation and input are important for enabling an internal team environment beneficial for shared leadership. <p>Leadership can emerge harmoniously within shared leadership and changes in leadership can occur fluently. Leadership responsibility can be rotated due to team members having:</p> <ul style="list-style-type: none"> • subject-matter leadership; • different areas of responsibility; and • different strengths and weaknesses. <p>A formal leader can be appointed in a shared leadership team for managing client engagement.</p>	<p>Shared leadership can facilitate different effects in management consultant teams, which are of further importance regarding the relationship between shared leadership and creativity:</p> <ul style="list-style-type: none"> • Knowledge sharing is stimulated through shared leadership, facilitating greater information exchange and learning by team members. • Involvement of team members regarding participation in team activities and team decision-making is enhanced with shared leadership. • Trust and team members' willingness to be vulnerable toward their team members' actions is developed through shared leadership. • Different views are provided in shared leadership teams. The findings are inconclusive on whether these translate into additional task conflict. 	<p>Creativity and innovation are enhanced in shared leadership teams:</p> <ul style="list-style-type: none"> • The equality integral to shared leadership management consultant teams is relevant in instilling creativity. • Knowledge sharing, involvement and trust are integral to instilling creativity in shared leadership management consultant teams. • Collaboration is central for shared leadership management consultant teams for effectively managing intragroup conflicts. • Collective decision-making is essential within a shared leadership team to provide team members with a sense of empowerment. • A diverse pool of knowledge and experience is most beneficial toward positive outcomes in a shared leadership management consultant team.
<p>Implications: In order for a management consultant team to benefit from shared leadership it is essential that the above mentioned prerequisites of individual responsibility, self-management, shared purpose, social support as well as participation and input are met. Knowledge sharing, involvement and trust of team members are facilitated within shared leadership team which can provide beneficial effects toward team creativity and innovation. Furthermore, a variety of views are provided. The aforementioned effects and the equality, collaboration and knowledge provided are integral to allowing for the development of creativity and innovation in shared leadership management consultant teams.</p>			

<p>Task conflict</p>	<p>Task conflict develops through disagreements between team members about the content of the task being performed:</p> <ul style="list-style-type: none"> • A range of different views increases the likelihood of task conflicts developing in a shared leadership team. • Task conflict should always be present to some extent in teams wanting to generate innovative outcomes. • Task conflicts can easily arise through misunderstandings, which, however, are quickly resolved. • Task conflicts commence by two team members disagreeing, with more team members becoming involved in the process. • Hierarchical forms of leadership reduce the openness of team members to accommodate task conflicts. • Functional or cultural diversity can prove beneficial for teamwork in allowing for different views. 	<p>Constructive and destructive forms of task conflict should be distinguished:</p> <ul style="list-style-type: none"> • Constructive forms of task conflict mostly develop during early stages of projects. This could be at the beginning of the project when a plan is made and approaches and assumptions are challenged. • Task conflict can become destructive at late stages of projects when conflicts take too much time. Therefore, management consultants need to reach consensus at later stages. • Task conflict episodes that are long are more likely to result in relationship conflict, to remain unresolved, and not to have beneficial outcomes. • Long phases of task conflict require an uninvolved team member to moderate between conflicting parties and thus to provide leadership for the team. • Trust is essential in preventing task conflict from turning into negative RC. • Humour can play an important role in deescalating conflicts. 	<p>The potential beneficial effects of task conflict depend to a large extent on the type of conflict behaviour displayed. One can distinguish between the conflict behaviour styles of:</p> <ul style="list-style-type: none"> • Collaborating, accommodating, compromising, avoiding and competing. <p>Two main contrasting forms of conflict behaviours are of particular relevance:</p> <ul style="list-style-type: none"> • Collaborative conflict behaviour in instances of task conflict can benefit team creativity and innovation. • Competitive conflict behaviour does not benefit team creativity and innovation. • Cognitive trust, which refers to team members believing in the competences of each other, can enhance the beneficial aspects of TC. • Affective trust, and thus spontaneous contribution, can help conflicts to be carried out constructively.
<p>Implications: Task conflicts can develop through various forms of disagreements in shared leadership management consultant teams such as team members having different views, misunderstandings or searching for solutions to problems. It is found that conflicts are more beneficial during early stages of projects and that consensus needs to be reached at some stage. Task conflict episodes that are long are less likely to have beneficial outcomes. The beneficial nature of task conflict in terms of creativity and innovation is partly dependent on the behaviour of the parties involved. Collaborative conflict behaviour is found to be more beneficial toward creativity and innovation than competitive conflict behaviour. Both cognitive and affective trust are believed to play an important role regarding the prevention of detrimental conflict and in mediating the relationship between SL and TC.</p>			

Relationship conflict	<p>Relationship conflict can involve negative reactions such as tension, animosity and annoyance among team members:</p> <ul style="list-style-type: none"> • Criticism which is of a personal rather than task-related nature results in relationship conflict. • Sarcasm or ironic comments are related to task conflicts becoming negative. • Management consultants' individual ego is seen as one of the main drivers of personal conflicts. 	<p>Relationship conflict is found to affect the running of the team as well as team outcomes negatively.</p> <ul style="list-style-type: none"> • Management consultants utilising shared leadership report lower levels of RC. • Positive effects in terms of creativity and innovation are less likely to develop during or following episodes of RC. • Competitive TC behaviour increases the likeliness of TC becoming negative. 	<p>Relationship conflict should be avoided within shared leadership management consultant teams:</p> <ul style="list-style-type: none"> • High levels of trust can ensure that relationship conflict in shared leadership teams is minimised. • Collaborative conflict behaviour reduces the likelihood of relationship conflict emerging.
<p>Implications: Relationship conflict is mostly detrimental toward positive outcomes such as innovation in shared leadership management consultant teams. Shared leadership can reduce negative relationship conflicts. However, competitive TC behaviour should be avoided since it increases the likelihood of task conflicts becoming negative. Collaborative conflict behaviour as well as trust provide beneficial effects toward the minimisation of RC in SL teams.</p>			
Innovation	<p>Innovation is related to management consultants having ideas and thus displaying creativity.</p> <ul style="list-style-type: none"> • Task conflict is found to enhance creativity in management consultant teams. • Functional expertise and thus expert knowledge is essential in developing creativity. • Knowledge sharing facilitates greater information exchange and learning by team members translating to higher creative output. • Involvement of team members regarding participation in team activities and team decision-making enhances creativity. • Trust and team members' willingness to be vulnerable toward their team members' actions can enhance creativity. 	<p>Innovation develops when an idea is taken forward. High levels of innovation require team members having many ideas and thus displaying high levels of creativity.</p> <ul style="list-style-type: none"> • Innovative outcomes are enhanced by employing shared leadership in a team. • Hierarchical forms of leadership can close down team creativity. • Shared leadership enhances knowledge sharing, involvement and trust, important for developing creativity. • Innovation that arises from creative conflict often involves collaborative conflict behaviour. 	<p>Collaboration and trust are essential in shared leadership management consultant teams to maximise the benefits of creativity and innovative outcomes.</p> <ul style="list-style-type: none"> • Collaboration in terms of the management of TC can enhance the effective utilisation of task conflicts in shared leadership management consultant teams which will allow for higher innovative outputs. • Trust, both cognitive and affective is essential in order for task conflicts to provide beneficial outcomes in the form of innovation.
<p>Implications: Creativity can be enhanced by employing shared leadership in management consultant teams. Knowledge sharing, involvement and trust are important in developing and allowing creativity to emerge in shared leadership management consultant teams. Task conflict, in particular when managed through collaborative behaviour, can provide beneficial effects in terms of creativity and innovation. Shared leadership may enhance the appearance of collaborative conflict behaviour. Trust is further found to be enhanced through shared leadership and to benefit team innovation.</p>			

Based on the points that have arisen from the analysis and the discussion, the framework in **Figure 6.1** below depicts the effects of shared leadership and task conflict on innovation, as revised from the original framework depicted in Chapter 3.

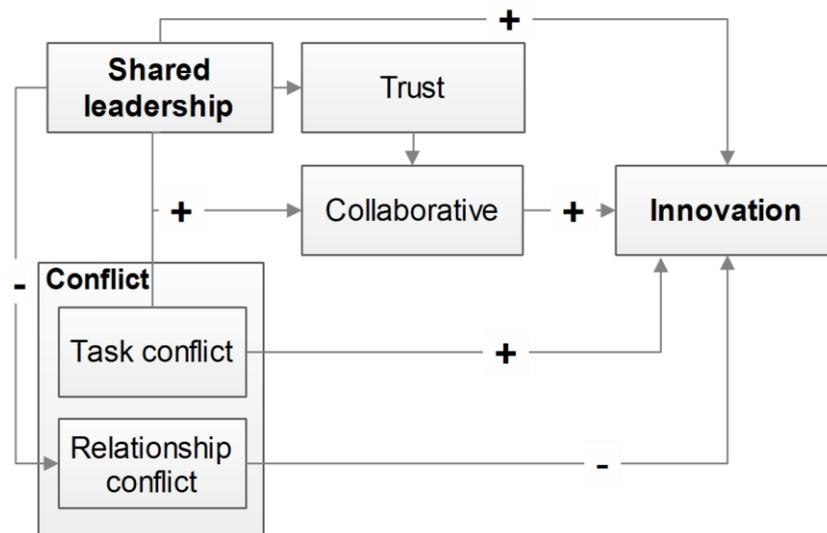


Figure 6.1: Relationship and effects of shared leadership and task conflict on innovation

In contrast to the previous model, a positive relationship between shared leadership and task conflict, and a negative relationship of shared leadership and relationship conflict with innovation, are not included. Positive relationships between shared leadership and innovation as well as task conflict and innovation, and, a negative relationship between shared leadership and relationship conflict are displayed. Importantly, as can be seen, trust and collaboration play an important role in allowing the positive effects of shared leadership and task conflict on innovation to develop.

6.5 Managerial Implications

The previous discussion on the relationships between the main concepts of this study delivers several results that are important to consider in the context of providing practical guidelines for management consultants. These guidelines will enable management consultants to employ shared leadership and task conflict in order to allow for additional innovation in their team. The following sections provide guidelines, developed in relation to the findings of the previous theoretical section. The second objective of developing a model and guidelines that can be used by shared leadership management consultant teams to enhance their innovatory capacities will hereby be addressed.

6.5.1 Management Consultants and Shared Leadership

The evidence demonstrates that shared leadership can provide significant beneficial outcomes in management consultant teams. However, as discovered, in addition to the relationships between different concepts it is important to consider prerequisites and processes important for successfully implementing shared leadership. Management consultant teams already employing or wanting to employ shared leadership can benefit from taking this information into account. It provides valuable points on how best to employ shared leadership and on aspects that might produce negative effects. The following guidelines have been derived from the analysis and discussion of the data and should be considered by management consultant teams wanting to work with a shared leadership structure.

a) The management consultant team should be self-managed

A certain degree of empowerment is essential for allowing shared leadership to develop. The team should, therefore, be empowered to work with little or no supervision. It was observed that in small organisations and teams consisting of independent management consultancies this was naturally the case. Although many management consultants are self-managed and have the ability to delegate their own tasks and responsibilities (Behfar et al. 2011), this is dependent on whether, or not, the organisation employs more traditional structures and top-down authority. It was found that self-managed teams have high decision authority and power dispersion. Therefore, enabling a management consultant team to be self-managed will significantly simplify the development and employment of shared leadership and should therefore be seen as a precondition.

b) The management consultant team should be comfortable with sharing leadership

Not all team members are necessarily used to sharing leadership functions and some team members may be more comfortable working within a hierarchical, top-down leadership structure. This is also related to some individuals participating more in the leadership process than others. Therefore, team members should become used to collaborating with others. Team members could make each other aware of directive behaviours. Furthermore, team members should be self-motivated and self-directed regarding their involvement in the team. This self-leadership will provide team members with the confidence and self-efficacy to engage in leadership when they believe their expertise is of value. Positive attitudes will develop with regard to team members believing in their ability to being able to manage their own work and thereby being able to contribute toward shared leadership.

c) The management consultant team members should collaborate in the process

It is important that all team members are involved in decision-making. Team members may make decisions related to their personal areas of expertise. However, team objectives and overall goals should be agreed on jointly and potential disagreements and distribution of tasks should be considered in advance. This will often occur naturally but should be kept in mind by team members. Team members should participate and involve themselves in the teamwork constructively, providing input and engaging in decision-making. In addition, team members should support each other emotionally, encourage the achievements of others and appreciate the input of every team member. Furthermore, team members having common objectives and goals will increase motivation, empowerment and commitment within the team, increasing the probability of succeeding with shared leadership.

d) The management consultant team should rotate leadership based on expertise and responsibilities

Teams cross-functional in nature are likely to benefit from shared leadership, as different areas of expertise of team members allow for 'subject-matter leadership'. This means that the management consultant team can allow for a team member to guide the team when he or she is seen as most competent to facilitate the progress of the team. It is of further importance that team members have different areas of responsibility. Leadership can then be rotated based on responsibility for different project segments. These changes in leadership can be facilitated through a project plan. However, different leaders can also emerge fluently during the teamwork. Often, when a clear leader does not emerge, shared leadership occurs fluently and

harmoniously. However, when a team lacks shared purpose, social support and participation, external team managers can contribute shared leadership development (Carson et al. 2007).

e) The management consultant team should employ a formal leader for client engagement

Shared leadership can occur both in a team with a designated formal leader and within a team without a formal leader. However, partly due to the nature of management consultant work, it is recommended that a management consultant team that deals directly with clients, designates a formal leader. In other cases, a formal leader, who reports on the development of the work, may also be useful. However, clients in particular will often only want to deal with one 'lead' consultant. This is related to potential confusion arising regarding who is responsible for presenting the work outcomes to the client. Therefore, a team member who manages and builds the relationship with the client and acts as the face for the client should be employed. This will ensure that engagement with a potential client is managed effectively.

f) The management consultant team should consider the potential risks of shared leadership

Firstly, shared leadership can be financially inefficient in the sense of the workload not necessarily being distributed by a designated leader. This may lead to team members working on project aspects that overlap. A project plan that distributes responsibilities, and team members being able to trust in the reliability of each other will minimise this risk. Secondly, shared leadership, as opposed to a command and control model of leadership, can take more time, as different perspectives have to be taken into account. This point can also be related to financial inefficiency and can again be addressed by effectively distributing responsibilities, but should, however, also be seen as a clear advantage of a shared leadership team. Thirdly, accountability can get lost in a shared leadership team, therefore both individual and team accountability should be clearly managed.

6.5.2 Management Consultants and Task Conflict

In terms of whether conflict can have beneficial effects toward team outcomes, the results in the previous theoretical section suggest that management consultant teams can benefit to some extent from conflict arising in their teams. However, not all conflict is beneficial and the analysis and discussion of the data have indicated that it is important to take different aspects into account. The following points provide guidelines for management consultant teams on how to avoid the pitfalls of conflict and how to utilise the benefits of conflict. These points are grounded in the teams employing shared leadership as discussed in the previous section. Management consultant teams sharing leadership will benefit from employing these guidelines in practice.

a) Management consultant team members should disagree during their teamwork

Task conflict which relates to team members disagreeing about the task at hand can provide beneficial outcomes in terms of team creativity and innovation. Management consultants should therefore consider some conflict as being constructive for their team. Team members should be aware and encourage each other to provide different views and opinions on issues that are task related. Therefore, cohesion should not always be seen as a primary desire. In particular, when the management consultant team wants to generate new ideas and solutions and wants to innovate, having no task conflict in the team could prove detrimental. Shared leadership will assist in providing a climate in which team members are encouraged to engage in debates and feel free to disagree with each other. Overall, differences in ideas, opinions and viewpoints are essential for the innovative, problem-solving nature of management consultant work and should therefore be taken into account.

b) Management consultant team members should avoid personal conflicts

It has been shown that personal conflict in terms of tension, animosity and annoyance among team members has detrimental effects towards team creativity and innovation. It is important that this form of conflict is avoided by team members. For example, negative comments aimed at criticising the competences of a team member, or sarcasm, should be avoided. In addition, conflict can turn personal when an opposing view is seen as a personal attack. Consequently, in order to maintain a beneficial climate within a management consultant team, it is important that team members consider conflict to be task focused rather than personal. Shared leadership and power dispersion in teams allows for different team members to engage in conflict resolution. Team members should encourage each other to engage in conflict resolution.

c) Management consultant teams should disagree at early project stages

Task related conflicts or disagreements are mostly helpful and beneficial at early project stages when the team enters a 'storming' phase. Management consultants should therefore encourage each other to develop and promote different views at early project stages. At later stages of projects, task conflicts will most likely be detrimental toward team creativity and team outcomes in terms of innovation. This could, for instance, be the case due to the management consultant team already having generated ideas on what sort of strategy to employ for problem solving and addressing the needs of a client. Therefore, management consultants should consider their project life cycle in order to know when task conflict is becoming disruptive. Teams should avoid

task conflict at later stages of projects when a plan has already been implemented and should try and discuss any possible disagreement early during the project.

d) Management consultant team members should be aware of the length and level of conflicts

Task conflicts can occur between different team members and may arise for various reasons. Evidence suggests that the length of disagreement between team members on a given topic will vary. Task conflicts that last for a longer period of time are less likely to result in beneficial creativity and team innovation. Management consultants should therefore ensure that task conflict episodes do not last for too long and are resolved in time. Furthermore, moderate levels of task conflict are most beneficial for team creativity and innovation. This form of conflict is more likely to develop during early project stages. Management consultant team members should be aware that task conflict that is too high, or too long, may be disruptive and may further turn into personal and negative conflict in their team.

e) Management consultant team members should manage conflicts collaboratively

Prior points made suggest that task conflict can be beneficial for teams but that it should be carefully managed. Management consultant team members should therefore engage in conflict management. This is particularly beneficial when task conflicts that are becoming too long need to be resolved. In addition, management consultants not always taking disagreements too seriously and being humorous can prove useful in de-escalating potential negative conflicts. Management consultants should collaborate in managing and eventually resolving conflicts in terms of aiming to find solutions which satisfy the concerns of all parties. Shared leadership is particularly useful in developing such collaboration. Team members should therefore be open to different solutions when engaging in task conflict and knowledge exchange processes.

f) Management consultant team members should develop trust in each other

Trust contributes significantly to team members being able to manage task conflicts effectively during their work. It is important that team members are willing to be exposed to the actions of their team members. Therefore, management consultants should believe both in the competences of each other and the willingness of team members to assist each other. Trust can develop through team members becoming increasingly familiar with each other. In addition, as with previously mentioned guidelines, trust may be enhanced through external team coaching as well as training and team building events. A primary point for shorter, ad-hoc management consultant teamwork, however, is the belief in the knowledge and competences of each other.

For management consultant teams employing shared leadership, high levels of trust will contribute to task conflicts being carried out constructively.

6.5.3 Management Consultants and Innovation

As discussed in the previous section, task conflict, when handled effectively, can provide significant benefits toward team outcomes for management consultants. It has been shown that task conflicts can benefit team creativity and innovation. Creativity and innovation require further discussion in the context of how they can best be enhanced in management consultant teams employing a shared leadership structure. The following guidelines are derived from the theoretical section of this research. They will aid in developing ways of employing shared leadership and task conflict best to enhance the innovatory capacity of management consultant teams.

a) Management consultant team members should encourage idea generation

In order to develop innovation in management consultant teams it is important that individual team members generate high levels of novel output in the form of ideas. It is only when an idea is taken forward and implemented, that innovation develops. The flat power structures inherent in shared leadership provide an effective way of bringing together and voicing the different skills and views of individuals. Management consultant team members should focus on bringing new ideas forward, not only regarding their own field of expertise but also in that of others. Nevertheless, management consultants should ensure the right ideas are selected for being taken forward in the team. Similarly to task conflict, the team will benefit from most ideas being generated during the early project stages. Therefore, team members could agree on how to manage the idea generation process.

b) Management consultant team members should collaborate with each other

As discussed, collaboration is of key importance to successfully managing conflicts in management consultant teams. Collaboration is both essential for managing task conflict as well as shared leadership to enable creativity and innovation. Team members should take the views of each other into account and aim to find solutions collaboratively. Furthermore, they should encourage each other to take on leadership roles and responsibilities. Naturally, the characteristics of individuals selected for the management consultant teamwork may influence collaboration. However, it is important that team members are committed to contributing to the creative process. This involves standing back and allowing others to lead the team when

required, as continuous collaboration provides the grounds for eventually leading to innovative output generated by team members.

c) Management consultant team members should encourage each other to share their knowledge and experience

It is proposed that the power dispersion inherent in shared leadership teams provides team members with greater access to information and leads to knowledge sharing among team members. Furthermore, team and individual learning can be facilitated through shared leadership and is linked to knowledge sharing. Creativity and innovation are enhanced through management consultants sharing knowledge in their teams. For this reason, management consultant team members should engage in information exchange and, importantly, effectively communicate their ideas so that their knowledge and expertise can be utilised by the team. Furthermore, team members should encourage each other to share their knowledge, which relates to team members encouraging each other to take on leadership responsibility.

d) Management consultant team members should fully involve themselves in the teamwork

High levels of involvement are essential in allowing for high levels of creativity and innovation in management consultant teams. Empowerment of team members can ensure that they have the possibility of engaging as much as possible. With individuals involving themselves in the activities of the team as well as the leadership process, their work can become more meaningful and enjoyable. Involvement further relates to the importance of management consultants actively engaging in the decision-making of the team. It is important that proactive behaviour is encouraged in the team, as involvement will also reduce negative team performance which may impede innovation. Therefore, team members should fully involve themselves in the creative process.

e) Management consultant team members should believe in the competences of each other

Trust has already been mentioned in the context of effectively managing task conflicts. In particular, it is essential that management consultants are aware of the skills, abilities and past experiences of each other. This is important for the team to be able to develop innovation. Furthermore, trust, in terms of believing and being able to rely on the competences of other management consultant team members, is essential for establishing expectations.

6.5.4 Management Consultant Working Model

The evidence gathered so far shows that the concept of shared leadership can be successfully employed in management consultant teams. Furthermore, to a certain extent, shared leadership will be associated with conflict which can lead to creativity and eventually team innovation. **Figure 6.2** displays a working model including three different steps identified as important for shared leadership management consultant teams wanting to enhance innovation through task conflict. The different stages were discussed in the previous sections including issues to approach. Issues to avoid are further displayed for each stage. Stage 1 outlines the conditions found to enable shared leadership, Stage 2 presents important aspects for utilising conflict in teams and Stage 3 displays further points relevant to the development of team innovation.

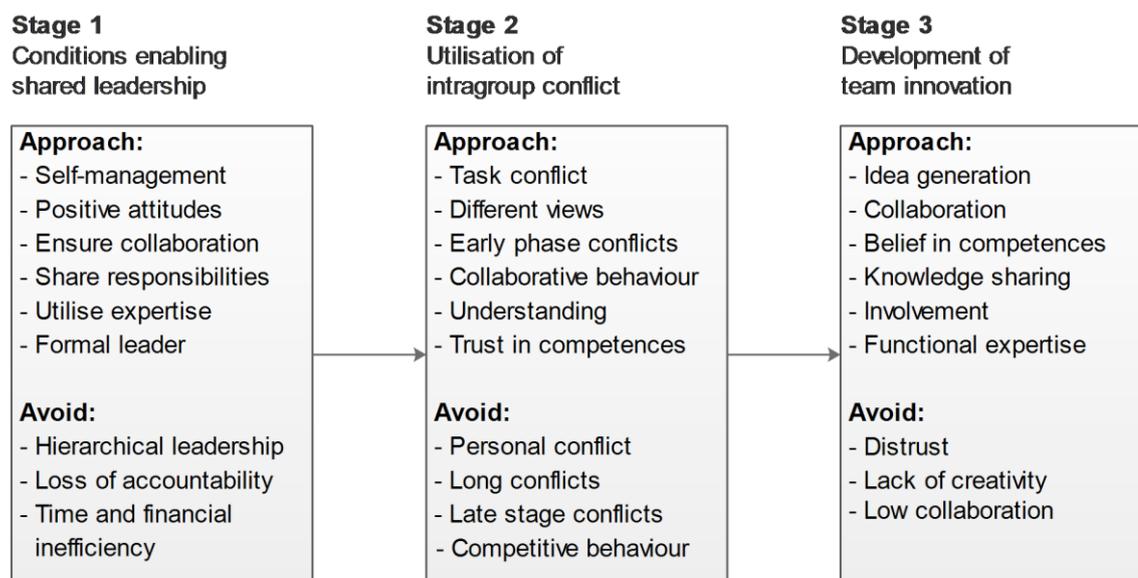


Figure 6.2: Working model displaying stages toward enhancing innovation in management consultant teams

The different steps of the three stages and corresponding issues to employ and to avoid in management consultant teams are further displayed in the overview in **Table 6.2**.

Table 6.2: Different stages and steps toward enhancing innovation for management consultant teams

Stage 1 - Conditions enabling shared leadership		
Approach	Employ	Avoid
(a) Ensure team is self-managed	- Team empowerment; - High decision authority; and - Little or no supervision.	- Traditional top-down authority.
(b) Be comfortable with sharing leadership	- Positive attitudes; - Self-motivation; and - Self-directed involvement.	- Directive behaviours.
(c) Ensure collaboration in the process	- Involvement in decision-making; - Emotional support; and - Common objectives and goals.	- Single decision-making processes.
(d) Rotate leadership based on expertise and responsibilities	- Different areas of responsibility; - External team manager.	- Loss of accountability.
(e) Employ a formal leader for client engagement	- Management and building of client relationship.	- Several, or no, formal leaders.
(f) Consider the potential risks of shared leadership	- Project plan responsibilities; - Trust in each other's reliability; - Accountability management.	- Time and financial inefficiency.
Stage 2 - Utilisation of intragroup conflict		
Approach	Employ	Avoid
(a) Have task related disagreements	- Different views and opinions; - Task related disagreements.	- Solely focusing on team cohesion.
(b) Avoid conflicts that are personal in nature	- Task related disagreements; - Conflict resolution.	- Tension, animosity, annoyance, sarcasm; - Personal attacks.
(c) Disagree at early stages of the project	- Project life cycle consideration; - Early stage disagreements.	- Late stage disagreements.
(d) Ensure awareness regarding the length and level of conflicts	- Task conflict resolution; - Moderate task conflict.	- High level task conflict; - Long task conflict.
(e) Ensure collaborative management of conflicts	- Conflict management; - Finding of agreeable solutions.	- Not engaging in de-escalation.
(f) Develop trust in your team members	- Belief in competences and willingness of assistance; - Team coaching facilitation.	- Low levels of trust.
Stage 3 - Development of team innovation		
Approach	Employ	Avoid
(a) Encourage each other in generating ideas	- High levels of novel output; - Management of idea generation process.	- Absence of creativity.
(b) Collaborate with each other	- Finding solutions collaboratively; - Taking on leadership roles.	- Lack of collaboration.
(c) Encourage yourselves to share your knowledge and experience	- Share knowledge and experience; - Encourage knowledge and experience sharing.	- No sharing of knowledge and experience.
(d) Fully involve yourselves in the teamwork	- Proactive behaviour; and - Team member empowerment.	- Low levels of contribution.
(e) Believe in the competences of your team members	- Awareness of skills, abilities and experiences.	- Non-belief in competencies.

6.6 Novel User Methodology

Theoretical and practical implications regarding the interrelationship of shared leadership conflict and innovation have been discussed in the previous two sections. In this study, a mixed or multiple technique methodology was employed. The data were collected through a survey, interviews and video observations and were analysed by employing regression analysis, causal mapping and video ethnography. The methods were related in that the survey examined initial relationships between concepts, the interviews sub-processes, with the observations providing validation and further examination of subtleties and occurrences in a real-life management consultant team. This combination of research techniques, with the essential inclusion of video observations, provided a novel and in-depth approach to researching the relationship between the different concepts. Therefore, the third objective of this study concerns an evaluation of the benefits of using these research techniques which is discussed in the following sections.

6.6.1 Combining Research Techniques

Survey, interview and observational techniques were employed in a sequential approach in this research. Similarly to other research on leadership or conflict in teams, the survey was conducted cross-sectionally via an online questionnaire. The survey was conducted with individual management consultants assessing their individual teamwork experience. The advantage of surveying individuals as opposed to teams was that it allowed for a wider assessment of teamwork practices in the management consultant sector. Nevertheless, the over-representation of quantitative, cross-sectional, single-source designs, which often involve self-reporting student samples, has been criticised and a greater use of qualitative methods has been advocated (Cools et al. 2013).

Following the justification of Ospina (2004) regarding the inclusion of qualitative techniques in a leadership study, this current research has been designed to allow for:

- better understanding of the relationships between concepts by adding rich detail to the quantitative testing of the relationships;
- understanding the phenomena from the perspective of individual management consultants involved;
- capturing the complexity of shared leadership and conflict and evaluating the development of innovation; and
- providing a novel perspective to studying the different concepts as opposed to merely capturing them quantitatively.

One of the advantages of including an observational approach was that concerns about causality, which have been voiced regarding cross-sectional studies, could be reduced (De Dreu 2006; Maxwell 2004). The design of the observation and the assessment of task conflict and innovation, for instance, at various points in time allowed for examining the relationship between these variables, as called for in previous studies (De Dreu 2006; van Woerkom and van Engen 2009). Similarly, results from the interviews with management consultants provided data that strengthened claims made about relationships regarding the survey results. The importance of including qualitative methods was therefore demonstrated in developing a more in-depth exploration and understanding of the relationships between the variables. Furthermore, as suggested by Parry et al. (2013), it can be confirmed that this approach helped in providing more of relevance and interest for practitioners.

The data from the management consultant interviews provided an essential contribution toward the results found in the survey. The exploration of the relationships identified in the survey, through individual interviews with management consultants, allowed for gaining in-depth information regarding teamwork, including issues such as conflict and leader behaviour. The importance of the semi-structured interviews can be seen in that they allowed for examining the perceptions of management consultants regarding shared leadership teamwork. In addition, their perceptions regarding situations in which conflicts were triggered and creativity arose, provided valuable information regarding underlying issues of management consultant teamwork. However, as reconfirmed by Bryman (2011), although the interviews provided accounts of leadership and the other issues under research, observations as an additional method offered the prospect of observing these issues directly.

Visual research as part of a wider range of mixed methods has been advocated as having high potential in researching leadership (Bryman 2011). When employed properly, observational techniques can provide a very accurate picture of what takes place and for how long things take place (Easterby-Smith et al. 2012). In this respect, the usefulness of video observational techniques was confirmed for this study and thus was employed as one of the three core methods of this current research. It not only included the researcher observing a management consultant team in action but also involved him digitally recording both the visual and the audible elements of the teamwork. The importance of employing video observation was reconfirmed in its usefulness in detecting instances of conflict and creativity in the team. Bergh et al. (2011) emphasise the promises of video-analysis where the process is important and

outcomes are difficult to measure. Similarly, employing the method in this current research allowed for detecting the development of task conflicts and creativity which could then be included in the analysis. In terms of observing how disagreements between team members led to the generation of different ideas, possibly in the form of solutions to problems and innovation, the method allowed for following the innovation process 'in situ'.

The video recording allowed the researcher to conduct an in-depth analysis of the conversations between the different team members. These conversations were transcribed allowing for an analysis of the exact words used, as well as providing visual evidence of subtle, non-verbal interactions between team members. In terms of gestures and facial expressions, the video data allowed for detecting annoyance of team members, as well as happiness by observing smiles or agitation by observing gesticulation. When merely listening to the audio it was not always clear which team members were communicating with each other, however, this too was detectable through the video. Furthermore, team members often referred to additional materials such as screen presentations, paper documents and computers in their discussions, which was recorded and thus visualised for the later analysis.

The observations allowed for discovering subtleties in the data which would not have been found otherwise. Conflicts were often very short and would not necessarily be remembered by team members. The differentiation between different conflict behaviour styles and the detection of the usefulness of a collaborative approach to task conflict in the shared leadership team can be attributed to this technique. Similarly to other studies employing video techniques (Badke-Schaub et al. 2010), the idea generation process was linked to the behavioural strategy observed. As the observations were conducted weekly, this added a longitudinal element to the research. In terms of innovative team outcomes developing over a period of time, an idea was often observed as having been taken forward in a later team meeting. In addition, a comparison of ideas generated in different meetings as well as the number of task conflicts could be made.

As discussed in the methodology chapter of this study, possible risks regarding reactivity of team members could be minimised by placing the miniature recording equipment as unobtrusively as possible. Furthermore, the researcher was effectively ignored by team members during the meeting. An indicator of the limited effect which the researcher had on the teamwork process were the large number of conflicts that occurred. These could otherwise have been fewer due to the possible reluctance of team members to engage in conflicts in the presence of a researcher.

6.6.2 Discovering Innovation Development

The potential benefits of utilising additional research techniques in the form of interview and observations as regards this current research have been discussed in the methodology chapter. The employment of qualitative techniques in addition to a more common quantitative approach allowed for uncovering subtleties and reconfirming findings in action. These subtleties could not have been uncovered using a cross-sectional survey approach, which, although useful in testing for relationships between variables, is limited regarding capturing underlying processes and creating a rich picture (Ladkin 2010). Therefore, interviews and observations provided important and insightful data, with the additional benefit of being subjective in nature and leading to a better understanding of the phenomena.

The interviews with management consultants were important as they allowed for an in-depth exploration of the relationships between the main concepts. The approach of mapping each individual interview using the causal mapping technique allowed for a detailed analysis of each map as well as a cross-map comparison. The aggregate map developed from the individual causal maps then provided a depiction of overall group tendencies. The results were useful in that they provided an understanding of different concepts that played a role regarding the interrelatedness of shared leadership, conflict and innovation. They provided in-depth insight into the teamwork of management consultants, which was of particular interest regarding the way in which they shared leadership functions and the benefits which they found to arise.

Management consultants provided information regarding the occurrence of conflict in their teamwork which gave useful insight into their perceptions regarding the benefits of task conflicts. However, this did not allow for a discussion of subtle disagreements. These may have taken place in the teamwork but would not have been realised at the moment, or later remembered by management consultants. Although management consultants commented on the benefits of disagreeing in teams regarding creativity, such underlying subtleties could not be detected. Therefore, it is important to note that, similar to surveys, interviews can contain self-report bias (Maxwell 2004). Nevertheless, the strength of the interviews for this study was that they helped to uncover what management consultants thought, believed and felt. Furthermore, interviewees could be asked about their experience with shared leadership, which is a concept difficult to observe. To a large extent the two methods complemented each other. Similarly to Crevani et al. (2010), the analysis looked both at interactions as seen to develop by the researcher, as well as interactions as recalled by management consultants from their teamwork.

The limitations mentioned regarding the interviews, link into the benefits which the observation of a management consultant team had for the study. Engaging both in observations and interviews allowed for a more valid, reliable and diverse construction of realities (Golafshani 2003). In particular, the observations allowed for examining subtleties of conflicts. This included micro-conflicts which can be fleeting and difficult to remember (Paletz et al. 2011). Indeed, it can be assumed that the large number of conflicts coded from the video recordings would not have been remembered by management consultants. Furthermore, subtle conflicts such as very brief disagreements or annoyances, although relevant at the time, would most likely not have been mentioned by management consultants through self-report measures. On the other hand, longer standing conflicts would more likely have been remembered. The usefulness of employing observational techniques can therefore be confirmed as assisting in uncovering subtle forms of conflict. This also relates to observing other issues that occurred during the teamwork, such as instances of creativity. These were coded both into having developed during episodes of conflict and non-conflict, as well as discussed in terms of having developed into innovation. Similarly, instances of shared leadership could be observed in individuals moderating in conflict episodes and different team members engaging in joint decision-making.

These examples of outcomes demonstrate the usefulness and importance of including observational data into this study. Importantly, the rich data collected were essential for capturing the processes and interpersonal dynamics of management consultant teamwork. To provide a combined perspective, both interviews and observations were integrated in the discussion of the results. The benefits of analysing each method separately, in a sequential approach, can be seen in each method providing further triangulation. The inclusion both of subjective and objective data collected from different sources added to the robustness of the findings. In addition, as discussed, each approach provided additional insight, which was essential for delivering in-depth explanations. The results from the first element of data analysis played a role in the analysis of the second element, and similarly the first and second elements in the analysis of the third element. The interaction between these different components demonstrates that the data were mixed prior to interpretation (Stentz et al. 2012).

This means that the ethnographic approach towards analysing the video data was, to some extent, informed by findings from the prior two elements. However, this was only done to some extent, in the sense of searching for occurrences which may for instance have been mentioned by individual management consultants in interviews. Therefore, rather than merely confirming

occurrences as found in the interviews, the observations provided rich insight into the concepts under study. This approach resulted in highly relevant findings such as the importance of collaboration regarding the relationship between shared leadership and task conflict.

6.6.3 Evaluating Research Findings

Table 6.3 displays the data uncovered from each of the research methods on the core concepts of shared leadership, task conflict and innovation. These findings were interpreted and integrated in the previous discussion sections. The findings demonstrate the usefulness of employing both interviews and observations as additional qualitative methods to provide richer and more robust findings. As discussed in depth, both interviews and observations had the important benefit of providing an in-depth exploration of the survey findings which provided important insight and understanding of processes. Each method had some downsides. For instance, the management consultants interviewed may not have remembered some of the conflicts that occurred in their team. Naturally, both the analyses of the interviews and observational data were subjective, which, however, was also the strength of this approach. One of the main difficulties in collecting these different types of data lies in the amount of time required for gaining access, collecting the data and analysing it. However, as shown in the current study, this can be accomplished through detailed planning.

Table 6.3: Main findings of three approaches and strengths and limitations

	Main findings	Strengths	Limitations
Survey	<ul style="list-style-type: none"> - Positive relationship SL & IN; SL+TC & IN; TC & IN; - Negative relationship SL & RC; and - Reasons for implementing SL. 	<ul style="list-style-type: none"> - Objective assessment of relationships; - Possibility of replication; - Large sample; and - Time efficiency. 	<ul style="list-style-type: none"> - Cross-sectional design; - Self-reporting; and - Less depth, no follow-up.
Interviews	<ul style="list-style-type: none"> - SL promotes different views; - SL develops knowledge sharing, involvement, trust; - Responsibility and expertise; - SL enhances creativity & IN; - Early stage TC beneficial; - TC enhances creativity & IN; - RC destructive; and - Trust mediates TC. 	<ul style="list-style-type: none"> - Triangulation; - Built on survey findings; - In-depth exploration; - Analysis of underlying issues; - Perceptions of consultants; and - Follow-up enquiries. 	<ul style="list-style-type: none"> - Self-reporting; - Limited recollection; - Subjective analysis; and - Time consuming.
Observation	<ul style="list-style-type: none"> - Most creativity and IN during TC - Collaborative conflict behaviour most creativity and IN; - Participation, support and purpose; - Long conflict episodes negative; and - Sarcasm personal and negative. 	<ul style="list-style-type: none"> - Triangulation; - Built on survey and interview findings; - Real life team observation in business situation; - Longitudinal element; and - Uncovering subtleties of conflict and innovation. 	<ul style="list-style-type: none"> - Access difficult, time consuming, extensive data; - Possible observer effect; - Subjective analysis; and - Follow-up interviews recommended.

6.6.4 Providing Recommended Steps

The prior discussion addressed the final objective of evaluating the benefit of using additional research techniques such as interviews and observation for discovering subtle innovation development. It is important that different stages of research are carefully considered in terms of planning and carrying out each method. The approach used in this study of first surveying and interviewing individual management consultants, followed up by an observation of a management consultant team, can be applied to various organisational groups of interest. It was found that the additional depth and subtleties discovered through both qualitative approaches provided both novel and robust findings. **Figure 6.3** below displays the recommended approach for carrying out such a sequential mixed method approach. Different steps are displayed for each of the three methods and issues, such as recommendations and precautions, are outlined. Naturally, this recommended approach may require adaptation depending on utilisation. In particular, the order of the research methods as employed for this current research is flexible and can be adapted if required by a particular domain of application. The different steps are outlined in a general nature so as to allow for an easier adaptation and potential modification for different areas of research.

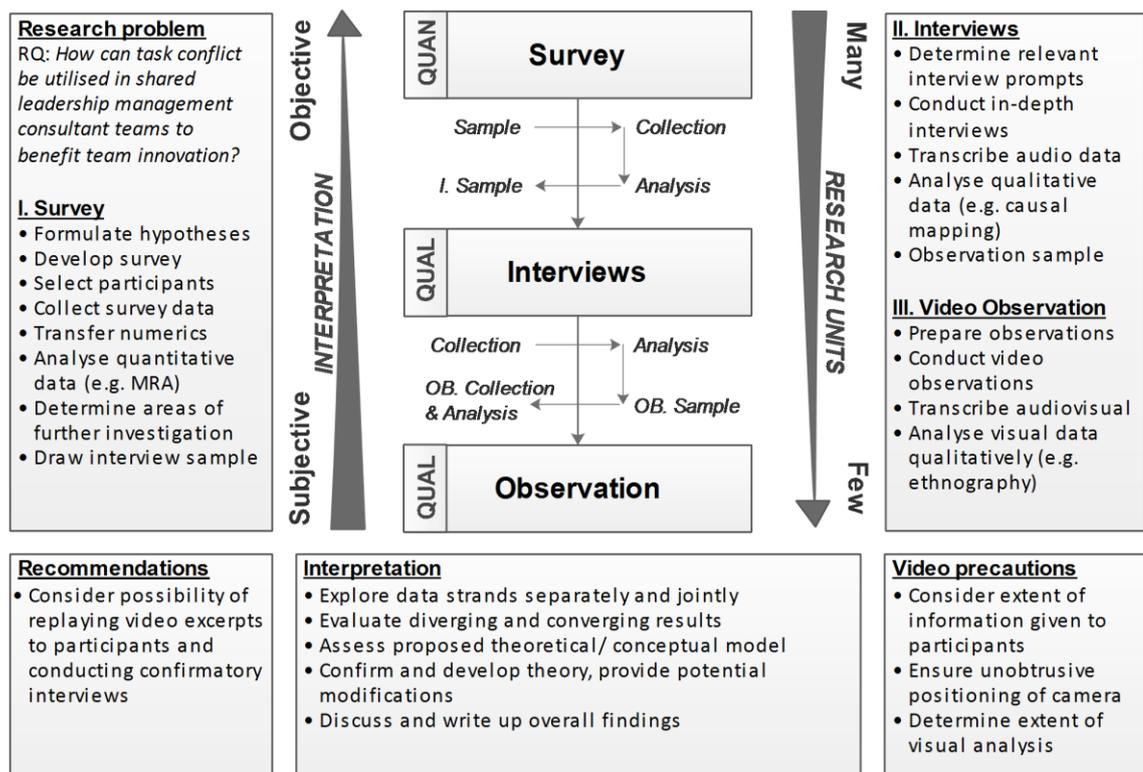


Figure 6.3: Recommended approach for employing multiple methods following this study

6.7 Conclusions

This chapter provided an interpretation and discussion of the findings from the previous data analysis chapter. The chapter was divided into three main sections, each addressing one of the three objectives of this study.

The first objective aimed to analyse the role that task conflict plays in developing innovation in shared leadership management consultant teams. The discussion confirmed that task conflict played an important role in developing team innovation in shared leadership teams. In particular, the essential role of collaboration and trust in ensuring the positive effects of task conflict are enhanced and the negative aspects are reduced, should be highlighted. Collaborative conflict behaviour is thought to be enhanced through shared leadership and can provide higher levels of creativity and innovation. In addition, trust can develop through shared leadership and enables task conflicts to be carried out constructively to increase creativity and innovation. An adapted conceptual model was provided.

The second objective aimed to develop a model and guidelines that can be used by shared leadership management consultant teams to enhance their innovatory capacities. Therefore, several guidelines were developed for management consultant teams (1) wanting to work with a shared leadership structure, (2) desiring to manage task conflict effectively and, (3) wishing to develop and enhance their innovative capacities. These guidelines provide detailed and valuable points for management consultants and they were further summarised in a working model for management consultant teams.

The third objective aimed to demonstrate the benefit of using additional research techniques such as interviews and video observation in discovering subtle innovation development. The corresponding discussion section outlined the importance of including qualitative research methods for providing a better understanding and capturing the complexity of the relationships and phenomena of this research. The video observation in particular allowed for discovering important subtleties and in-depth insight into a real-life management consultant team. The discussion concluded with the development of a recommended user methodology for employing survey, interview and observational techniques sequentially.

The following and final Chapter 7 will discuss the conclusions and recommendations for this study.

Chapter 7 - Conclusions and Recommendations

7.1 Introduction

This final chapter provides a conclusion to the research undertaken in this study. It demonstrates how the objectives have been achieved and thus the original contribution to knowledge. The chapter begins by presenting an overview of the different chapters of this research. Following that, the research findings and contributions are discussed. The theoretical, practical and methodological contributions are presented. Limitations of the research are critically discussed. The chapter concludes by providing suggestions that can be used as a foundation for further research in the areas of shared leadership, conflict and innovation.

7.2 Research Overview

As shown in the literature review there is a need to achieve innovation in management consultant teams. Certain types of conflict in teams have been shown to provide beneficial effects toward team outcomes such as innovation. In addition, there is evidence to suggest that employing shared leadership in teams can be of particular benefit to team effectiveness and team innovation. Research on the role of conflict in shared leadership teams has, to date, primarily focused on the negative aspects of conflicts, therefore, this requires further investigation. Management consultant teams frequently employ shared leadership and are seen to benefit particularly from this approach. The research presented in this study therefore examined the effects that conflict could have in driving forward innovation in management consultant teams operating a shared leadership structure. A conceptual model was created, practical guidelines for management consultants were provided and a novel user methodology was developed to be employed in future research.

The literature review presented in Chapter 2 discussed the three concepts of shared leadership, conflict and innovation central to this study. The discussion commenced with a systematic review of the shared leadership literature. The background literature demonstrated its contrast to traditional and hierarchical forms of leadership in teams. Additionally, the importance of follower-centred leadership perspectives regarding the development of shared leadership was outlined. Self-leadership and self-managed teams were identified as essential toward the process of shared leadership. Due to the large fragmentation of the shared leadership literature, different definitions and conceptualisations of shared leadership were discussed. This allowed

for identifying the most common features and conditions for developing shared leadership, which was predominantly seen as beneficial for teams. As regards the concepts of team conflict and team innovation, a systematic review of the relevant literature demonstrated a main differentiation between task conflict and relationship conflict. Relationship conflict was predominantly found to be related to negative outcomes in teams. However, there was conflicting evidence on task conflict, as some studies showed it to provide positive effects regarding team outcomes such as innovation. A review of previously employed research techniques demonstrated the need for employing multiple research methods, in particular qualitative and observational, in studying shared leadership, conflict and innovation.

To provide clarification regarding the interrelatedness of shared leadership, conflict and innovation, in Chapter 3, a conceptual framework was developed. This framework was based on an extensive discussion of relevant literature, that allowed for an identification of relationships among the three concepts. While the model depicted shared leadership, conflict and innovation, conflict was additionally divided into task and relationship conflict. It was argued from the literature that while shared leadership reduces negative relationship conflict, it enhances beneficial task conflict. In addition, it was hypothesised that shared leadership and task conflict are positively related to team innovation. This discussion led to the development of several testable hypotheses. A graphical model depicted the hypothesised relationships of the conceptual framework and further displayed antecedent conditions to both shared leadership and conflict, as well as additional effects identified as relevant from the literature.

Chapter 4 outlined the details of the research methods employed in this study. The chapter began with a discussion of the research philosophy and the critical realist approach followed. It was argued that, in order to understand the complexity of the phenomena and to add rich detail to the study, a combination of quantitative and qualitative techniques is essential. A sequential explanatory mixed method design was deemed most appropriate to study the interrelatedness of shared leadership, conflict and innovation. Therefore, three different research methods, carried out in three distinct research elements, were outlined. Quantitative Elements 1 entailed the collection and analysis of data collected from an online survey with management consultants. Qualitative Element 2 involved the collection and analysis of in-depth interviews conducted with individual management consultants. Qualitative Element 3 outlined the video observation and analysis of several management consultant team meetings.

Chapter 5 reported the empirical findings of each of the three research elements. The quantitative analysis of the data collected from an online survey conducted with 329 management consultants in Quantitative Element 1 was discussed. To assess the different relationships, correlation and regression analysis were employed. Shared leadership was found to have a negative relationship with relationship conflict. Task conflict was found to be positively related to innovation. Shared leadership was found to be positively related to innovation. In addition, shared leadership and task conflict were found to be positively related to innovation. The qualitative analysis of 25 individual management consultant interviews using causal mapping, in Qualitative Element 2, provided further explanation of the quantitative findings. Several discoveries were made, such as the importance of knowledge sharing, involvement and trust regarding the relationship between shared leadership and creativity and innovation. The ethnographic analysis of video data from 16 real-life management consultant team meetings in Qualitative Element 3 allowed for observing and confirming prior findings in action. Further results provided through the in-depth analysis emphasised the importance of collaborative conflict behaviour for the team.

Chapter 6 discussed the findings of the study. The chapter is divided into three sections, each addressing one of the three objectives of the study. The first section discussed each hypothesised relationship and provides an assessment of the conceptual framework developed in Chapter 3. A revised conceptual model was proposed and the theoretical outcomes of the study were summed up. These demonstrate that task conflict in shared leadership teams can have positive effects on team innovation. Collaboration and trust were identified as essential as regards achieving innovation through task conflict in shared leadership teams. The second section discussed managerial implications and provided detailed guidelines and a step-by-step model enabling management consultants to enhance their innovatory capacities. The third section addressed the usefulness of the research methods employed in the study and provided a recommended approach toward employing these in the future, as they offer a beneficial approach in discovering subtle conflict and innovation development.

7.3 Research Findings and Contributions

An investigation of the leadership and management literature showed that shared leadership is effective towards working in teams and is increasingly employed by management teams. There is a paucity of research examining the potentially beneficial role that conflict plays in management consultant teams. The potential benefit of utilising conflict in management consultant teams sharing leadership functions was established. It was shown that to investigate

the issues of shared leadership and conflict in the context of innovation, a combination of research methodologies is essential.

This has been the opportunity to make an original contribution to knowledge in developing a systematic model to demonstrate the processes linking shared leadership, conflict and innovation and their effective utilisation toward enhancing the innovatory capacities of management consultant teams. Several findings were identified from a review of the literature and from an analysis of and discussions on empirical data:

- A systematic review demonstrated the rapid development and increasing importance of shared leadership in the study of leadership and provided a conceptualisation. Both self-managed teams and self-leadership were identified as important components for developing shared leadership. The possibility of multiple individuals becoming involved in the leadership of the team is seen as essential for work in the current age of knowledge. Shared leadership was found effective in enhancing team effectiveness, new venture growth, team participation and information sharing and, importantly, in developing creativity and innovation. A review of the conflict and innovation literature found that task conflict would benefit teams in developing innovation, this being dependent on the stages of the teamwork.
- A lack of qualitative studies in studying shared leadership and conflict was identified. It was found that employing both qualitative and quantitative methods would not only allow for data triangulation but also add more depth, richness and understanding. Observations of teams were discussed as providing particular benefit regarding the capturing of underlying team processes.
- The in-depth analysis of the literature led to the development of a conceptual framework proposing relationships between shared leadership, task conflict, relationship conflict and innovation. The major assumption made from reviewing the literature, related to the positive effects that shared leadership and task conflict would have in developing team innovation. Several relevant variables were included in the framework.
- The findings from the analysis and discussion of the empirical data identified several underlying processes of shared leadership. The importance of functional expertise and rotation of leadership in shared leadership teams was outlined. Involvement of team

members was found to be a key component for developing shared leadership along with collective decision-making, individual responsibility and self-leadership.

- The findings suggested that shared leadership led to a reduction of negative relationship conflict in management consultant teams. It was found that the low power structures inherent in shared leadership facilitated the resolution of such negative conflicts. Additionally, it was found that the individual ego of management consultants was one of the primary causes of relationship conflict. The trust developed through shared leadership was identified as essential in preventing destructive relationship conflict.
- Both shared leadership and task conflict were found to enhance innovation in management consultant teams. Functional expertise, knowledge sharing and involvement of team members were found to be stimulated in shared leadership teams and identified as essential regarding the development of creativity and innovation. Shared leadership was found to enhance the development of different views in teams. The two factors identified as essential regarding the possibility of shared leadership and task conflict leading to innovation were collaboration and trust. Collaboration was identified as essential for effectively managing and utilising task conflicts. Trust, enhanced through shared leadership, was found important for preventing negative conflicts and allowed conflicts to be carried out constructively.

7.3.1 Theoretical Contribution

This study presents a novel perspective on the positive role of conflict in the context of shared leadership teams. New theory was developed as to the relationship between shared leadership, conflict and innovation and their relevance to teams. A novel and empirically tested framework depicting the relationship between shared leadership, task and relationship conflict as well as innovation adds to the theory on shared leadership and team effectiveness. This framework addresses the paucity of research regarding the positive role of conflict for shared leadership and further presents an important contribution to the conflict management literature.

The study illuminates the positive role of shared leadership and task conflict regarding team innovation, and the beneficial effects of shared leadership regarding negative team outcomes. It demonstrates the importance of knowledge sharing, involvement and trust in developing team innovation. It outlines the role of collaboration and trust in mediating the relationship between shared leadership and task conflict. Collaborative conflict behaviour is found to be enhanced through shared leadership and is related to higher innovative outcomes. In addition,

trust is found to enable the constructive and collaborative use of conflicts in teams leading to team innovation.

The research adds to discussions of shared leadership in management teams, providing important insight regarding the processes of shared leadership. Due to the extensive research on management consultants, both as individuals and in teams, it further informs research on management consultant teamwork and approaches toward the development of innovation in management consultant teams.

7.3.2 Practical Contribution

The practical contribution of this research is that it provides management consultant teams with guidelines for effectively employing shared leadership and managing conflicts in their teams in order to more effectively produce innovative outcomes. These detailed guidelines suggest techniques to be considered and issues to be avoided by management consultants working both in teams and organisations. The guidelines were developed into a model with three different stages:

Firstly, with the evidence suggesting that shared leadership can provide beneficial outcomes in teams, several guidelines were developed for working with a shared leadership structure. It was suggested that self-management, positive attitudes, collaboration and rotation should be employed by management consultants. In addition, the need of a formal leader for client engagement and the potential risks of shared leadership were discussed.

Secondly, regarding the possibility of management consultants benefiting from intragroup conflicts, several guidelines were outlined. Management consultants should allow for task conflicts, avoid personal and long conflicts, disagree at early project stages, manage conflicts collaboratively and develop trust in each other.

With the first two stages focusing on enabling shared leadership and utilising conflict, the third stage focuses on the development of team innovation. Management consultants should encourage idea generation, collaborate, share knowledge and experience, involve themselves and believe in their competences.

7.3.3 Methodological Contribution

This study employed a novel combination of research methods toward the study of shared leadership, conflict and innovation. It is argued that employing survey, interview and video observational techniques provides a useful approach in researching the three concepts. The benefits of these in discovering innovation development have been evaluated and a recommended approach toward employing these research methods was outlined.

In particular, employing multiple methods, both quantitative and qualitative, allowed for data triangulation. Furthermore, the sequential order of the research allowed for the methods to inform each other, leading to a greater understanding of the research phenomena. The video observations employed to uncover subtle occurrences such as micro-level interactions in management consultant team meetings, provided a rich understanding of their complexity.

Regarding the methodological contribution, a recommended approach is outlined for researchers undertaking similar studies. The strength and limitations of the approach are discussed and detailed steps are provided to allow for potential adaptation in future studies.

7.4 Limitations of Research

A number of limitations regarding the research conducted in this study should be noted. The first two stages of data collection and data analysis involved a survey and then interviews with a sample of survey participants. It is important to note that for these two stages individual management consultants served as the unit of analysis. This allowed for conducting a large-scale survey with the management consultant sector. However, it limited the study to the perceptions of these individuals regarding their teamwork. While this was a strength of the research, some studies conduct surveys with individual team members. Nevertheless, the video observation of a management consultant team allowed an in-depth and ethnographic analysis of a team. Furthermore, this study was conducted in a real-life business situation which allowed for capturing real world business and teamwork occurrences.

The research methods employed in this study were justified in detail. Employing both quantitative and qualitative methods allowed for researching the subject both from a subjective and objective stance. However, the order of the research methods employed may be changed to suit a domain different from management consultant teams. Furthermore, while it was demonstrated that the methods complemented each other, qualitative research has some

inherent weaknesses. For instance, the ethnographic analysis of the observational data is subjective and selective, as the experiences of the researcher himself are introduced. This is a well-known criticism of qualitative research, as it also does not allow for replication of the study. However, the subjective approach allowed for a deeper understanding of and learning from the management consultant team. This was an essential component of the study, as it provided insight regarding behaviours related to conflict and innovation in a real-world business situation.

Caution is further required regarding the generalisability of qualitative studies. Due to the quantitative testing of relationships through survey techniques, to some extent, generalisations can be made from this study. Furthermore, although the qualitative findings lack statistical generalisability, the deductions from the quantitative sections allowed for making further qualitative inferences, building theory and synthesising findings. The findings can therefore be used for making naturalistic generalisations enabling an application of the findings to similar cases and contexts (Stake 1995).

7.5 Directions for Future Research

Further research should examine the processes leading to collaborative conflict behaviour in shared leadership teams. It was demonstrated that collaboration was high in the shared leadership team observed and that this contributed toward the beneficial effects of task conflict on the innovative outcomes of the team. Strategies toward enhancing collaborative conflict in shared leadership teams should be developed. Furthermore, additional research should consider the processes that allow for the emergence of trust in management teams. As trust was frequently mentioned in the context of shared leadership and conflict, it may be possible that steps can be developed toward additionally enhancing cognitive and affective trust.

Researching management consultants was important due to their teams often working on an ad-hoc basis with flat leadership structures. Changing working structures, partly due to technological advancement, increasingly involve more agile and ad-hoc working teams. Therefore, the results of this study regarding the positive effects of shared leadership and conflict and the importance of collaboration and trust can, to some extent, be transferred to other domains of work. However, relevant concepts such as professional standards, ethics and loyalty, mentioned in the context of trust, may differ in other domains. Taking these differences into account requires further investigation of shared leadership and conflict in domains and teams different from management consultants.

The employment of video observational research techniques was an essential component of the study. It provided an important contribution in that the phenomena could be observed over time. Observational methods should be employed in the research of other organisational teams and settings. Although costly and time consuming, they permit a rich and unique perspective of the research subjects, in particular regarding team processes and micro-level interactions of team members. A strategy of gaining further insight and confirmability regarding these observations could lie in replaying video sequences from the team meetings to the entire team, or in individual follow-up interviews with team members. This would allow for rechecking the data as well as making discoveries which may have previously remained undetected. However, any potential bias that may arise through such an approach should be considered.

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Appendices

Appendix A - Bibliometric Analysis

Bibliometric search strategy

a) Search limited to title, abstract and keywords

The search was limited to searching for the term “shar* leadership” in title or abstract or keywords of journal articles. This ensured that articles relevant for this study were identified. A full-text search would have produced a significantly higher amount of results, but also a less stratified number of documents and would thus have included a large amount of irrelevant articles not concerned with research in the field of shared leadership.

b) Search limited to journal articles

Only scholarly journals were searched, to exclude material which had not been officially reviewed. This was done to provide a clearer picture of the research development in the field. A search including other forms of documents resulted in a large amount of news articles, meeting notes, interviews, book reviews, editorials, conference proceedings. These documents have not been reviewed and can thus not be seen to have contributed essentially to the field.

c) Deleting duplicates

Once the bibliometric data was downloaded from each database, it was merged into one file. The WoS data was coded differently than the data from the other databases. Thus, each field tag, for example title, authors and keywords, had to be matched to that of the other databases manually. Once each reference had the correct field tags the material was moved to the bibliometric analysis software Bibexcel. The software was developed by Persson et al. (2009) and allows the importation of bibliometric data from various databases and to organise and analyse it in different ways and to delete duplicates. The data from the different databases was organised in Bibexcel, which allowed for it to be exported to Microsoft Excel, where it could be analysed more adequately.

Once the data was saved into a Microsoft Excel file, each record received a separate line in this table containing author, title, year, journal name, keywords, abstract, volume, issue, pages, language, country, author address, direct object identifier (DOI) and database name. After this any duplicates were removed once again. Finally, 434 unique journal articles remained in the Excel table.

d) Language

Of the articles extracted from the four databases 98.4% were written in English. 0.7% were written in French, 0.7% in Spanish and 0.2% in German. Since none of these articles were concerned with team leadership, they were not deemed relevant for the study and thus excluded. Therefore, only English language journal articles were included in the analysis, reducing the amount of articles to 427.

e) Relevance

In a first step only articles that directly concerned shared leadership were included. Furthermore, articles that approached shared leadership from perspectives such as international state negotiation were not deemed relevant. Only articles focusing on individuals as a level of analysis were included in this step. This was seen as appropriate as the study focuses on shared leadership within management teams and is thus concerned with shared leadership between people. After omitting all irrelevant articles, 173 articles remained.

Results of bibliometric analysis

a) Fields of shared leadership articles

The articles identified as relevant were categorised and mainly three distinct fields emerged: Health, education and team literature. This is consistent with other analyses of the shared leadership literature (Fitzsimons et al. 2011). A few articles crossed two of these three fields. **Table A.1** and **Figure A.1** display the results of this analysis.

Table A.1: Shared leadership articles in fields

Field	Number of articles	Frequency
Education	41	23.7%
Health	22	12.7%
Other	3	1.7%
Team	107	61.9%
Total	173	100%

The development of the literature in the fields of health, education and teams, per year and number of publications can be seen in Figure 2. While the shared leadership literature did not evolve significantly until the 1990s, first publications can be identified to have been published in the 1970s in the health and education literature. Overall, 89.6% of the total number of articles

were published during 2000-2012. Of all three fields, the shared leadership literature in teams grew most significantly this period as 98% of the team leadership articles were published. This shows that the field has received increased interest recently. Although the health and education literature has also risen slightly it has not received as much attention as the team literature.

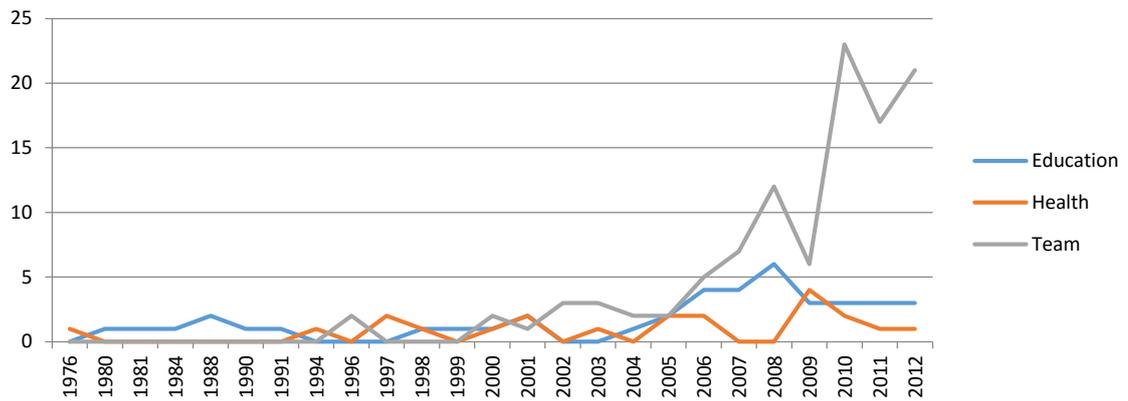


Figure A.1: Shared leadership publications per year and field

b) Team literature authors

Since articles related to shared leadership in teams were considered relevant for the study, these articles were examined further. In total, the 107 team-based shared leadership articles were written by 195 unique authors (305 total participations). Pearce, Manz and Sims are the most dominant authors in the field of shared leadership. These authors accounted for 29% of the total authorship participations.

As depicted in **Figure A.2** the overall first author's affiliation was mainly with the USA followed by the United Kingdom, Germany, the Netherlands and Canada.

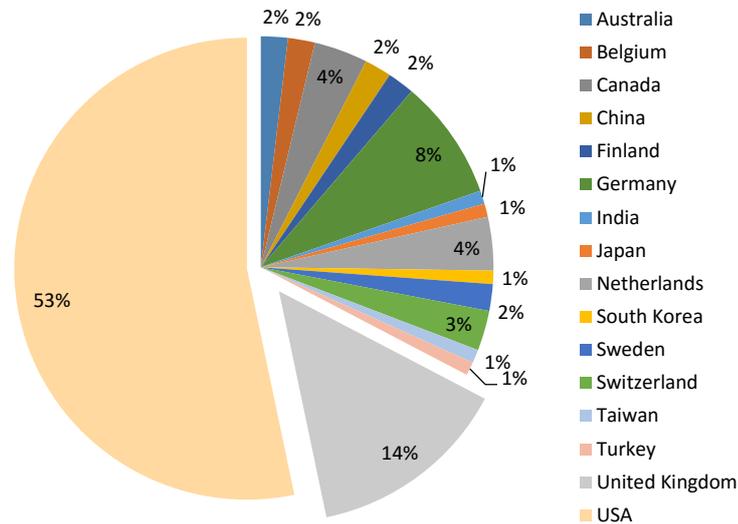


Figure A.2: Author by country

c) Publication sources

The 107 articles identified were spread out across 61 different publication sources. The largest amount of articles was published in The Leadership Quarterly followed by the Journal of Personnel Psychology and the International Journal of Psychology. The amount of journals that only had one shared leadership publication was at 43%.

Table A.2: Shared leadership articles in journals

Journal	Total	Frequency	ABS	Impact factor
The Leadership Quarterly	18	16.8%	4	2.705
Journal of Personnel Psychology	7	6.5%	4	2.926
International Journal of Psychology	6	5.6%	N/A	1.097
Human Resource Management Review	4	3.7%	2	2.375
Journal of Management	3	2.8%	4	4.595
Industrial and Organizational Psychology	3	2.8%	N/A	0.654
Organizational Dynamics	3	2.8%	3	0.791
Scandinavian Journal of Management	3	2.8%	2	1.208
One Publication (46 journals)	46	43.0%	-	-
Two Publications (6 journals)	14	13.1%	-	-
Total	107	100%		

d) Epistemological orientation of shared leadership literature

To identify the epistemological orientations of the shared leadership literature the articles were classified into different categories. De Bakker et al. (2005) in their bibliometric analysis of the corporate social responsibility and corporate social performance literature, classify their paper

though their theoretical, prescriptive and descriptive orientation. Furthermore, they create subcategories for each of these classifications which are depicted in **Table A.3**.

Table A.3: Classification scheme for epistemological orientation of papers (De Bakker et al. 2005)

Theoretical	
Conceptual	Major focus is on developing propositions, hypotheses, or (cor)relations between theoretical constructs, based on a discussion of state-of-the-art literature; no new empirical material has been collected for this work.
Exploratory	Major focus is on developing propositions, hypotheses, and (cor)relations between theoretical constructs, based on the examination of extensive, new empirical data.
Predictive	Major focus is on testing (refutation, confirmation) of propositions, hypotheses, or (cor)relations between theoretical constructs, based on the examination of extensive, new empirical data.
Prescriptive	
Instrumental	Major focus is on providing prescription (means, ideas, recipes for action) to practitioners and professionals, that are instrumental in the realization of some desired end, such as improved performance along some dimension.
Normative	Major focus is on providing prescription (means, ideas, recipes for action) to practitioners and professionals, that are valuable in themselves when considered from some ethical, moral, or religious point of view.
Descriptive	
Descriptive	Major focus is on reporting fact or opinion; no intention of a theoretical or prescriptive contribution.

The literature was classified, first according to the three orientations and then according to the six subcategories of De Bakker et al. (2005). For this, the title, abstract and keywords of each article was first analysed, and then, the entire article was scanned. Through this analysis it was identified that 89% of the articles were theoretical, 7% were prescriptive and 4% descriptive. As shown in **Figure A.3**, 48% of the theoretical articles were conceptual (19% of all conceptual articles developed propositions), 26% were predictive, 14% exploratory, 6% instrumental, 4% descriptive and 2% normative. A total of 41% of articles used empirical data.

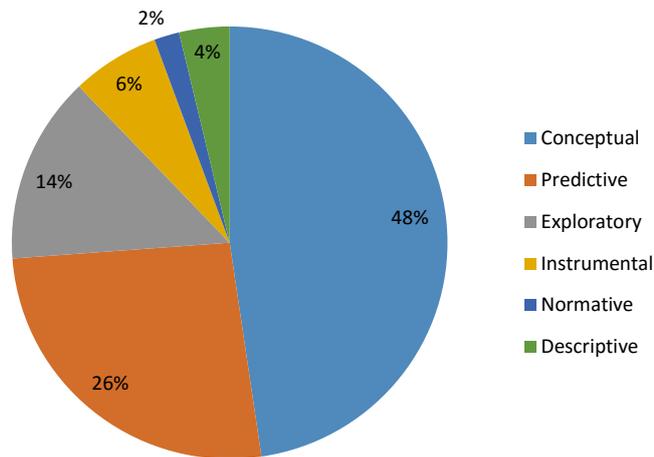


Figure A.3: Epistemological orientation of articles

e) Research methodology

A majority of the empirical shared leadership studies used quantitative methods (70%). The remaining, 25% used qualitative methods (**Figure A.4**). A total of 5% of articles used more than one method of data collection, of which 83% included qualitative methods.

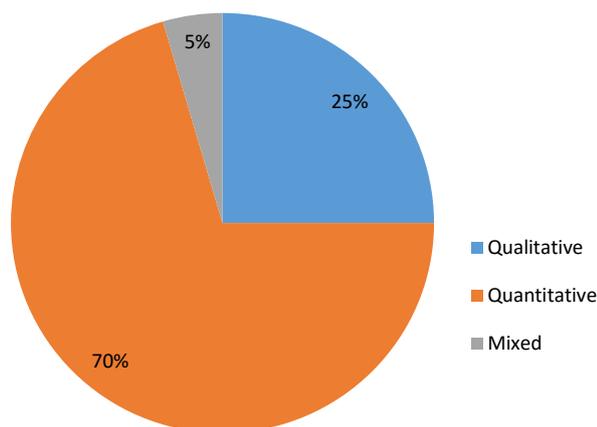


Figure A.4: Research methods

As depicted in **Figure A.5**, a majority of the quantitative studies employed survey-based techniques. This is followed by grounded theory and case study approaches.

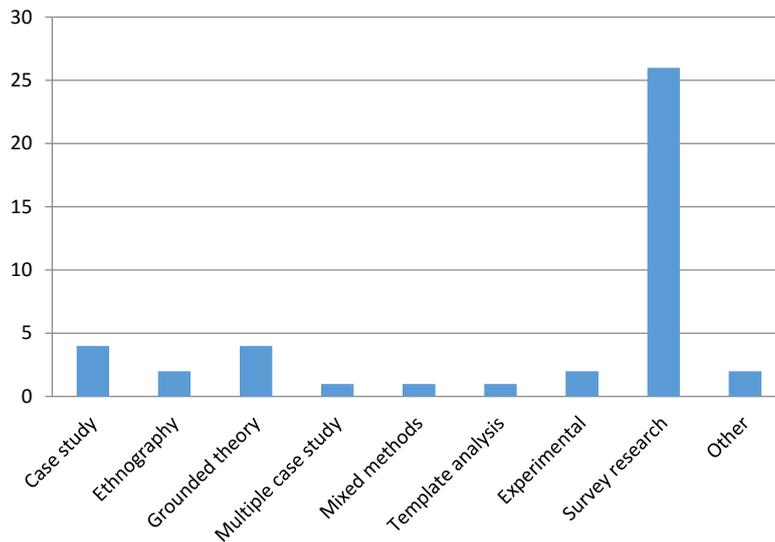


Figure A.5: Research strategy of articles

f) Data analysis

Regarding their methods of data analysis, 59% of all articles used inferential statistics (descriptive statistics 2%), whereas qualitative articles mostly employed a coding system (26%) or thematic/ content analysis (9%, 4%) (**Figure A.6**).

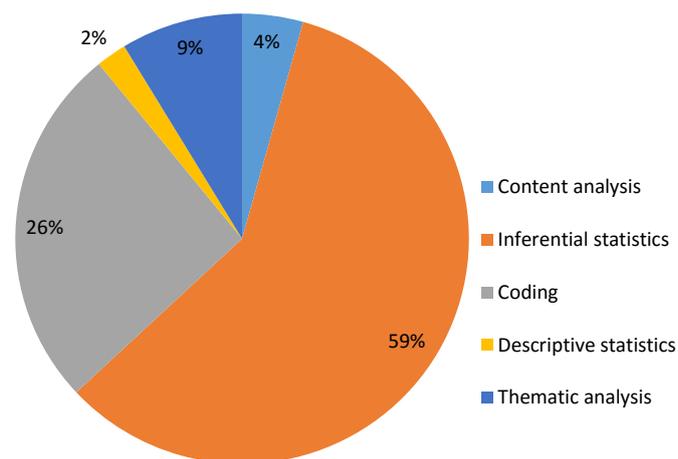


Figure A.6: Data analysis methods

Appendix B - Questionnaire

Management Consultant Survey

Thank you for accessing this Westminster Business School survey!

The purpose of this research is to investigate how team member relationships affect innovation in management consulting teams that utilise a shared leadership approach.

Shared leadership is defined as a dynamic leadership process in which all members of a team have the opportunity to participate in its decision-making processes. Leadership might be distributed around the team equally, unilaterally, or in any number of ways. Thus, decisions and actions made by the team regarding a task are not the result of a single person.

The survey should take about 8 minutes to complete.

Participation in this study is entirely voluntary and you may refuse to participate or withdraw at any time without consequence. Strict confidentiality will be maintained for this survey and the data collected. No individual identifying information will be disclosed.

Your answers to this questionnaire are vital to the success of this study. Thank you for your time and effort to participate in this project. The closing date for completed questionnaires is 16 June 2014.

This research is being conducted by Vasilii Penny of the Westminster Business School at the University of Westminster. If you have any further questions or comments, please do not hesitate to get in touch.

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Please TICK if you would like a copy of the summary statistics of this survey.

Yes

Email

Management Consultant Survey

***Would you describe yourself as being a management consultant, that is, someone who provides independent advice about the process of management to clients?**

Yes

No

Management Consultant Survey

***Approximately how many years have you been working as a management consultant?**

- Less than one year
- 1 - 2 years
- 3 - 4 years
- 5 - 9 years
- 10 or more years

***How do you work?**

(Please TICK all relevant boxes)

- For a company
- Self-employed

Is your organisation

(Please TICK all relevant boxes)

- Private
- Public
- Not-for-profit

***Is your occupation as a management consultant part-time or full-time?**

- Part-time
- Full-time

Approximately how many management consultants are there in your organisation?

- Sole-proprietor
- 2 - 4
- 5 - 9
- 10 - 49
- 50 - 99
- 100 and more

***Please indicate your formal position.**

- Senior Management
- Management
- Non-Management

Management Consultant Survey

What area(s) of management consulting do you specialise in?

(Please TICK all relevant boxes)

General Management

Finance

Human Resources

Legal

Marketing & Sales

Operations

Transformation & Change

Quality Management

Strategy

Technology

Other (please specify)

***Approximately how much of your working life do you spend in consultancy teams?**

0%

1% - 9%

10% - 24%

25% - 49%

50% - 74%

75% - 89%

90% - 100%

Management Consultant Survey

Taking into consideration your most recent experience of working on a project as a member of a consultancy team, please answer the following questions.

***Approximately how large was your consultancy team?**

- 2 - 3 people
 4 - 5 people
 6 - 8 people
 9 and over

***Approximately how often did your team meet?**

- daily
 weekly
 monthly
 quarterly
 annually

***How long did your team meetings normally last?**

- less than 15 minutes
 15 - 30 minutes
 31 - 60 minutes
 up to 3 hours
 more than 3 hours

***Was your team composed of people from functionally different areas of consultancy?**

- Yes
 No

***Was there an obvious choice of person to lead the team?**

- Yes
 No

***Was the concept of shared leadership, that is, a leadership process in which all members of a team have the opportunity to participate in its decision-making process, implemented?**

- Yes
 No

Management Consultant Survey**What were the main reasons (maximum of 3) why you think this happened?**

1

2

3

Management Consultant Survey

How was the leader chosen?

(Please TICK all relevant boxes)

- Age
- Income
- Position in the company
- By lot
- By rotation
- Work experience
- Specialist area

Other (please specify)

*What type of leadership developed?

- Leader made decision and announced it.
- Leader 'sold' decision.
- Leader presented ideas and invited questions.
- Leader presented tentative decision subject to change.
- Leader presented problem, got suggestions, made decision.
- Leader defined limits; asked group to make decision.
- Leader permitted subordinates to function within limit defined by superior.

Management Consultant Survey

Taking into consideration your most recent experience of working on a project as a member of a consultancy team, and based on your current feelings, perceptions and discussions with others, please indicate your agreement, or disagreement, with the following statements.

***There was more than one person engaged in leadership of the team.**

strongly disagree disagree neither disagree nor agree agree strongly agree

***Irrespective of job 'titles' used, all members were considered equal.**

strongly disagree disagree neither disagree nor agree agree strongly agree

***Each team member had the opportunity to participate in the decision-making of the team.**

strongly disagree disagree neither disagree nor agree agree strongly agree

***Each team member had the opportunity to play a part in deciding courses of action.**

strongly disagree disagree neither disagree nor agree agree strongly agree

The client during your most recent experience of consultancy teamwork was a -

- Sole trader
- Micro enterprise (2 - 10 people)
- Small enterprise (11 - 50 people)
- Medium-sized enterprise (51 - 250 people)
- Large enterprise (More than 250 people)

***Each team member had the opportunity to take part in establishing the goals for the team.**

strongly disagree disagree neither disagree nor agree agree strongly agree

***Leadership responsibility was shared among team members.**

strongly disagree disagree neither disagree nor agree agree strongly agree

***Team members encouraged each other to work together with other members.**

strongly disagree disagree neither disagree nor agree agree strongly agree

Do you expect to work in a 'shared leadership' team within the next three months?

- Yes
- No

Management Consultant Survey

Taking into consideration your most recent experience of working on a project as a member of a consultancy team, and based on your current feelings, perceptions and discussions with others, please indicate your agreement, or disagreement, with the following statements.

***There were no personality conflicts evident among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***There was no tension among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***There was no friction among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***There was emotional conflict among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Management Consultant Survey

Taking into consideration your most recent experience of working on a project as a member of a consultancy team, and based on your current feelings, perceptions and discussions with others, please indicate your agreement, or disagreement, with the following statements.

*** There were differences in the views on the content of the project among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** There was no conflict of ideas among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** There was no disagreement regarding task procedure among members of the team.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** Members of the team talked through disagreements about this team project.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How long did the project last until completion?

- Up to one week
- Up to one month
- Up to three months
- Up to six months
- Up to 12 months
- More than 12 months

*** During the first 50% of the project completion time, task disagreement increased.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** At around 50% of project completion time, task disagreement was high.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** From 50% of the project completion time until completion, task disagreement decreased.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** From 50% of the project completion time until completion, task agreement increased.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Management Consultant Survey

Taking into consideration your most recent experience of working on a project as a member of a consultancy team, and based on your current feelings, perceptions and discussions with others, please indicate your agreement, or disagreement, with the following statements.

***The team developed innovative ways of accomplishing work objectives.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***The team developed new skills in order to foster innovations.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***The team initiated new procedures and methods of performing tasks.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What were main areas of focus in this project?

(Please TICK all relevant boxes)

- Products
- Procedures
- Solutions
- Strategies
- Systems

Other (please specify)

***The team did not improve their strategies and methods of undertaking work.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***The team obtained information useful in developing multiple solutions to problems.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***The team obtained information useful in satisfying needs unforeseen by the client.**

strongly disagree	disagree	neither disagree nor agree	agree	strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Management Consultant Survey

Are you -

- Male
- Female

What is your age?

- 18 - 24 years old
- 25 - 34 years old
- 35 - 44 years old
- 45 - 54 years old
- 55 - 64 years old
- 65 - 74 years old
- 75 years or older

What is your highest level of educational achievement?

- No formal qualifications
- GCSE, GCE 'O' level, or equivalent
- GCE 'A' level, or equivalent
- Higher education, below degree level
- Degree, or equivalent
- Post-graduate degree (Masters/MBA)
- Higher degree (Doctorate)

Management Consultant Survey

Do you possess any professional management consultant memberships, for example, from the Institute of Consulting?

(Please TICK all relevant boxes)

- No
- Institute of Consulting - Affiliate
- Institute of Consulting - Associate
- Institute of Consulting - Member
- Institute of Consulting - Fellow
- Institute of Management Consultants - Basic
- Institute of Management Consultants - Experienced
- Institute of Management Consultants - Management

Other (please specify)

Do you possess any professional management consultant qualifications, for example, from the Institute of Consulting?

(Please TICK all relevant boxes)

- No
- Level 5 in Business Support (QCF)
- Level 5 in Professional Consulting (QCF)
- Level 7 in Professional Consulting (QCF)
- Certified Management Consultant (CMC)
- Certified Business Adviser (CBA)

Other (please specify)

Management Consultant Survey

Please CONFIRM that you would like a copy of the summary statistics of this survey.

Yes

Further Stages in this Research Project

- This research aims to investigate how differences of opinion can influence innovation in management consultant teams that share leadership functions.
- Additionally, as part of the research project, team meetings are being observed and interviews of team participants are being conducted. This work is conducted with minimum inconvenience.
- All participants in this further research will receive a confidential report on the work carried out in their organisation.
- Confidentiality and data security are assured and you will have the opportunity to withdraw from the study at any time. No identifying information will be disclosed.

Please view this information sheet for further information: https://dl.dropboxusercontent.com/u/20297508/Consultants_observation.pdf

Your participation

- Would you like to participate in this study with your team?
- For further information regarding participation in the extended study, please complete the form below.

Your contact details

We confirm that all information given will be treated as confidential.

Your name

Email

Telephone/Mobile

Company

Postcode

Any additional comments?

Management Consultant Survey

Thank you for participating in this survey.

We would be very grateful if you could pass on the link to this survey below to your management consultant colleagues and friends.

<https://www.surveymonkey.com/s/managementconsult>

Regards,

Vasilii Penny

Appendix C - Interview Guide

AIDE MEMOIR

Interview no.		Date	
Name		Company	
Gender	Male	Female	Age
Position in company		Experience in years	

1. Introduction

2. Management consultant work

- a) Please tell me about your management consultant background and current job role.
- b) In the survey you indicated that you undertake management consultant teamwork. What does this teamwork entail?

3. Shared leadership

- a) In the survey you indicated that you use shared leadership in your teamwork. What do you understand by this term?
- b) You mentioned different reasons for implementing shared leadership in your team. Could you elaborate on these?
- c) Could you give an example of shared leadership teamwork and how it is conducted?
- d) What are the advantages and disadvantages in using this approach to leadership?

4. Conflict

- a) What is your experience, if any, with having differences of ideas/ disagreements in teams?
- b) How do you deal with differences of ideas/ disagreements in your teamwork?
- c) Could differences of ideas/ disagreements be linked to project outcomes? How?
- d) Does the level of differences of ideas/ disagreement vary regarding the stage of the project? How?

5. Innovation

- a) In your experience, what are the most important factors for a team to generate innovation?
- b) How would you go about generating innovation in a shared leadership team?
- b) Could you describe a typical example of teamwork with innovative outcomes?

6. Closing

Appendix D - Interview Consent

CONSENT FOR PARTICIPATION IN INTERVIEW

Management Consultant Research

You have been asked to participate in a research study conducted by Vasili Penny from the *Westminster Business School (WBS)* at the University of Westminster. The purpose of the research is to investigate how team member relationships affect innovation in management consulting teams that utilise a shared leadership approach. You were selected as a possible participant in this study because of your interest in further research stated in an on-line questionnaire and your work as a management consultant

Please note:

- This interview is voluntary. You have the right not to answer any question, and to end the interview at any time or for any reason. The interview will take about 30-45 minutes.
- You will not be compensated for this interview.
- You will not be identified by name in any reports using information from this interview unless prior consent is obtained in writing from you. Your confidentiality as a participant in this study will be maintained.
- This interview may be recorded for reference while proceeding. You have the right to revoke recording permission at any time.
- Interview recordings will be stored in a secure location to which only the researcher has access. The handling of all personal data will comply with the requirements of the Data Protection Act 1998.
- You have the right to withdraw your data and participation in this study at any time.
- A copy of this consent form will be made available for you.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

I give permission for this interview to be recorded.

Name: _____

My Signature: _____ Date _____

Signature of Researcher: _____ Date _____

Please contact *Vasili Penny*, Doctoral Researcher at the University of Westminster at *v.penny1@westminster.ac.uk* should you have any questions or concerns regarding this study.

Appendix E - Interview Coding

Table E.1: Example Excel coding sheet of interview participant 17

C-#	R	P-#	Statement	Cause	Phrase	Effect
2	17	4	<i>We have a monthly meeting and make sure that we divide our responsibility. We have somebody who looks after the marketing, somebody who looks after the sales, whatever it is we need. So we make sure that as a team we function pretty much as a proper management team. We have somebody on finance and they also look after the legal side, from various times we will take over leadership for particular projects.</i>	management consultant teamwork	with	shared leadership
3	17	4		shared leadership	requires	functional expertise
4	17	4	<i>In our model people will move out if we go anywhere. We don't have an ego that says 'I want to be the next managing director or the next chairman or progress on'. So for us that is quite well and that doesn't cause any competitive edge other than the few egos. Nobody is joking for permission for promotion.</i>	shared leadership	reduces	ego
5	17	4	<i>It's a very flat structure, there are nine of us I think in there or something like that. We have a chairman, but we can have a flat structure and have different team leaders because we don't have to go anywhere if you like. If you are in corporate life or you are running a company the hardest is motivation.</i>	shared leadership	can have	formal leader
6	17	4		MC teamwork	in	corporation
7	17	4		corporation	can restrict	motivation
8	17	5	<i>So our reward if you like comes from a slightly different angle, if we are working in that sort of collaboration. There are a few egos, but there is nothing so cut throat. It is much easier to find a common cause and a common objective than somewhere else. And bear in mind in that company, in that control, although we do have our chairman who is quite frankly, he wants to take a back seat, he wants to do more chairmanship and he likes to be director, but really that's because nobody can be bothered to do the bloody paperwork.</i>	shared leadership	leads to	common cause
9	17	5	<i>I think the people do feel they are equals. I think they have different areas of expertise and different knowledge and I don't think anybody has a particular point to prove.</i>	shared leadership	leads to	equality
10	17	6	<i>(In terms of innovation) We focus on giving the expert on a particular topic the lead in the team. You set out goals what people have got to do and get on with it. If somebody has got additional ideas, they bring it to the table.</i>	functional expertise	leads to	rotation
11	17	6		idea generation	requires	rotation
12	17	6	<i>It's a question if you get the right people and somebody you feel comfortable with it becomes easier to share leadership. It is about relationship. A team will be more innovative if there is a trust,</i>	shared leadership	with	trust

Appendix F - Observation Information



OBSERVATION OF MANAGEMENT CONSULTANT TEAM MEETINGS

As part of a study being undertaken at the Westminister Business School into the work that management consultants conduct with each other, we would like to study what is happening in these teams. We are looking to shadow management consultancy in action and will also be interviewing individual management consultants.

We would welcome your participation in this research!



WESTMINSTER BUSINESS SCHOOL

About the research

The research focuses on the role that members' relationships play in developing innovation in teams entailing management consultants and other professionals who are providing independent advice about the process of management to clients. In particular, the effectiveness of teams that partly utilise 'shared leadership', rather than hierarchical forms of leadership, is of interest. A preliminary survey of approximately 300 management consultants has shown that a large number of consultants work in teams that allow participation of all members in decision making.

Benefits of participation

- The research results will be shared with participants and will be of value to the management consultant business.
- Management consultants, if they wish, may receive a transcript of their team meeting.
- Participants will be contributing to expanding knowledge in business and management research.

Use of data

- The data will be analysed and will contribute towards achieving the objectives of this study.
- The data will only be used for academic and non-commercial purposes.
- All data will be completely anonymised and no individual identifying information about companies, projects and participants will be made available.
- All data will be stored in a secure and password-encrypted location.
- All data will be processed in line with the UK Data Protection Act 1998 (DPA).



Observation of teamwork

- These observations are conducted to observe management consulting in real-life business situations. Depending on the availability, one or more of your consultancy team meetings would be observed, if possible, an audio recording will be made.
- Teamwork is silently observed by one researcher, no suggestions will be posed, and no opinions or questions will be made.
- If necessary, during delicate sections of the teamwork, the observation can be halted.

Observation of teamwork

- ▶ We would be very happy to provide further information. Please contact Vasilii Penny, Doctoral Researcher at the University of Westminister, at v.penny1@westminster.ac.uk

Appendix G - Observation Consent

CONSENT FORM FOR OBSERVATION OF PROFESSIONAL ACTIVITY

Management Consultant Research

Consent Form for

Research purpose

You have been asked to participate in a research study conducted by Vasilii Penny from the *Westminster Business School (WBS)* at the University of Westminster. The purpose of the research is to investigate how team member relationships affect innovation in management consulting teams that utilise a shared leadership approach. You were selected as participants in this study due to your membership in a team of management consultants and your willingness to allow a researcher to observe your teamwork as a part of this study.

This study has been granted ethical approval under the University of Westminster Ethics Code.

Please read the following information carefully and ask the researcher any questions. A copy of this form will be made available for you.

Voluntary participation

- Participation in this observation is entirely voluntary.
- You have the right to withdraw from the study, and to end the observation at any time for any reason.
- You will not be compensated for your participation in this study.

Procedure

- A researcher will silently attend your team meetings to observe how your management consultant work is conducted and interactions between team members. The researcher may ask some questions following the observation.
- The observations may be audio/video recorded for reference while proceeding. You have the right to revoke recording permission at any time.
- The raw data from these observations will be analysed only by Vasilii Penny from the Westminster Business School.

Confidentiality

- Participants in the observations and your company will not be identified by name or through other personal information in any publications resulting from this study unless prior consent is obtained in writing from you.
- Any identifying names will be changed thus always maintaining confidentiality of project clients.
- Any other confidential information can be removed from the study upon request.

Data security

- The handling of all personal data will comply with the requirements of the Data Protection Act 1998.
- Any recordings will be stored in a secure location to which only the researcher has access and destroyed upon completion of the study unless participants' give their written consent for further usage at a later stage.

- You have the right to withdraw your data and participation in this study at any time.

Benefits

- Participants will have access to a report outlining the main results from the study.
- Upon request, a copy of the data collected can be made available to the participants following these observations.

I hereby give my consent to **Vasilii Penny**, doctoral researcher at the Westminster Business School at the University of Westminster, whose signature appears below, to study my professional management consultancy activities.

I give permission for the use of these data in the writing up of the study.

I understand the procedures described on page 1. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

SIGNATURES

Name of Participant Signature: Date:

Signature of Researcher: Date:

Please contact *Vasilii Penny*, Doctoral Researcher at the University of Westminster at *v.penny1@westminster.ac.uk* should you have any questions or concerns regarding this study.

Appendix H - Survey Analysis

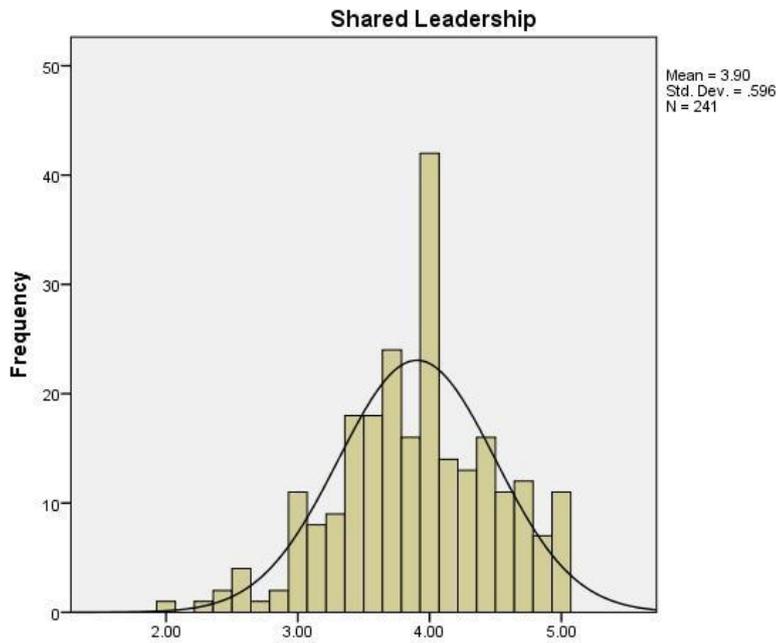


Figure H.1: Shared leadership histogram

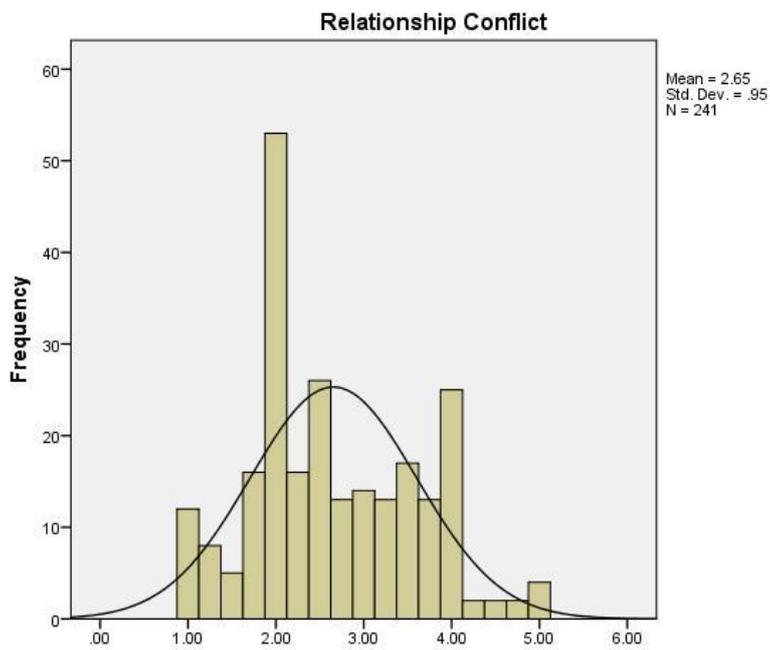


Figure H.2: Relationship conflict histogram

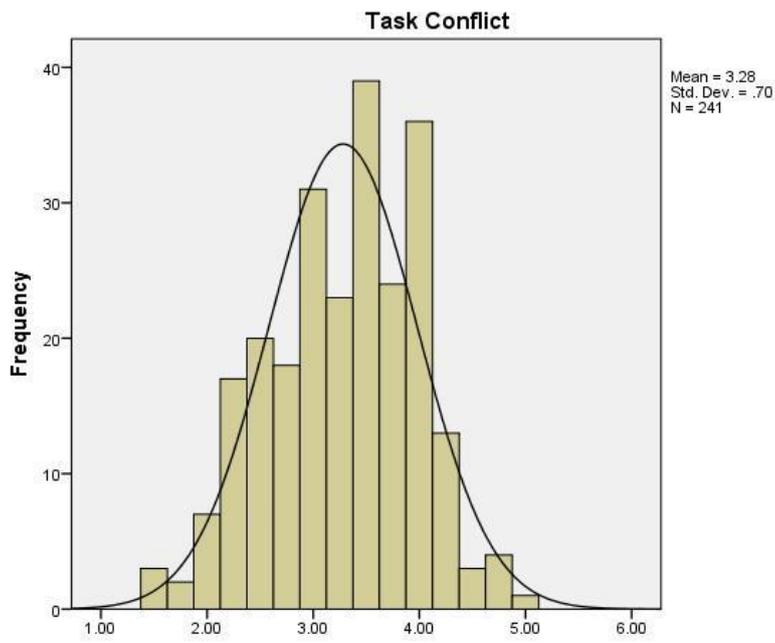


Figure H.3: Task conflict histogram

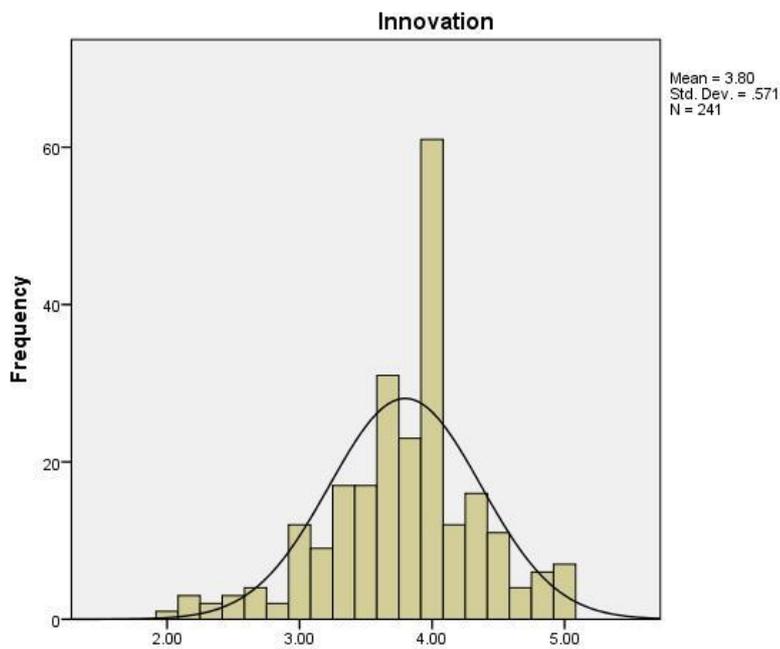


Figure H.4: Innovation histogram

Table H.1: ANOVA hierarchical regression analysis - Shared leadership (IV) and Relationship conflict (DV)

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.997	2	8.498	10.142	.000 ^b
	Residual	199.433	238	.838		
	Total	216.430	240			
2	Regression	30.466	3	10.155	12.942	.000 ^c
	Residual	185.964	237	.785		
	Total	216.430	240			

a. Dependent Variable: Relationship Conflict

b. Predictors: (Constant), Functional diversity, Team_size

c. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership

Table H.2: Coefficient table HRA – Relationship conflict (DV)

Model	Coefficients ^a													
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error	Beta				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
(Constant)	2.545	.222			11.481	.000	2.108	2.981						
1 <u>Team_size</u>	.252	.064	.246	.246	3.918	.000	.125	.379	.259	.246	.244	.984	1.016	
Functional diversity	-.242	.142	-.107	-.107	-1.710	.089	-.521	.037	-.138	-.110	-.106	.984	1.016	
(Constant)	4.229	.460			9.199	.000	3.324	5.135						
2 <u>Team_size</u>	.229	.063	.223	.223	3.661	.000	.106	.352	.259	.231	.220	.976	1.024	
Functional diversity	-.301	.138	-.133	-.133	-2.183	.030	-.572	-.029	-.138	-.140	-.131	.974	1.027	
Shared Leadership	-.403	.097	-.252	-.252	-4.143	.000	-.595	-.212	-.256	-.260	-.249	.984	1.017	

a. Dependent Variable: Relationship Conflict

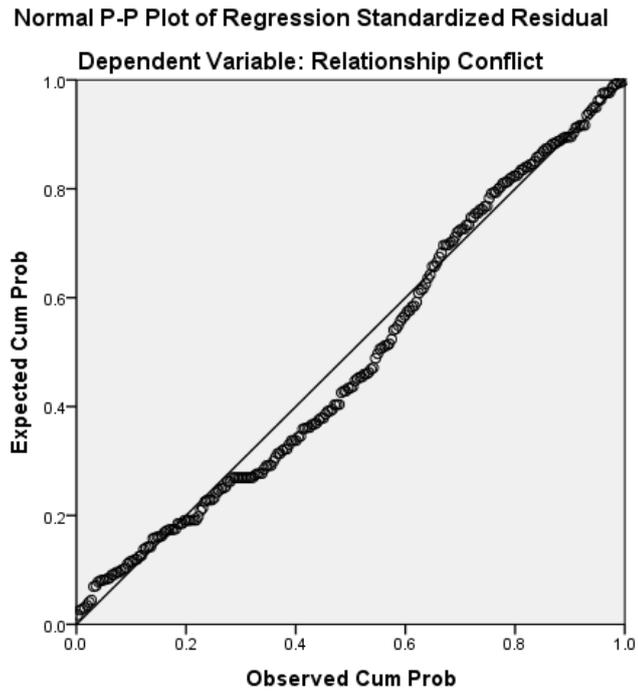


Figure H.5: P-P Plot Relationship Conflict

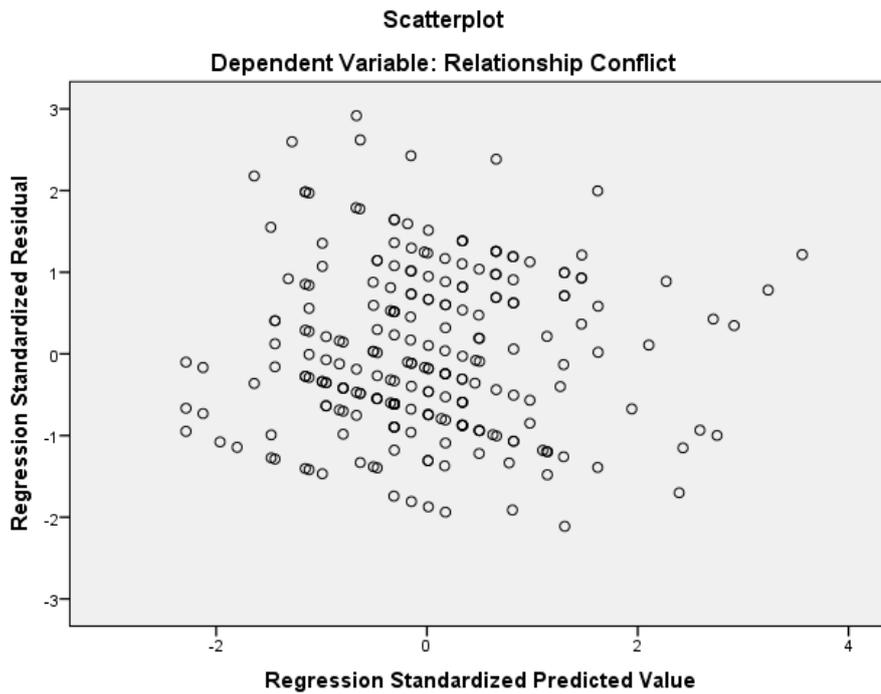


Figure H.6: Scatterplot Relationship Conflict

Table H.3: ANOVA hierarchical regression analysis - Shared leadership (IV) and Task conflict (DV)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.167	2	5.084	11.271	.000 ^b
	Residual	107.349	238	.451		
	Total	117.517	240			
2	Regression	10.450	3	3.483	7.711	.000 ^c
	Residual	107.067	237	.452		
	Total	117.517	240			

a. Dependent Variable: Task Conflict

b. Predictors: (Constant), Functional diversity, Team_size

c. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership

Table H.4: Coefficient table HRA - Task conflict (DV)

Model	Coefficients ^a										Collinearity Statistics		
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Tolerance	VIF	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part			
1	(Constant)	3.533	.163		21.730	.000	3.213	3.854	.194	.170	.165	.984	1.016
	Team_size	.126	.047	.166	2.659	.008	.033	.219	.194	.170	.165	.984	1.016
	Functional diversity	-.371	.104	-.223	-3.567	.000	-.575	-.166	-.244	-.225	-.221	.984	1.016
	(Constant)	3.289	.349		9.429	.000	2.602	3.977	.194	.174	.168	.976	1.024
	Team_size	.129	.048	.170	2.717	.007	.035	.223	.194	.174	.168	.976	1.024
	Functional diversity	-.362	.105	-.218	-3.464	.001	-.568	-.156	-.244	-.219	-.215	.974	1.027
	Shared Leadership	.058	.074	.049	.791	.430	-.087	.204	.056	.051	.049	.984	1.017

a. Dependent Variable: Task Conflict

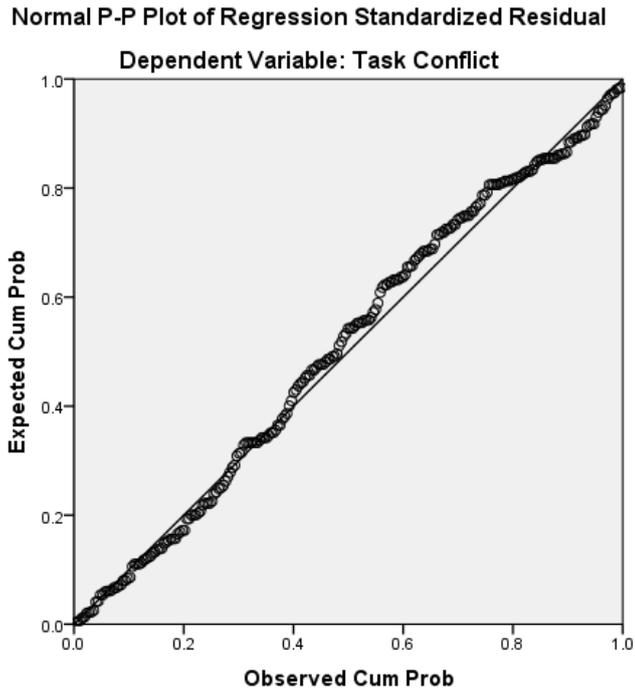


Figure H.7: P-P Plot task conflict

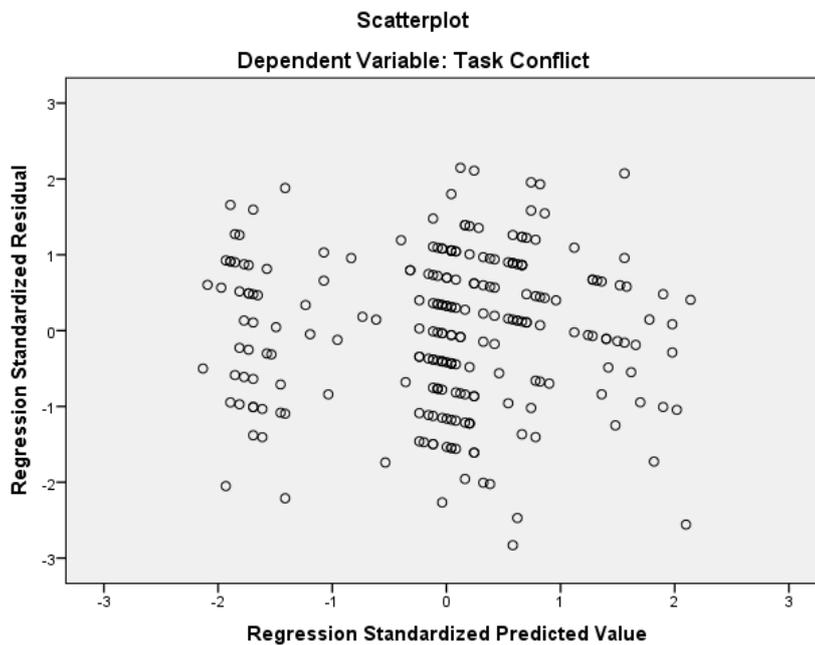


Figure H.8: Scatterplot task conflict

Table H.5: ANOVA hierarchical regression analysis - Shared leadership, Task conflict, Relationship conflict (IVs) and Innovation (DV)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.811	2	.405	1.256	.287 ^b
	Residual	76.822	238	.323		
	Total	77.633	240			
2	Regression	19.224	3	6.408	26.000	.000 ^c
	Residual	58.409	237	.246		
	Total	77.633	240			
3	Regression	20.460	4	5.115	21.114	.000 ^d
	Residual	57.173	236	.242		
	Total	77.633	240			
4	Regression	20.470	5	4.094	16.831	.000 ^e
	Residual	57.162	235	.243		
	Total	77.633	240			

a. Dependent Variable: Innovation

b. Predictors: (Constant), Functional diversity, Team_size

c. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership

d. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership, Task Conflict

e. Predictors: (Constant), Functional diversity, Team_size, Shared Leadership, Task Conflict, Relationship Conflict

Table H.6: Coefficient table HRA – Innovation (DV)

Model	Coefficients ^a																			
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations			Collinearity Statistics										
	B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF									
1	(Constant)	3.975	.138		28.894	.000														
	Team_size	-.004	.040	-.006	-.099	.921	.007	-.006	-.006	.984	1.016									
	Functional diversity	-.139	.088	-.103	-1.582	.115	-.102	-.102	-.102	.984	1.016									
2	(Constant)	2.005	.258		7.780	.000														
	Team_size	.023	.035	.038	.661	.509	.007	.043	.037	.976	1.024									
	Functional diversity	-.070	.077	-.052	-.912	.363	-.102	-.059	-.051	.974	1.027									
	Shared Leadership	.472	.055	.491	8.644	.000	.493	.490	.487	.984	1.017									
3	(Constant)	1.651	.300		5.512	.000														
	Team_size	.009	.035	.015	.264	.792	.007	.017	.015	.947	1.056									
	Functional diversity	-.032	.078	-.023	-.401	.688	-.102	-.026	-.022	.927	1.079									
	Shared Leadership	.465	.054	.485	8.591	.000	.493	.488	.480	.981	1.019									
	Task Conflict	.107	.048	.132	2.259	.025	.168	.146	.126	.911	1.098									
4	(Constant)	1.630	.318		5.126	.000														
	Team_size	.008	.036	.013	.222	.824	.007	.014	.012	.915	1.093									
	Functional diversity	-.030	.079	-.023	-.386	.700	-.102	-.025	-.022	.923	1.084									
	Shared Leadership	.469	.057	.488	8.258	.000	.493	.474	.462	.897	1.115									
	Task Conflict	.104	.051	.128	2.041	.042	.168	.132	.114	.800	1.250									
	Relationship Conflict	.008	.039	.013	.204	.838	-.058	.013	.011	.754	1.326									

a. Dependent Variable: Innovation

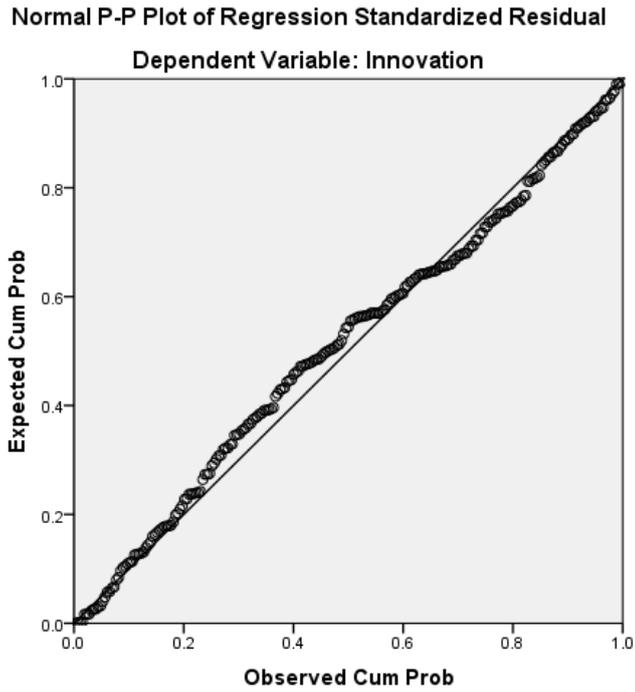


Figure H.9: P-P Plot Innovation

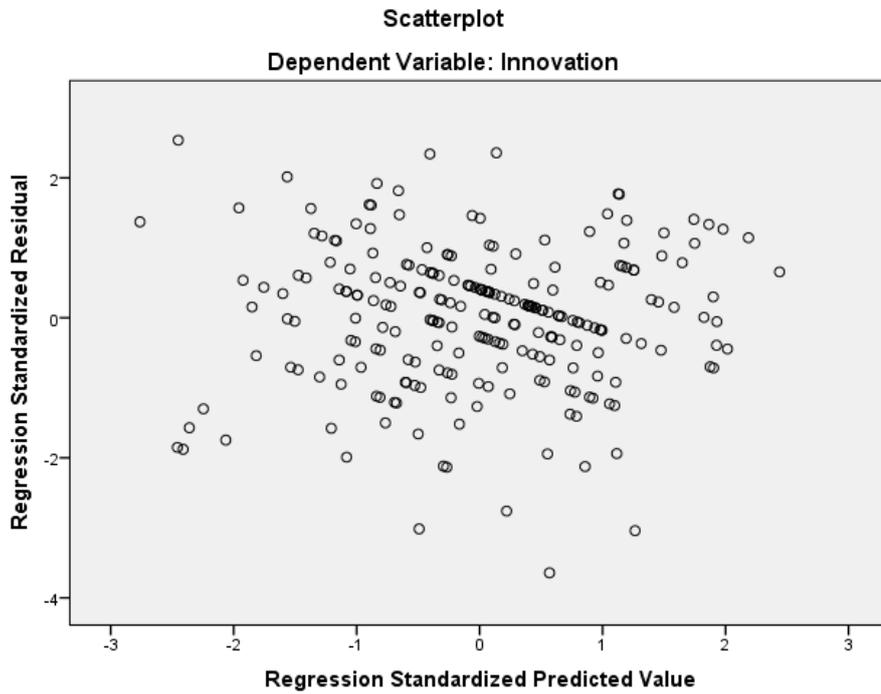


Figure H.10: Scatterplot Innovation

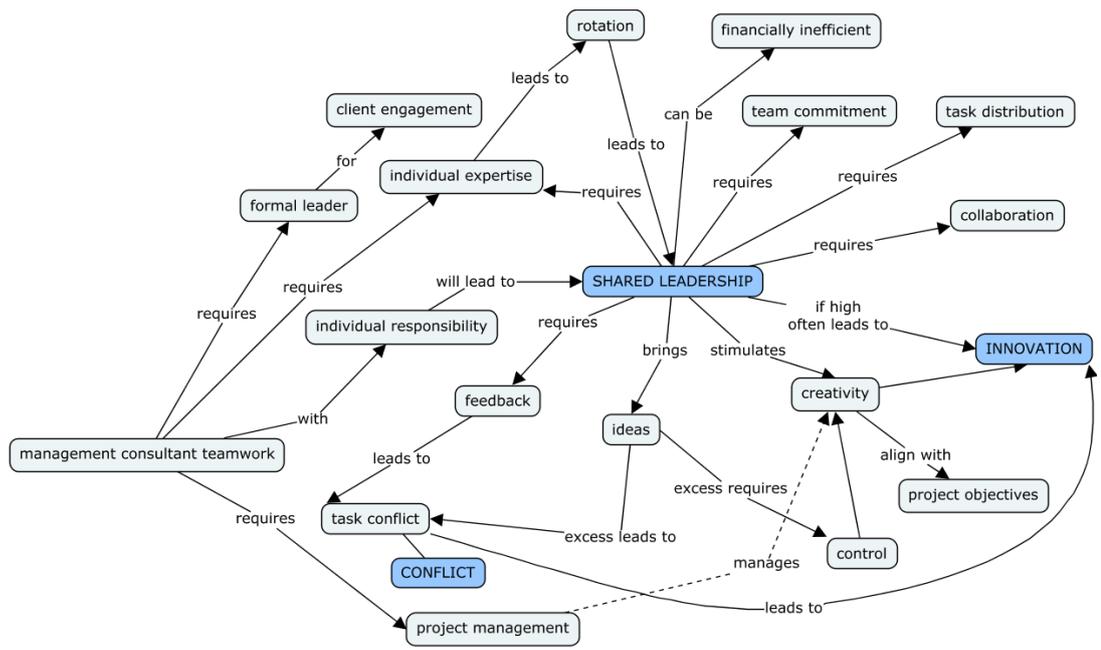


Figure I.5: Causal map - Interview 5

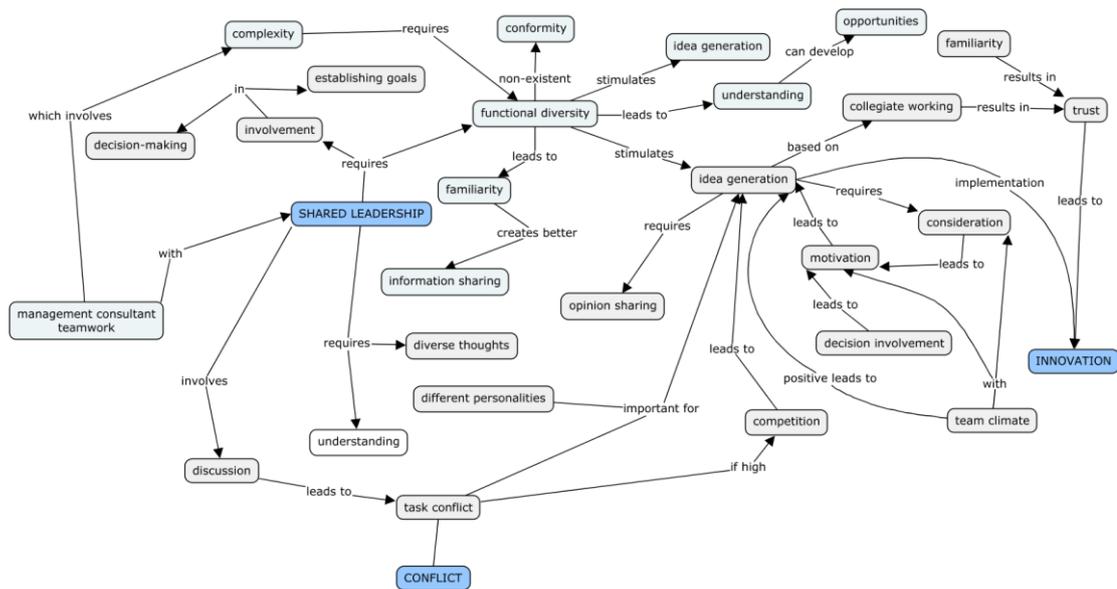


Figure I.6: Causal map - Interview 6

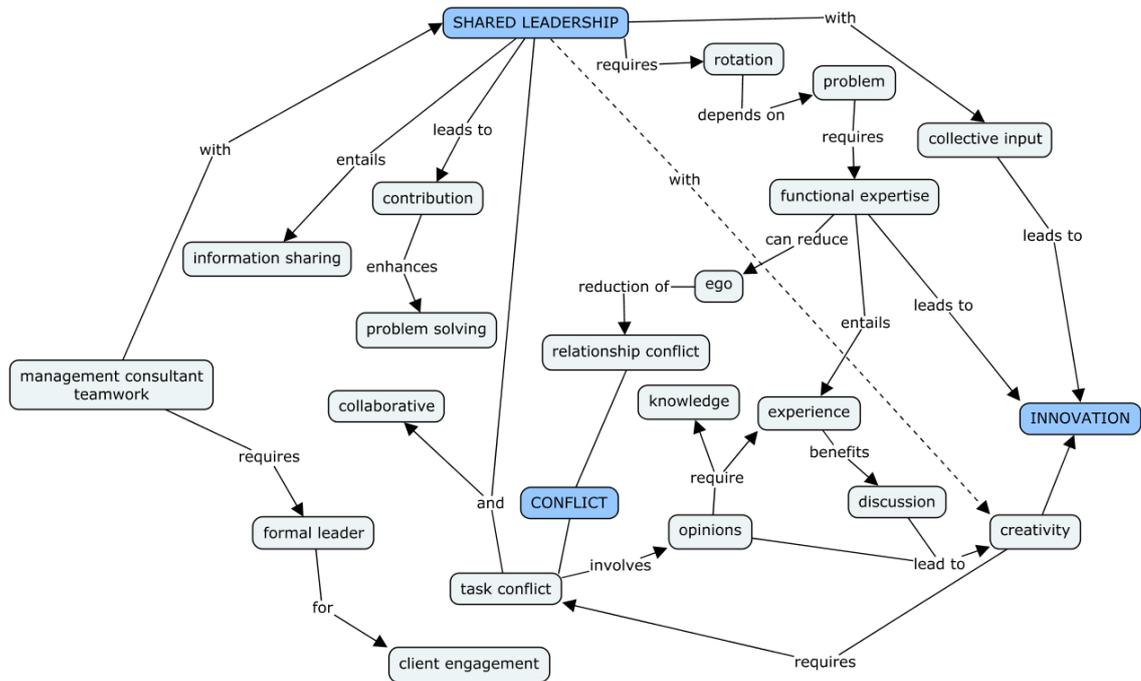


Figure I.15: Causal map - Interview 15

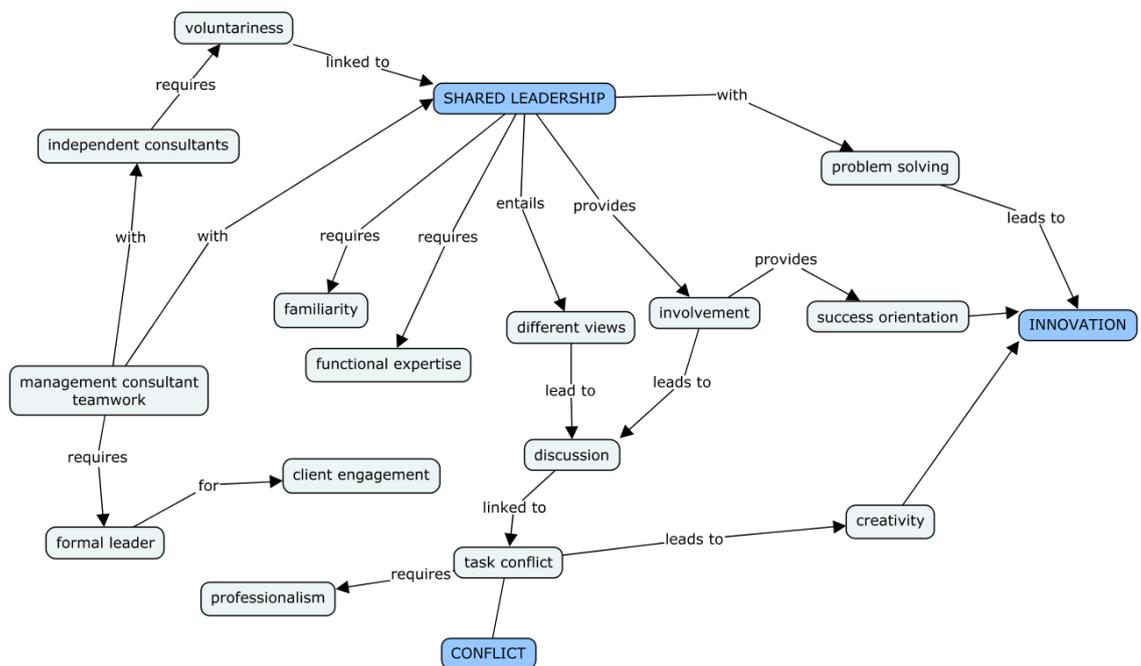


Figure I.16: Causal map - Interview 16

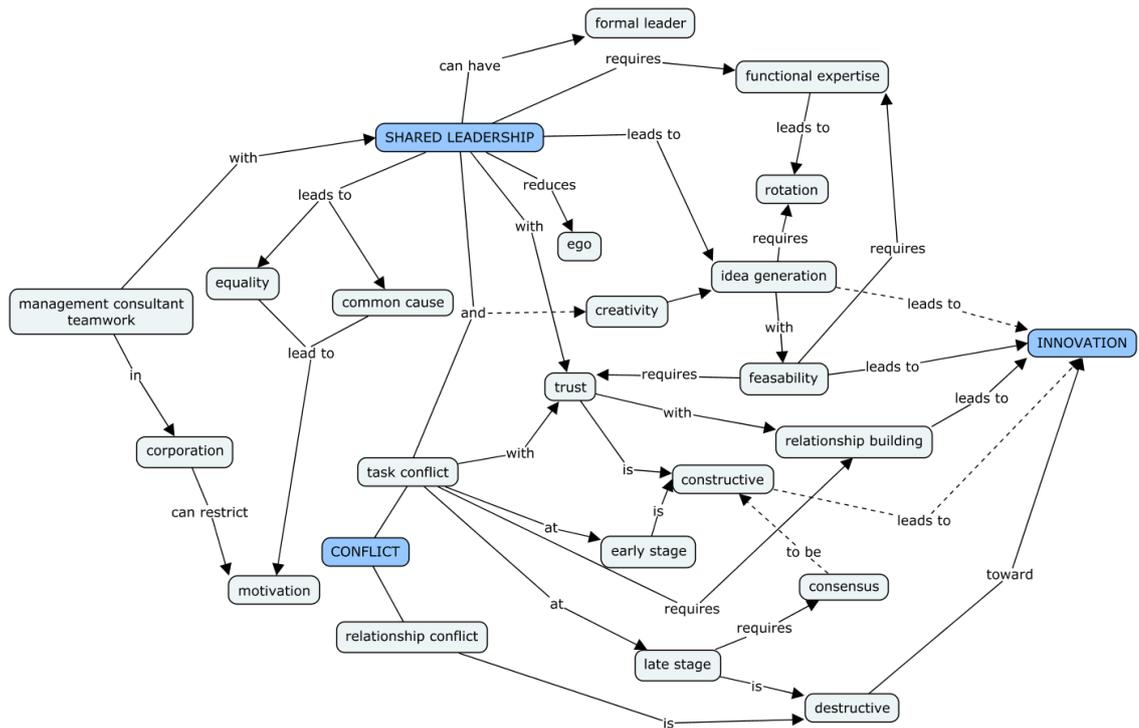


Figure I.17: Causal map - Interview 17

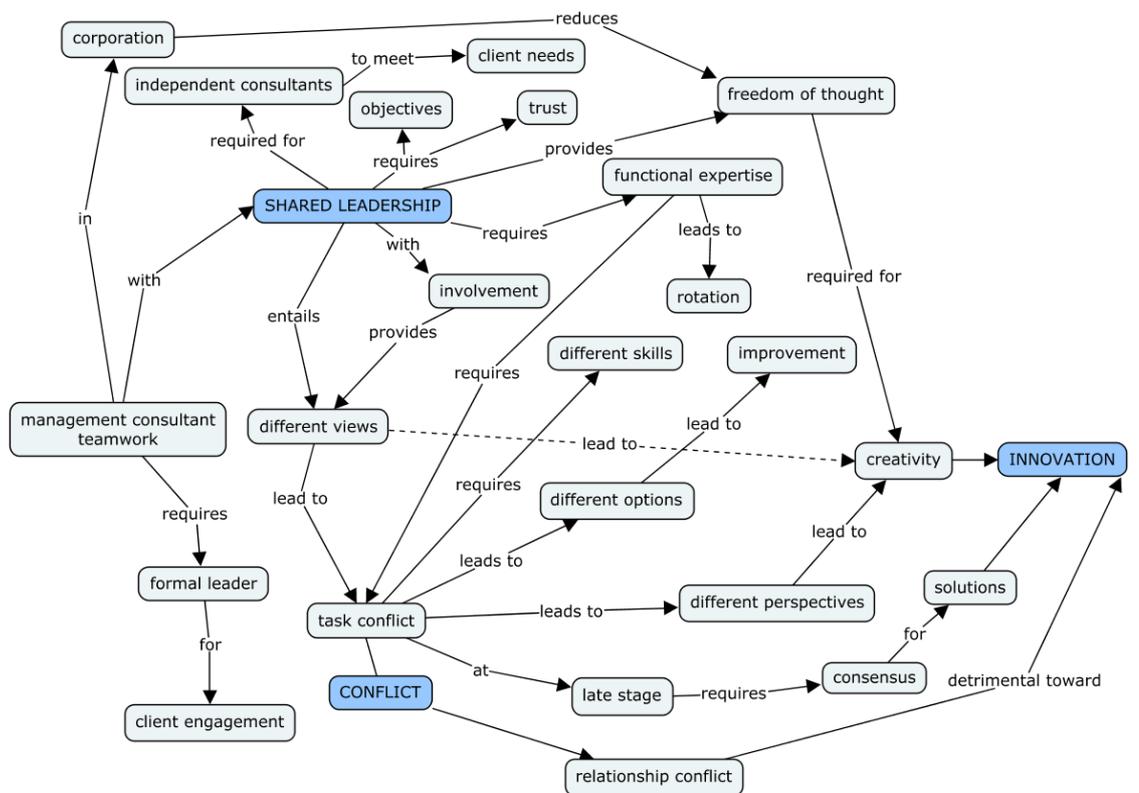


Figure I.18: Causal map - Interview 18

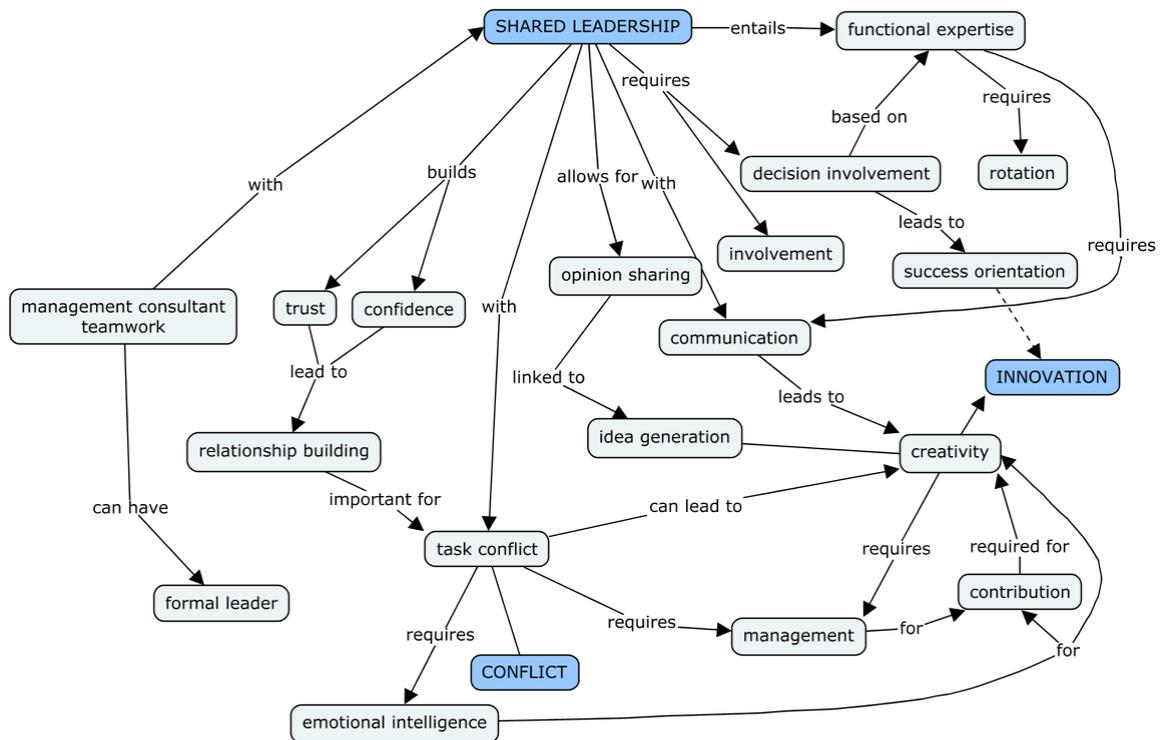


Figure I.19: Causal map - Interview 19

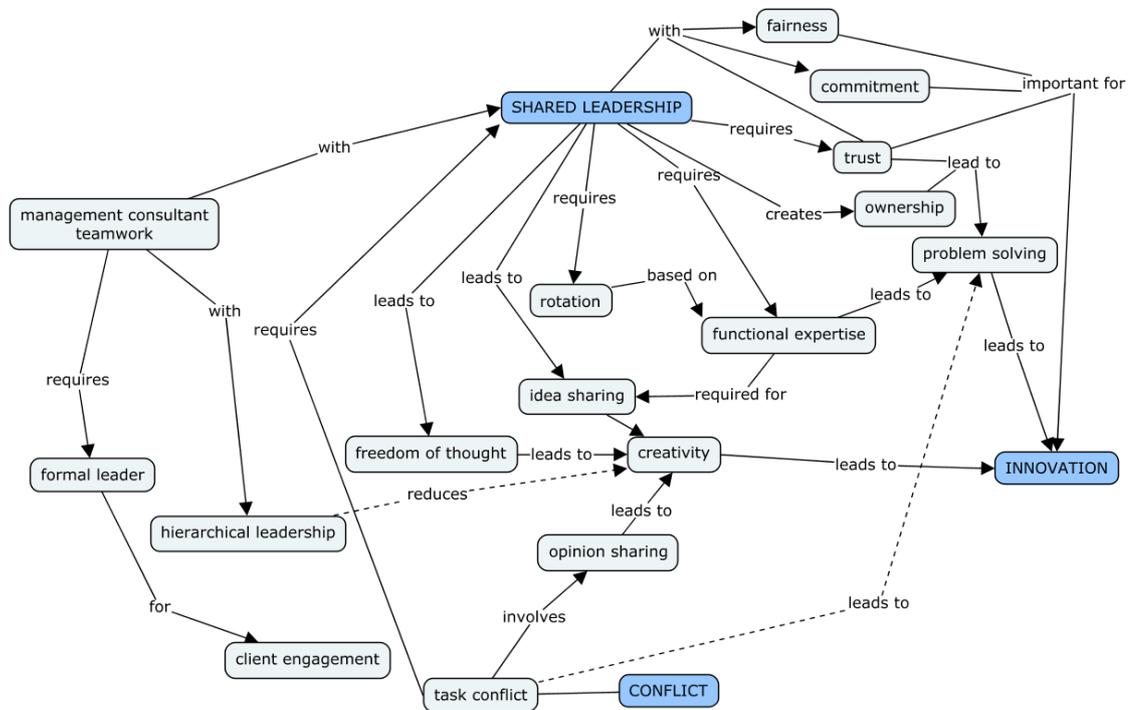


Figure I.20: Causal map - Interview 20

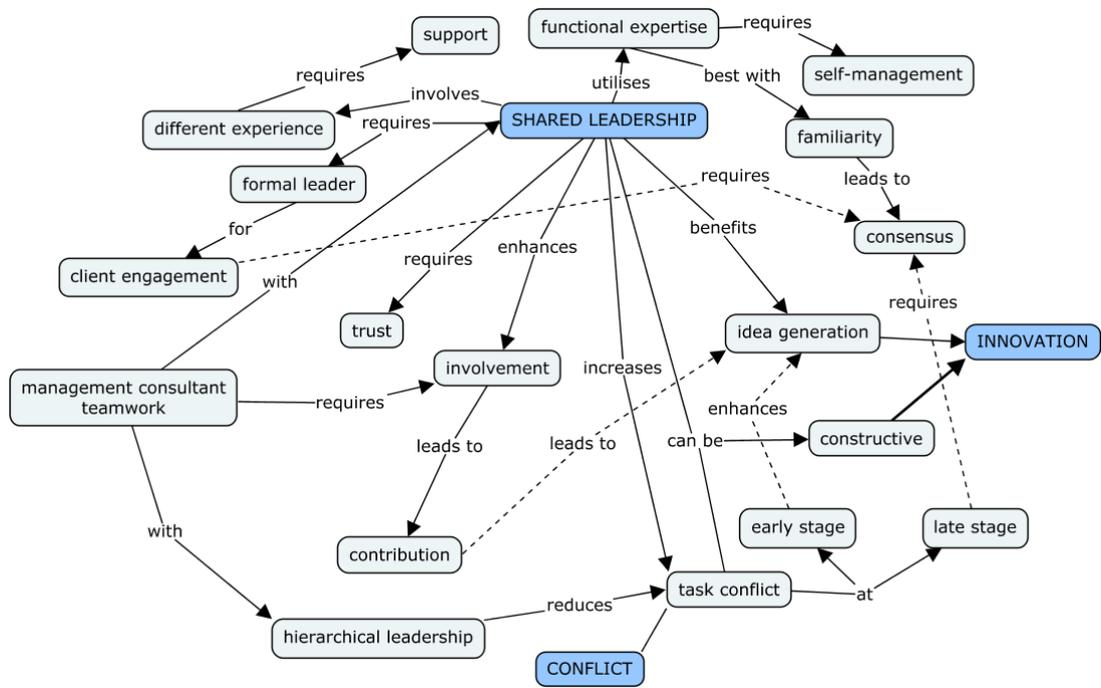


Figure I.23: Causal map - Interview 23

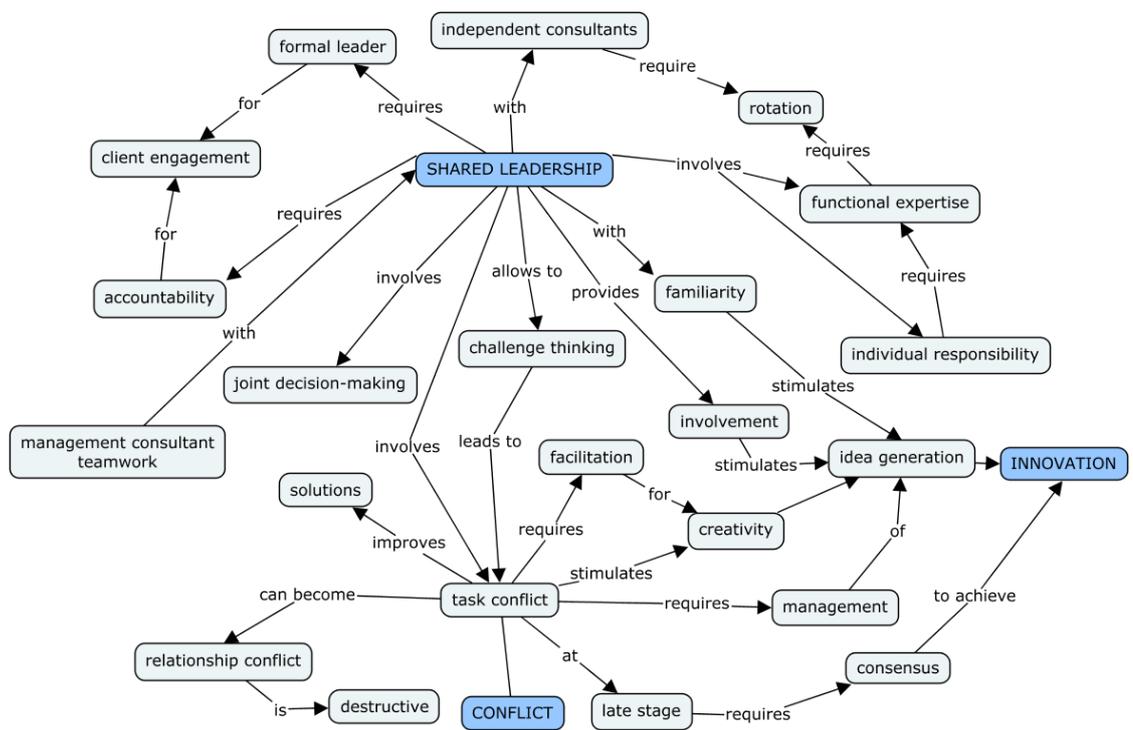


Figure I.24: Causal map - Interview 24

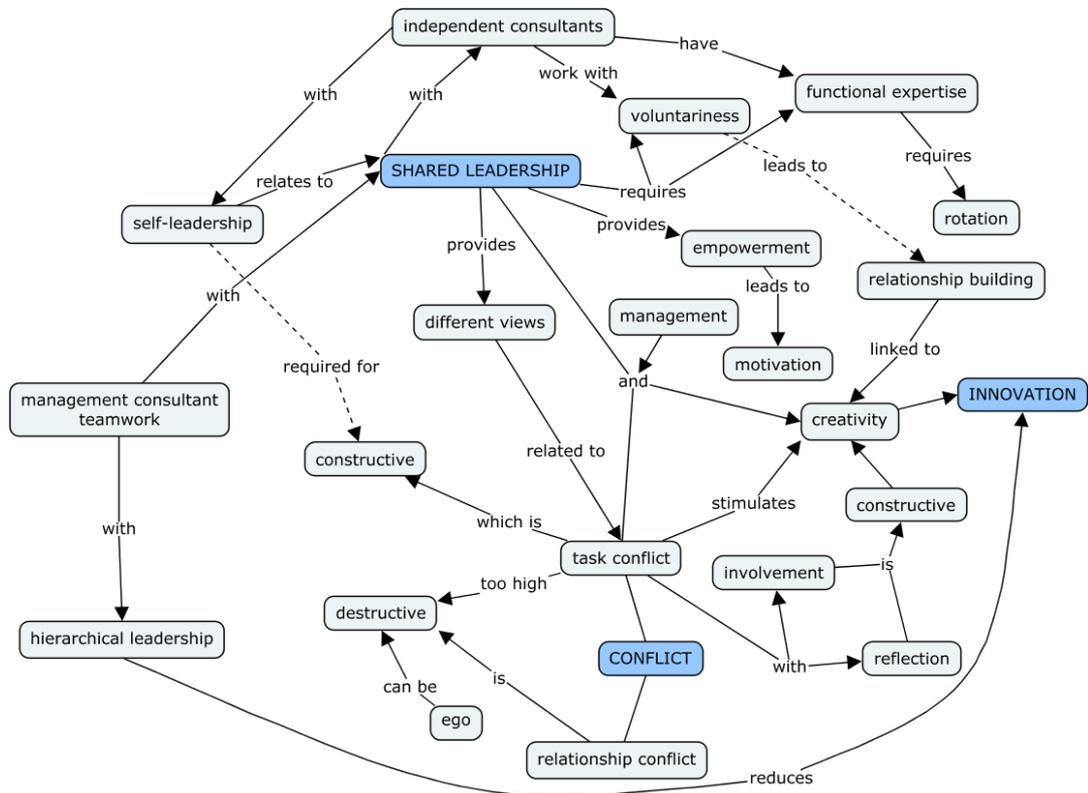


Figure 1.25: Causal map - Interview 25

Appendix J - Interview Participants

Table J.1: Detailed information of interview participants

ID	Management consultant information						Management consultant work	
	Age	Company size	Specialisation	Position	Experience	Time in teams	Type of consulting work	Teamwork
MC1	65-74	Sole-proprietor	Operations, Transformation & Change, Quality Management	Senior Management	10 or more years	1%-9%	<ul style="list-style-type: none"> - Gets firms to implement ISO quality management and environmental system standards - Teaches ideas and techniques to large organisations 	<ul style="list-style-type: none"> - Works with self-managed teams - Team members familiar with each other - Works with other sole-proprietors and consultants within the organisations
MC2	55-64	100 or more	General Management, Marketing & Sales, Transformation & Change, Strategy, Technology	Senior Management	5-9 years	25%-49%	<ul style="list-style-type: none"> - Is the managing director of a large consulting firm which conducts software solutions - Manages day-to-day operations - Conducts preliminary consulting work with clients 	<ul style="list-style-type: none"> - Conducts teamwork mainly with colleagues in the organisation
MC3	65-74	100 or more	Strategy, Technology	Senior Management	10 or more years	25%-49%	<ul style="list-style-type: none"> - Senior manager in a large oil and gas technology consultancy - Deals a lot with innovation in the sector - Supports strategic acquisitions, due-diligence or joint ventures 	<ul style="list-style-type: none"> - Works in senior team of specialists - Team members familiar with each other
MC4	55-64	6-8	General Management, Transformation & Change, Strategy,	Senior Management	10 or more years	10%-24%	<ul style="list-style-type: none"> - Provides general management consultant advice - Assists businesses with purchasing and procurement functions 	<ul style="list-style-type: none"> - Works in team of experts formed for assignments - Teams consist of sole-proprietors

			Supply Management				- Works in management consultant consortia	
MC5	65-74	4-5	General Management, Finance, Human Resources, Legal, Marketing & Sales, Transformation & Change, Strategy, Technology	Senior Management	10 or more years	50%-74%	- Small consultancy, specialises in online business consulting and in helping not-for-profit organisations to develop commercial income streams - Improving profits, efficiency through use of technology, productivity through management of people.	- Consultant team consists of partners - Each consultant provides individual expertise
MC6	45-54	Sole-proprietor	General Management, Human Resources, Marketing & Sales, Transformation & Change, Strategy	Senior Management	10 or more years	90%-100%	- Works independently, calls in help from other consultants when required - Specialises in organisational change management (mergers, org. change in culture) - Conducts business development, helps organisations grow organically or by acquisition.	- Consultants provide expertise in teams - Mostly small, autonomous teams
MC7	35-44	10-49	Transformation & Change	Senior Management	10 or more years	75%-89%	- Executive director of consulting partnership - Specialises in transformational change in financial services - All associates senior consultants with own firms	- Associates 'called in' for assignments based on core skills - Consultants choose to work in teams - Standard methodologies for teamwork, consultants often do not know each other - Teams work independently
MC8	55-64	10-49	Transformation & Change, Strategy, Technology	Senior Management	10 or more years	90%-100%	- Partner at a specialist information systems consultancy - Specialises in working with not-for-profit organisations	- Team works by distributing areas of responsibility - Team meets regularly and has identity - Team members very familiar - Each team member is valued

							- Advise senior-management teams and trustees to address problems and introduce change	
MC9	55-64	Sole-proprietor	General Management, Transformation & Change, Strategy	Senior Management	10 or more years	50%-74%	- Focuses on large public and private sector projects	- Teamwork conducted with other consultants called in by client - Several people share responsibility of delivering teamwork
MC10	55-64	Sole-proprietor	Finance, Transformation & Change	Senior Management	10 or more years	90%-100%	- Independent consultant focusing on financial management, change management and developing target operating models - Work comes through network of former colleagues	- Teamwork conducted with other consultants in senior management - Clear functions in teams for members playing to team members' skill-sets
MC11	55-64	Sole-proprietor	General Management, Human Resources, Operations, Transformation & Change, Quality Management	Senior Management	10 or more years	1%-9%	- Specialises in performance management, team working, leadership development and project management/ improvement - Works independently, with associate in a partner model	- Team put together depending on client situation, client-driven approach - Team based on complementary skills - Regular team meetings but quite informal
MC12	55-64	2-4	General Management, Human Resources, Transformation & Change	Senior Management	10 or more years	1%-9%	- Provides training delivery, learning delivery as well as general consultancy mainly around management and leadership - Client base mainly in NFP and public sector	- Team members have different functional expertise - Associates called in for expertise but under name of company
MC13	65-74	Sole-proprietor	General Management, Marketing & Sales	Senior Management	10 or more years	25%-49%	- Consulting partnership consisting of independent consultants, specialising in direct selling area	- Team of independent consultants specialising in different areas - Regular team progress meetings
MC14	55-64	Sole-proprietor	General Management	Senior Management	10 or more years	10%-24%	- Consulting for technology companies requiring growth, e.g. sales training/ coaching	- Team with different functional expertise

								- Company experts can be included in teamwork
MC15	65-74	10-49	General Management, Operations, Transformation & Change, Strategy	Senior Management	10 or more years	50%-74%	- Business institute with individual experts for clients - Expertise in manufacturing, finance and marketing	- Fluid teams dependent on expertise required - Usually teams of 2-3 members - Regular meetings, exchanging experience, knowledge, understanding
MC16	75+	10-49	General Management, Marketing & Sales	Senior Management	10 or more years	50%-74%	- Consulting company assisting large companies with business development, focusing on sales and marketing	- Teamwork based on individuals with certain expertise working on different aspects of project
MC17	55-64	Sole-proprietor	General Management, Marketing & Sales, Transformation & Change, Strategy	Senior Management	10 or more years	50%-74%	- Consultancy group with collaboration of independent consultants focusing on general management and marketing & sales	- Team of consultants put together for individual assignments - Structures relatively loose and informal
MC18	65-74 years old	Sole-proprietor	General Management, Finance, Operations, Transformation & Change, Quality Management, Strategy	Senior Management	10 or more years	1%-9%	- Group of associate members providing on a wide range of consulting expertise	- Teamwork based on individuals' expertise, consultants' can focus on assignments for which they find their skills most fitting
MC19	55-64	Sole-proprietor	Strategy, Technology	Senior Management	10 or more years	25%-49%	- Independent consultant with assignments ranging from mentoring chief executives to addressing HR related and operational problems	- Teamwork conducted with a group of experts, also in-house consultants
MC20	55-64	Sole-proprietor	General Management, Marketing & Sales, Operations,	Senior Management	5-9 years	90%-100%	- Independent consultant with a predominant sales and marketing background	- Teamwork conducted with experts from regional advisory groups - Usually 2-3 consultants in teams

			Transformation & Change, Strategy				- Recognised growth accelerator coach	
MC21	55-74	Sole-proprietor	General Management, Marketing & Sales, Transformation & Change, Strategy	Senior Management	10 or more years	25%-49%	- Director of small management consultant team focusing on different consulting aspects	- Synthesised team of four consultants with multidisciplinary functions
MC22	55-64	Sole-proprietor	General Management, Marketing & Sales, Transformation & Change, Strategy	Senior Management	10 or more years	10%-24%	- Independent consultant specialised in strategy Focus on consulting training and facilitation as well as mentoring and coaching in management	- Teamwork on assignments with consultants who bring required skills - Assembling a team of experienced trainers who work with client
MC23	35-44	10-49	Transformation & Change	Senior Management	10 or more years	75%-89%	- Senior manager focusing on strategy implementation - Works in consultancy partnership	- Team formed from experts from partnership - Team members are independent consultants with own companies - Client involved in teamwork
MC24	35-44	10-49	Transformation & Change, Strategy	Senior Management	5-9 years	75%-89%	- Executive board of management consultancy partnership - Focus on change management, transformational type management, change programme coordination	- Team has clear roles regarding expertise of members - Team members independent consultants with own companies
MC25	45-54	Sole-proprietor	General Management, Human Resources, Transformation & Change, Strategy	Senior Management	10 or more years	25%-49%	- Independent consultant working both in private and NFP sector - Focuses on change management, offering training, system implementation	- Team workload divided into three elements of process design, working with dynamics and making meaning for three team members - People invited from client to collaborate with team

Appendix K - Interview Concepts

Table K.1: All concepts from causal maps

accountability	different skills	individual expertise	project objectives
agreement	different views	individual ideas	project phase
assignment criteria	disagreement	individual responsibility	reflection
autonomy	discussion	informal hierarchy	regular meetings
behaviour	disruption	informality	relationship building
challenge thinking	diverse thoughts	information	relationship conflict
challenging	diversity	information sharing	relationships
client driven	early stage	initiative	responsibility
client engagement	early stage teamwork	INNOVATION	return on investment
client needs	education	interaction	rigid structures
client situation	effectiveness	involvement	roles
collaboration	ego	isolation	rotation
collaborative	emotional intelligence	joint decision-making	satisfaction
collective input	empowerment	knowledge exchange	self-leadership
collective management	energy	knowledge	self-management
collective thinking	engagement terms	knowledge sharing	self-motivation
collegiate working	equal responsibility	knowledge spill-overs	SHARED LEADERSHIP
commercial drive	equality	late stage	shared learning
commitment	establishing goals	learning	sharing experiences
common cause	experience	management	skills
common goals	expertise	MC teamwork	sole-traders
communication	exposure	mentoring	solutions
competition	facilitation	motivation	strengths
complexity	fairness	multiple decision-makers	subject-matter leadership
confidence	familiarity	new ideas	success orientation
CONFLICT	feasibility	new situations	support
conformity	feedback	new views	task conflict
consensus	financially inefficient	non-compatibility	task distribution
consideration	flat structures	objectives	team
constructive	flexibility	openness	team climate
consultants	followership	opinion sharing	team commitment
consultation	formal leader	opinions	team empowerment
contribution	formal protocol	opportunities	team hierarchy
control	freedom	outcomes	team identity
coordination	freedom of thought	overlapping influence	team maturity
corporation	functional diversity	ownership	team members
creative disagreement	functional expertise	participation	things in common
creativity	hierarchical	personal agenda	time
decision involvement	hierarchical leadership	personality conflict	training
decision-making	idea deferment	positive	transparency
democratic	idea generation	problem	trust
demotivation	idea impediment	problem solving	understanding
dependency	idea sharing	professionalism	valuing members
destructive	ideas	project aim	vested interest
different experience	improvement	project failure	voluntariness
different options	independent consultants	project improvement	work quality
different personalities	individual decision-making	project management	
different perspectives	individual ego	project manager	

Appendix L - Aggregate Map

Table L.1: Aggregate causal map concepts table

Concept 1	Link	Concept 2	No.	Management consultants
creativity	+	INNOVATION	20	MC 1, 2, 3, 5, 6, 7, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
task conflict	+	creativity	14	MC 1, 5, 6, 8, 9, 10, 11, 12, 14, 16, 19, 22, 24, 25
functional expertise	+	rotation	13	MC 2, 5, 11, 12, 13, 17, 18, 19, 20, 21, 22, 24, 25
SHARED LEADERSHIP	+	different views	10	MC 3, 4, 6, 13, 16, 18, 21, 22, 24, 25
SHARED LEADERSHIP	+	involvement	10	MC 2, 3, 7, 14, 15, 16, 20, 22, 23, 24
SHARED LEADERSHIP	+	creativity	10	MC 1, 2, 3, 4, 5, 12, 14, 17, 21, 23
different views	+	creativity	9	MC 1, 2, 3, 10, 15, 18, 19, 20, 22
involvement	+	creativity	9	MC 2, 7, 15, 19, 20, 21, 22, 23, 24
trust	+	creativity	8	MC 1, 3, 6, 8, 12, 17, 20, 25
different views	+	task conflict	7	MC 1, 3, 6, 16, 18, 21, 25
relationship conflict	+	destructive	7	MC 2, 7, 12, 13, 17, 24, 25
SHARED LEADERSHIP	+	task conflict	7	MC 3, 4, 9, 10, 22, 23, 24
individual ego	+	relationship conflict	6	MC 7, 8, 10, 12, 15, 25
individual responsibility	+	SHARED LEADERSHIP	6	MC 1, 3, 4, 5, 7, 8
problem solving	+	INNOVATION	6	MC 1, 16, 18, 20, 21, 22
SHARED LEADERSHIP	+	knowledge sharing	6	MC 2, 4, 7, 15, 19, 20
constructive	+	INNOVATION	5	MC 12, 17, 22, 23, 25
functional expertise	+	creativity	5	MC 1, 6, 15, 20, 22
functional expertise	+	knowledge sharing	5	MC 1, 2, 3, 4, 6
knowledge sharing	+	creativity	5	MC 1, 3, 4, 5, 7
SHARED LEADERSHIP	+	trust	5	MC 2, 4, 12, 19, 21
task conflict	+	problem solving	5	MC 10, 18, 20, 21, 22
hierarchical leadership	-	creativity	7	MC 1, 12, 14, 20, 21, 22, 25
destructive	-	INNOVATION	6	MC 10, 12, 13, 14, 17, 18
hierarchical leadership	-	task conflict	5	MC 1, 3, 10, 12, 23
SHARED LEADERSHIP		functional expertise	15	MC 6, 9, 10, 11, 13, 14, 16, 17, 18, 20, 21, 23, 24, 25
mc teamwork		formal leader	14	MC 4, 5, 11, 12, 13, 15, 16, 17, 18, 19, 20, 22, 23, 24
formal leader		client engagement	13	MC 4, 5, 8, 11, 12, 13, 15, 16, 18, 20, 22, 23, 24
mc teamwork		hierarchical leadership	9	MC 1, 7, 8, 10, 14, 20, 22, 23, 24
late stage		consensus	7	MC 4, 13, 14, 17, 18, 23, 24
task conflict		late stage	7	MC 12, 13, 14, 17, 18, 23, 24
consensus		constructive	5	MC 8, 11, 17, 18, 24
early stage		constructive	5	MC 1, 12, 17, 22, 23
task conflict		early stage	5	MC 4, 12, 17, 22, 23

Appendix M - Concept Descriptions

Table M.1: Concept descriptions for aggregate causal map

Concept	Description
Linked to Shared leadership	
functional expertise	Consultants with functional experience in a certain area are experts in that area (Finkelstein 1992).
rotation	Responsibility for guiding a group (leadership) can rotate among consultants (skills/situation dependent) (Jackson and Parry 2011)
individual responsibility	Each consultant holds responsibility toward the teamwork. Responsibility does not lie with one sole individual.
knowledge sharing	Consultants share work-related perspectives, suggestions, and information with each other. (Staples and Webster 2008)
involvement	Consultants participate in activities or situations in the team.
trust	Consultants believe in the truth and reliability of each other.
different views	Consultants have different attitudes or opinions on an issue.
Linked to Conflict	
individual ego	Individual consultants' sense of self-importance.
hierarchical leadership	A top-down, non-organic leadership structure.
problem solving	Consultants find solutions to difficult or complex issues.
task conflict	Disagreements about the content of the task, including differences in viewpoints, ideas, and opinions (Jehn 1995).
relationship conflict	Interpersonal, non-task-related incompatibilities among consultants, including tension, animosity, and annoyance (Jehn 1995).
late stage	Occurrence after 50% of the project time.
early stage	Occurrence before 50% of the project time.
Linked to Innovation & other	
creativity	Consultants generating original and useful ideas (Amabile 1983)
problem-solving	The process of consultants finding solutions to difficult or complex issues.
constructive	Beneficial toward team innovation.
consensus	Consultants reach agreement.
destructive	Detrimental toward team innovation.
formal leader	Designated, formal leadership role of a consultant, often held by title.
client engagement	Consultants' involvement with clients, meaningful client connections.

Appendix N - Observation Coding

Table N.1: Coding matrix for management consultant team observations

	Total	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	M13	M14	M15	M16
Paul	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
George	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sarah	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Thomas	5	1	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0
Claire	3	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0
Anne	5	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
creativity	42	1	0	4	2	4	2	2	5	4	1	3	2	4	2	5	1
relationship	8	0	2	1	1	0	0	0	0	0	1	3	0	0	0	0	0
task conflict	52	2	3	7	7	4	2	3	3	3	5	4	2	2	2	2	1
short	18	1	1	1	2	4	0	1	1	2	1	0	1	1	1	1	0
medium	27	1	2	3	4	1	2	2	1	1	3	2	1	1	1	1	1
long	9	0	2	2	0	0	0	0	1	0	2	2	0	0	0	0	0
accommodating	9	1	1	0	1	2	1	0	0	0	1	0	1	0	1	0	0
avoiding	5	0	1	0	2	0	0	0	0	1	1	0	0	0	0	0	0
collaborating	21	1	0	4	2	2	0	2	2	2	2	1	0	1	0	1	1
competing	16	0	2	3	2	0	0	1	1	0	2	3	0	0	1	1	0
compromising	5	0	0	0	1	0	1	0	1	0	0	0	1	1	0	0	0
production	38	0	0	3	3	4	2	1	4	4	1	2	1	4	3	5	1
decision-making	7	1	0	0	2	2	0	0	1	0	1	0	0	0	0	0	0
planning	39	0	2	2	3	0	1	3	4	1	6	5	4	2	1	3	2
problem solving	20	2	1	1	1	4	1	0	2	3	0	0	0	1	1	2	1

Table N.2: Coding matrix for management consultant team observations (continued from M16, creativity etc.)

creativity	RC	TC	short	medium	long	accommodating	avoiding	collaborating	competing	compromising	production	decision-making	planning	problem solving
41	8	49	16	26	9	9	5	21	14	4	36	6	35	18
29	8	46	14	25	9	9	5	16	16	4	27	7	31	17
24	7	34	10	18	8	4	3	14	13	3	19	4	23	11
2	1	6	1	4	1	1	0	3	2	0	2	0	6	2
5	1	4	0	3	1	1	0	2	1	0	5	0	3	2
1	1	3	1	1	1	0	0	0	3	0	1	0	2	1
42	1	20	5	13	1	2	1	14	2	3	34	3	16	12
1	8	7	1	2	5	1	2	0	5	0	1	0	6	1
20	7	52	15	27	9	8	5	21	16	5	20	4	24	16
5	1	15	18	0	0	3	2	7	1	2	6	4	6	6
13	2	27	0	27	0	5	2	14	6	3	13	2	14	7
1	5	9	0	0	9	1	1	0	9	0	0	0	6	2
2	1	8	3	5	1	9	0	0	0	0	3	0	3	4
1	2	5	2	2	1	0	5	1	1	0	2	0	3	1
14	0	21	7	14	0	0	1	21	0	1	13	2	11	5
2	5	16	1	6	9	0	1	0	16	0	1	2	8	5
3	0	5	2	3	0	0	0	1	0	5	3	0	3	1
34	1	20	6	13	0	3	2	13	1	3	38	1	15	11
3	0	4	4	2	0	0	0	2	2	0	1	7	1	1
16	6	24	6	14	6	3	3	11	8	3	15	1	39	1
12	1	16	6	7	2	4	1	5	5	1	11	1	1	20

Appendix O - Meeting Discussions

Meeting 13

P: So you took the Ws and worked your way through everything starting with a W? (referring to visiting organisations via postcode)

G: Yeah. The problem of course is you can get as I got a real mix because you can be you know one postcode area starts here and another one starts there and it could be 100 yards. It would just become impossible to map it all out.

P: Isn't there a software that will do this?

G: Well...

P: In fact, there is.

G: Well I'm sure somewhere there could be but it depends on how long you are going to be, it depends a little bit on the weather, it depends on all sorts of things.

S: Yes, but it will still map them out in a sensible manner which is why I am pretty keen to have this meeting where you sit down with Anne and sort of coordinate the whole activity so you get that support from the office where somebody has looked at the map...

G: (interrupts) Well I've looked at it.

S: ...and worked out the best route.

G: Well I'm not sure that is necessarily gonna be that useful because it depends on - yesterday I decided to see four people. I could only get in two of them....

S: That doesn't matter...

G: (interrupts) And therefore you have to make a decision on the fly as to what you are going to do and...

S: That's fine but you still know: I've been to Company X, I still need to go to Company Y next, never mind I've not seen anyone at Company X, that's stop 2, that's stop 3. It doesn't matter if you get there at 10am or if you get there after lunch. Your route doesn't change.

G: No, what I am saying is the route will change, because if I have three that don't work, then I have exhausted that area and I have got to go somewhere else. Which is what I did yesterday.

S: That's fine. (sounds surprised)

A: That somewhere else will have already been planned.

S: Yes. That's fine. But they'll still be in an order. So she (pointing at Anne) might give you a list of 10 organisations in an area and if you succeed in getting into the first four, you realise you've gotten to the end of the day and you stop. The next day you start with number five or maybe you've...

G: (interrupts) No. I don't see that there's any merit in it. Because I can't predict what I am going to do, where I am going to be and...

S: (interrupts) I can understand the what I am going to do bit, where I am going to be I don't understand, I really don't. (laughs; turns away from George)

G: (loud) Lets, lets, if I've got one hour. (quieter) One potential visit. I'll go to an area where hopefully there's just one organisation (points finger upwards). Or if I go to an organisation...I don't think you can break it up logistically into little bits. Because the bits overlap.

P: I would have thought (turns toward George looking into air and placing hand on own mouth - wondering), if you are going to visit 112 organisations, I bet there is mapping software that can do this...

S: (interrupts; loud) Yeah that's what I'm saying!

P: You could say: I want a route plan from one to 112 (gesticulating plan), and you go along and you see the first two, the third one is not there and then jump to there. (pointing steps with fingers)

G: But you are making the assumption that I'm gonna be starting at the same point.

S: (annoyed) No! We are not making the assumption - we are making the assumption - so let's do this literally. So you step out of 3b, you know you are going to the Company X. You take the Hammersmith & City line. After that you know you are going to see Company Y it doesn't matter what time you get there, (pointing) you are still taking the Hammersmith & City line to Euston Square. It's just mapping out your route, not telling you to be at Company Z at 10am.

G: But what I am saying is: Depending on how things go I might not go to the next one on the list. It might not be the most efficient way of doing it is what I'm saying.

S: Why not?

G: Because if I've only got a limited amount of time, what is going to determine the sequence of charities you go to?

S: The sequence stays the same. If you realise you are getting to the end of the day and you realise you don't have enough time for the next company on the list, you call it a day. Get down to Victoria catch a train to the office.

G: Well that's a waste of time isn't it?

S: No. (shakes head)

G: Yes, it is. If the next one for some reason is a long way away...

S: (interrupts, loud, agitated) It's not going to be a long way away, that's what somebody is going to map out. The next company is always always always going to be the nearest company to the one you are sitting at. That's the point of the map. (gesticulating)

G: I can't see it's the effort doing it - if you guys want to do it that's fair enough. I see where you are coming from but the logistics of actually doing it I don't think it's going to benefit me relative to the things you could be doing otherwise

S: Right. The only reason I - I am not going to force the issue - but the only reason I suggested we do this was because. When you set out to see these companies you are hopefully working of a database and a list. And before you set out on any given day you decide where you want to go. So you don't just stand there on any given day scratching your neck or googling the next address. The only reason I suggested you take the support from the office was because I think your time is more important than spending the day planning the itinerary or a couple of hours - but if you think you've got the time for that be my guest (laughs sarcastically).

G: I'm just thinking I need to google - somebody does - each company. Because the addresses are not perfect and organisations have moved. On both days there have been organisations - I've gone to a company and it's not been there. No that's been a complete waste of time. And it does need to be addressed.

C: Okay, so the supported from the office basically is. You give the office a list, they double check that they do exist...

S: (interrupts) We have a list in the office, so we've got a database in Infusionsoft...

C: But it's obviously wrong. Because if there's an account that he's gone to and they've moved on, something is not up-to-date.

S: No it's not wrong. At the time the database was put together it was put together for a snail-mail exercise. Now some of these charities will have a different postal address and a different physical address.

C: Yes, so they've been registered maybe with an accountant. So it says to me that that list and the ones that you are going to postcode need to visit that list and do a physical list. So therefore your time if you go there they will be there. Are you getting appointments before you go there?

G: No, I'm not.

C: Alright so this is cold-calling?

G: Yes. So I might be there for a minute and I might be there for an hour.

P: Can I just understand something? Because my brain is hurting a bit here. If you've got 112 to visit and you use a bit of mapping software and you say "ok I've got 112 to visits to make around London, please work out for me the optimum rout that would take me around the whole lot". And you start out by following that. Now, yes you are going to run along one that doesn't exist, wrong address or whatever, and so you fly that one and you jump to the next and the office run this to earth, find out what the score is, gt you a new address. And it gets shifted...And I know you must be able to do that in fact I know that other companies do this. What I am not following why not do that. What actually are you doing?

S: Well I don't think we disagree on that bit. I think we disagree on George thinks that it would be more efficient for him to plan and I think it would be more efficient for him to get office support.

G: I can't quite see the merit in spending a huge amount of time doing it. Because someone has to check the address and since I'm going there and I have to work out where it is, I think I have to do that.

S: I mean fair enough, if you think you can do it, do it. (resigns)

P: So we've got 112 to visit. Is there a plan that says we are going to visit this one in this week, that one in that week?

G: Not yet. Because I've only just started and before I do that plan, I need to work out roughly how many I can do a day. So what I then look at is okay there's a chunk in this postcode there, that looks to be a good day, so I can spend I day there. These other two postcode area, there aren't that many and they are a long way apart within the thing, they'll maybe be a halfway job.

P: Okay, so if we find a bit of software here and do it for you here are you happy with that?

G: Yeah. I'm not trying to make my life difficult (Paul laughs), I'm actually trying to just...

S: Hang on, so you want us to do it for you at the office.

G: No, no, what I said is bear in mind that I am going to two places that I've never been. I need to be familiar with where I need to be and there's a certain amount of time that I need to do that.

P: That's what the software could do for you.

G: Yeah well I still - rather than blindly following the software need to be able to sort of familiarise myself with the surroundings.

P: Well having said that it's a complicated job for you, you've got to sit down with that map and say "now let me see, the district line goes up here and...." You could go nuts.

G: Well I have a logic to where I go because I met up with Thomas over and above what we are doing.

P: Well let's look into it between now and next Wednesday.

G: I'm not trying to be awkward, it's just I'm just very wary that there's potentially going to be a lot of work here and then I'm still going to have to actually figure out...

P: Can we look at that between now and next Wednesday. (talking to Sarah)

S: We can yes.

Appendix P - Creative Conflicts

Table P.1: List of creative conflicts from team observation

M	P	TC	Type	Length	Conflict reason	Conflict outcome	Shared leadership	Creativity	Innovation	Type
1	G	P&G	collaborating	short	Disagreement regarding the proposed project stages being the only relevant points	Resolved. Paul agrees with George's idea regarding transferring bits of the project stages to the training programme	Joint decision-making, agreement	George has idea of transferring relevant parts of consultancy.	Yes, idea taken forward.	programme
1	P	P&G	collaborating	short	Disagreement regarding the proposed project stages being the only relevant points	Resolved. Paul agrees with George's idea regarding transferring bits of the project stages to the training programme	Joint decision-making, agreement	Paul finds that process consultancy is most relevant.	Yes, idea taken forward.	programme
3	S	P&S, P&G	competing	medium	Paul and Sarah disagree regarding the use of cartoons.	Partly resolved. Sarah suggests the use of a process diagram for the website.	Involvement	Sarah suggests use of a process diagram.	Considered.	technical
3	P	P&G	collaborating	medium	George has doubts regarding the use of live chat due to attendance and	Resolved. Team agree to look into the option of using live chat.	Involvement	Paul suggests use of live chat for client engagement.	Considered.	technical

3	G	S&P	collaborating	medium	Disagreement regarding the number of events to promote the training programme.	Resolved. Template will be placed on website and completed at event.	Involvement, shared effort, shared responsibility.	George has idea of setting up a public event for the audit part of brochure and let participants deliver a consulting assignment.	Yes. Idea implemented in training programme.	programme
4	G	P&G	collaborating	medium	George disagrees with Paul on how to structure the training brochure.	Resolved.	Involvement, shared effort	George suggests customising the training programme for clients.	Yes. Public events restructured to provide standardisation and customisation.	programme
5	G	P&G	accommodating	medium	Paul disagreeing with approaching public tenders.	Resolved. Paul agrees (satisfies George's concerns).	Rotating leadership	George presents idea of how to approach public tenders to through membership organisation.	Yes. Idea considered at later stage	marketing
5	S	P&S	collaborating	short	Paul doubting relevance of graphic on website.	Resolved. Paul agrees following Sarah's explanation.	Joint decision-making, shared effort, involvement	Sarah suggests replicating menu on website.	Yes. Ideas regarding website structure implicated.	technical
5	P	P&S	collaborating	short	Paul doubting structure of graphic on website.	Resolved. Paul agrees following Sarah's explanation. (Gesture of George implicates that he agrees)	Joint decision-making, shared effort, involvement	Paul proposes reshuffling the images to make them more relevant and to build a story.	Yes. Ideas regarding website structure implicated.	technical

6	P	G&P	accommodating	medium	George being unsure about the optimisation of the training modules.	Partly resolved. George recognises the importance of operationalising.	Joint decision-making, agreement ("are we all agreed...")	Idea of modularising all the material.	Yes. Modularisation implemented.	programme
6	G	P&G	compromising	medium	George believes the strategy on how to approach relevant clients requires refinement.	Resolved. George agrees with Paul.	Joint decision-making	George has idea of bringing on commercial people to the network.	No.	marketing
7	P	S&P	collaborating	medium	Paul being unsure about meaning of Sarah's idea.	Unresolved. Paul and Sarah agree to discuss later.	Rotation to Sarah because of knowledge of website.	Paul emphasises need of aligning website with handbook. Sarah notes that some differences need to persist.	Yes. Modules in handbook and on website aligned.	technical
8	P	P&G	collaborating	medium	Paul disagrees with George on appropriateness of style of modules.	Resolved. Team moves on to new topic after generating ideas	Involvement, shared effort	Paul has the idea of letting other people write the training modules through crowdsourcing.	Yes. Contact with existing businesses established	programme
8	S	P&G	compromising	medium	Paul disagrees with George on appropriateness of style of modules.	Resolved. Team moves on to new topic after generating ideas	Involvement, shared effort	Sarah has the idea of generating a community of followers and asking contacts to write a module regarding business problems	Yes. Contact with existing businesses established	programme
8	G	P&G	collaborating	medium	Paul disagrees with George on	Resolved. Team moves on to new	Involvement, shared effort	George suggests linking into the	Yes. Contact with existing	programme

					appropriateness of style of modules.	topic after generating ideas		knowledge business.	businesses established	
9	P	S&P	collaborating	medium	Sarah being unsure about how the flyer will be filled out by businesses.	Resolved. Sarah and Peter agree to place flyer on website.	Involvement, shared effort	Paul suggests placing flyer on website for filling out by businesses.	Yes. Flyer placed on website.	marketing
9	S	S&P	collaborating	medium	Sarah being unsure about how the flyer will be filled out by businesses.	Resolved. Sarah and Peter agree to place flyer on website.	Involvement, shared effort	Sarah suggests to have a detachable bit on the flyer.	Not implemented. Flyer placed on website	marketing
9	P	P&G	collaborating	short	Paul disagrees with George's concern regarding filling out the form.	Resolved. George agrees with Paul.	Rotating leadership	Paul has the idea of making the most relevant organisations an offer.	Yes. Implemented in company marketing approach	marketing
9	S	P&S	avoiding	short	Paul sees suggestions of Sarah as unimportant	Unresolved. Paul suggests deferment.	Involvement	Sarah has technical idea for Paul,	No.	technical
10	P	P&G	collaborating	medium	Paul provides explanation on how the schedule will be developed.	Resolved. George and Paul agree on implementing a planning day.	Shared effort, involvement	Paul has idea of making templates for training stages of creating new venture.	Yes. Templates created.	programme
11	C	P&G, S&G	competing	medium	George disagrees with Paul on whether reaching the trustees is a good idea.	Unresolved. George seems dissatisfied with the result but wants to move on.	Involvement	Claire suggests getting a list of the trustees and linking the connections.	No. Idea not taken forward.	marketing
11	C	C&G	collaborating	medium	George believes potential companies could be competitors.	Resolved. Paul suggests researching the issue. Paul moderates.	Involvement	Claire has the idea of approaching recruitment or other companies.	Yes. Research conducted on potential multipliers	marketing

13	S	P&S	compromising	short	Sarah disagrees with Paul regarding the simplicity of putting the table together.	Resolved. Both agree on how to resolve the issue.	Joint decision-making, Shared effort	Sarah has the idea of marketing the front page of the brochure and placing the table.	Yes. Team agrees on implementation.	marketing
13	S	S&G	collaborating	medium	Sarah concerned about amount of time it takes George to market brochure.	Resolved.	Joint decision-making, shared effort, involvement	Following up charities with letters.	Yes. Implemented.	marketing
13	S	S&G	collaborating	medium	Sarah concerned about amount of time it takes George to market brochure.	Resolved.	Joint decision-making ("Paul and I think...")	Suggests implementing a December date.	Yes. Implemented.	marketing
13	G	S&G	collaborating	medium	Sarah concerned about amount of time it takes George to market brochure.	Resolved.	Involvement	Suggests having a series of dates	Yes. Implemented.	marketing
13	S	S&G	collaborating	medium	Sarah concerned about amount of time it takes George to market brochure.	Resolved.	Shared responsibility	Suggests putting up a January event date and giving a discount	Yes. Implemented.	marketing
15	P	C&P, C&G	collaborating	medium	Claire disagrees with novelty of business approach.	Resolved. Paul and George agree with leveraging through a retail approach.	Involvement, rotating leadership	Paul suggests setting up an event with the company logo.	Yes. Implemented.	marketing
	C	G&P	collaborating	medium	Paul disagrees with cooperating with other consultancies due to risk of 'pinching'	Partly resolved.	Involvement, rotating leadership	Claire suggests looking at clusters of retail	Yes. Implemented.	marketing