DOCTOR OF PHILOSOPHY

Trust in leader-follower relationships

how and when trust building enhances dyadic and organisational outcomes

Alison Legood

2013

Aston University

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TRUST IN LEADER-FOLLOWER RELATIONSHIPS: HOW AND WHEN TRUST BUILDING ENHANCES DYADIC AND ORGANISATIONAL OUTCOMES

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THESIS SUMMARY

Guided by theory in both the trust and leadership domains, the overarching aim of this thesis was to answer a fundamental question. Namely, how and when does trust-building between leaders and followers enhance leader-member exchange (LMX) development and organisational trust? Although trust is considered to be at the crux of the leader-follower relationship, surprisingly little theoretical or empirical attention has been devoted to understanding the precise nature of this relationship. By integrating both a typology of trustworthy behaviour and a process model of trust development with LMX theory, study one developed and tested a new model of LMX development with leader-follower trust-building as the primary mechanism. In a three wave cross-lagged design, 294 student dyads in a business simulation completed measures of trust perceptions and LMX across the first 6 months of the LMX relationship. Trust-building was found to account for unexplained variance in the LMX construct over time, while controlling for initial relationship quality, thus confirming the critical role of the trust-building process in LMX development. The strongest evidence was found for the role of integrity-based trust-building behaviour, albeit only when such behaviour was not attributed to insincere motives. The results for ability and benevolence-based trustworthy behaviour revealed valued insights into the developmental nature of trustworthiness perceptions within LMX relationships. Thus, the pattern of results in study one provided a more comprehensive and nuanced understanding of the dynamic interplay between trust and LMX. In study two, leader trust-building was investigated cross-sectionally within an organisational sample of 201 employees. The central aim of this study was to investigate whether leader trust-building within leader-follower relationships could be leveraged for organisational trust. As expected, the trust-building process instigated by members in study one was replicated for leaders in study two. In addition, the results were most consistent for benevolence-based trust building, whereas both integrity- and ability-based trust-building were moderated by the position of the leader within the organisation's hierarchy. Overall, the findings of this thesis shed considerable light on the richness of trusting perceptions in organisations, and the critical role of trust-building in LMX development and organisational trust.

Key words: Trust, leadership, Leader-Member Exchange (LMX), trustworthy behaviour, trustworthiness

ACKNOWLEDGEMENTS

First and foremost I would like to thank my supervisor Dr Geoff Thomas for introducing me to the world of research and for being there as a great mentor and motivator. His support, words of encouragement and guidance have been invaluable throughout this process. I think we had a very high quality LMX relationship!

I would also like to thank my second supervisor Dr Claudia Sacramento for her advice and words of wisdom along the way. Many people at Aston have endured the highs and lows of PhD life over the past 3 and a half years with me and I am indebted to them all. A special thank you goes to Jo Lyubovnikova for all her kind words over the years and for never saying she was too busy when I appeared at her office door. A wider thank you goes to everyone at the Work and Organisational Psychology group for the stimulating and supportive environment the group provides. In particular thanks to Jenny, Lynne and Zabin for their positivity and help over the years. Thank you to all my friends at Aston, past and present, for all the fun along the way, especially Ieva, Anna, Margarita, Kristin, Charmi, Fran, Nishat, Danny, Tom and Jen.

I would also like to thank all of my family and friends for their continued love and support. A special thank you is for my parents, Peter and Nicola, for their encouragement in everything I do. In particular thanks to my Dad for giving me the final push to decide to start this journey in the first place. My biggest thank you goes to my partner Allan for always making me smile, no matter how stressed I was.

Finally I dedicate this thesis to my brother Simon, because he would have been proud.

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CHAPTER ONE

"Trust men and they will be true to you; treat them greatly and they will show themselves great."

Ralph Waldo Emerson

1.1 Introduction

In many ways, Emerson's quote captures the essence and dynamics of trust in relationships. Trust is widely considered to be a necessary, if not sufficient, condition of successful relationships (Fletcher, Simpson, & Thomas, 2000). Important questions remain, however, about why trust is so critical, and what can be done to develop trust in relationships. Emerson's quote alludes to the importance of interpersonal treatment and the norm of reciprocity as the driving force for trust-building. Undoubtedly the importance of 'treating others greatly' is a truism, but surprisingly little is known about what this actually entails. That is, what kinds of treatment are readily translated into interpersonal trust? This thesis will seek to answer this question by focusing on a particularly critical relationship – the leader-follower relationship. Although leaders may ascribe to the wisdom bestowed by Emerson, in reality many fall short and fail to cultivate trusting leader-follower relationships. This failure is likely due, in part, to the inherent ambiguity surrounding what constitutes effective trust-building behaviours in leader-follower relationships. Therefore, the overarching aim of this thesis is to shed light on the nature of successful trust-building, and how and when such trust-building efforts culminate in enhanced relationship quality, and more broadly organisational trust.

A discussion of trust and leadership becomes particularly germane in situations which are characterised by vulnerability. One key context is that of contemporary organisations which are often characterised by complex, fast changing structures wherein the pattern of interdependencies and the nature and extent of uncertainty has become altered (McEvily, Perrone & Zaheer, 2003). This leads to enhanced dependency on and increased vulnerability to the decisions and actions of others. A willingness to be vulnerable is rooted in the definition of trust provided by Mayer, Davis and Schoorman (1995) making the conditions within organisations significantly reliant upon trust for effective functioning.

Trust is considered the "social lubricant that promotes cooperation between group members, sustains social order and permits beneficial long-term exchanges that otherwise might not occur" (Simpson, 2007, p. 1). It is widely acknowledged that leaders play a principal role in establishing and developing trust in teams and organisations (Creed & Miles, 1996; McAllister, 1995). Many leadership scholars view trust as a defining component of leadership (e.g., Shamir & Lapidot, 2003). Indeed, Solomon (1996) asserts that "….leadership is an emotional relationship of trust" (p. 80) as

trust lays the foundations upon which successful interpersonal relationships are built (Holmes & Rempel, 1989). Kelley et al. (2003) suggest that interpersonal relationships involve the configuration of high interdependence, a blend of rules for coordination and exchange that sustain interdependence, and moderately corresponding interests- all features that are inherent to leader-follower relationships within organisations.

A vast and diverse literature on the topic of leadership exists. This popularity is likely attributable to the belief that leadership effectiveness plays a key role in organisational success (Druskat & Wheeler, 2003), and there is considerable empirical evidence to support this view (e.g. (DeRue, Nahrgang, Wellman & Humphrey, 2011; Judge, Piccolo, & Illies, 2004; Kaiser, Hogan & Craig, 2008; cf. Meindl, 1985). Indeed, Hogan and Kaiser (2005) refer to leadership as a "…vastly consequential phenomenon" (p. 1), with effective leadership, organisations can thrive and prosper. Leadership can be defined as "a process of social influence through which an individual enlists and mobilizes the aid of others in the attainment of a collective goal" (Chemers, 2001 p. 376). A dominant feature in virtually all definitions of leadership, including the widely accepted one above, is the view that leaders deal in the currency of influence (House & Javidan, 2004; Martin, Epitropaki, Thomas & Topaka, 2010; Yukl, 2010). Within the literature there is no agreed upon framework driving leadership research and its multidisciplinary nature makes the task of conceptual and empirical synthesis difficult (Millward, 2005). A plethora of paradigms examining leadership processes exist, these range from the traditional trait based view (Stogdill, 1948) to contingency theories of leadership (Fiedler & House, 1994). Of the various perspectives available, the relationship-based approach to leadership provides a particularly good vantage point for examining trust between leaders and followers because both trust and leadership are quintessentially dyadic phenomenon (Holmes & Rempel, 1989; Graen & Uhl-Bien, 1995; Uhl-Bien, 2006).

Although trust features within a number of other leadership theories, the focus is typically upon how the leader inspires the follower's trust (e.g., transformational leadership). Furthermore, these theories often detail generalised behaviours and traits which are provided to all followers. Such an approach neglects the dyadic process and fails to capture the complexities of trust which occurs between the two parties. In contrast, relationship-based approaches to leadership are specifically located at the dyadic level and look to explain the interpersonal dynamics of leader-follower relationships in work groups (Dansereau, Graen & Haga, 1975; Graen & Cashman, 1975). Despite this, to date, limited empirical research has explored the processes of how trust is cultivated in these leader-follower relationships. This is a key principle of this thesis and I will provide a more detailed rationale for adopting this dyadic approach in both this chapter and chapter two.

According to the sociofunctional perspective (see Cotrrell, Neuberg & Li, 2007) the essence of all human social interactions and relationships has its foundations in trust. Typically, trust theorists

adopt the dyadic approach to trust (Holmes & Rempel, 1989; Rempel, Holmes & Zanna, 1985). Within this interpersonal perspective, trust is a psychological state or orientation of an actor (the trustor) toward a specific partner (the trustee) with whom the actor is in some way interdependent. Kenny (1994) observed that interpersonal judgements are overwhelmingly a function of the relationship between the perceived and the target. Trust, as a form of interpersonal judgement, involves a unique relationship between the two parties. Therefore, according to Kenny (1994) trust is not just a function of the individual target but a dyadic consideration.

Trust has risen in prominence within the organisational literature and significant pockets of theory and research have emerged. Nevertheless, when compared to the rich literature on leadership, trust may be considered the underdog. Surprisingly, the domain of trust is not characterised by widespread empirical study. Simpson (2007) contends that the study of trust has been constrained by several interrelated factors; all of which have often impeded empirical study. Most prominently, the complex and multidimensional nature of the construct, which is likely to be construed differently across situations, has negatively impacted research efforts. Furthermore, confusion relating to the accurate conceptualisation of trust makes interpretation difficult. Such issues limit the scope for generalising to a wider theory of trust.

Despite such conceptual problems, robust relationships have been found between trust and leadership and a number of important organisational outcomes. Research has consistently shown that the trust which exists between a leader and a follower is linked to increased job performance, organisational citizenship behaviour and negatively related to counterproductive work outcomes such as intention to quit (for meta analytic reviews, see Colquitt, Scott & LePine, 2007; Dirks & Ferrin, 2002). As a result, considerable knowledge has accumulated concerning the correlates of trust in leadership (Schaubroeck, Lam & Peng, 2011). Furthermore, research has identified critical antecedents as well as both proximal and distal outcomes of trust. Nevertheless, despite such progress the insights gained are rather disjointed as little is known about how and why interpersonal trust is built and maintained (Simpson, 2007).

How and when does leader-follower trust develop?

Given the relevance of leader-follower trust to important organisational outcomes it is somewhat surprising that the trust-building literature is not more established. Scholars and practitioners alike have been interested in identifying the mechanisms through which trust can be developed between a leader and follower as well as the moderating factors which either facilitate or impede trust-building efforts (e.g., Gillespie & Mann, 2004; Kouzes & Posner, 1995; Roberts & O'Reilly, 1974; Whitener, 1997). However, as observed by Burke, Sims and Lazzara (2007) there currently exists a paucity of research actually testing models of trustworthy behaviour. Addressing

this gap in knowledge constitutes the main aim of this thesis. Across a programme of research this thesis will examine how and when trust develops within leader-follower relationships, and in doing so will contribute to both the trust and leadership literature.

In order to achieve this aim it is important to identify behaviours which are likely to build trust between dyadic parties. The model of trustworthy behaviour proposed by Whitener, Brodt and Korsgaard (1998) provides a strong theoretical foundation and is considered to be one of the most promising models of trust-building, but has yet to be fully tested empirically (Burke et al., 2007). Within their typology, Whitener et al. (1998) identify five core behavioural markers of trustworthy behaviour which are proposed to build leader-follower trust. In order to significantly advance our understanding of trust-building, however, it is important to not only identify which behaviours may be responsible for building trust but also to understand the underlying process of how such behaviours enhance leader-follower trust. To do so it is necessary to consider models of trust that are more explicitly developmental in nature.

One such process model of trust that has received considerable empirical support is the Integrative Model of Organisational Trust (Mayer et al., 1995; Schoorman, Mayer & Davis, 2007). In recent years, Mayer et al.'s (1995) model has become the dominant model of trust in the literature. Its popularity is likely due to the theoretical strength of its conceptualisation and the consideration of trust development within the model. Mayer et al. (1995) clearly outline a fine grained model of how trust unfolds between two trusting parties, including both antecedents such as trustworthiness perceptions (i.e., ability, integrity and benevolence), and risk taking behaviours as outcomes. Furthermore, the authors describe a feedback loop illustrating an iterative process, leading from trustworthiness to interpersonal trust and then outcomes of trust, which in turn inform subsequent trustworthiness beliefs. Thus, Mayer et al.'s (1995) model is particularly well-suited for addressing the process of trust development in leader-follower relationships. Accordingly, within this thesis a causal chain is proposed between trust-building behaviours and leader-follower trust, mediated by updated trustworthiness perceptions. Both theoretical and empirical research exists to support this trust-building process (Mayer et al., 1995; Whitener et al., 1998). The addition of Mayer et al.'s (1995) trustworthiness dimensions to Whitener et al.'s (1998) framework serves to synthesise these two models of trust and allows for a more prescriptive account of how leader-follower trust can be cultivated. Therefore, a further contribution of this thesis is to not only provide a robust test of a model of trustworthy behaviour but also to extend this framework significantly by integrating it with a model of trust development.

As well as providing a model of how trust can be built within leader-follower relationships, another important aim of this thesis is to consider certain boundary conditions of this trust-building process. According to Dirks and Ferrin (2002), attribution processes play a key role in trust

development. Individuals within dyadic relationships are motivated to understand the causes behind others behaviour and form impressions of trustworthiness based upon their interpretation of observed behaviour (Heider, 1958). Trustors are likely to make attributions about the motives behind a trustee's trustworthy behaviour prior to updating their trustworthiness perceptions. It is proposed that attributions relating to insincerity motives will be particularly relevant when trustworthiness is under consideration. As such, attributions are proposed to moderate the link between trustworthy behaviour and trustworthiness thus influencing when engagement in such behaviour leads to increased interpersonal trust.

The role of trust-building in LMX development

As mentioned previously, the trustworthy behaviours described by Whitener et al. (1998) and the process model of trust provided by Mayer et al. (1995) portray trust as a dyadic level phenomenon occurring within the context of important work relationships. Dyadic relationships are at the heart of the Leader-Member Exchange (LMX) Theory of leadership, a dominant relationship-based leadership approach. Indeed, LMX is the only leadership perspective that assumes mutual influence and a unique relationship between leaders and followers (Graen & Uhl-Bien, 1995). As such it is an approach that is uniquely suited for examining the trust-building process in leader-follower relationships. Unlike more leader-centric approaches to leadership, LMX theory has advanced our understanding of leadership by considering the leader-follower relationship within the leadership process. By emphasizing the nature and the quality of the relationship between leaders and followers, this theory of leader-member exchanges was the first to stress that leadership was not just a top-down process, but a reciprocal relationship in which leaders and followers mutually influence each other (see Dienesch & Liden, 1986; Graen & Uhl-Bien, 1995; Martin et al., 2010). Drawing upon principles of social exchange (Blau, 1964), the central concept of LMX theory is that leadership occurs when leaders and followers are able to develop effective relationships that result in incremental influence and thus gain access to many of the benefits these relationships bring (Graen & Uhl-Bien, 1995). LMX relationships fall along a continuum ranging from high to low quality (Dienesch & Liden, 1986; Graen & Scandura, 1987) and it has been empirically shown that the nature of this relationship can largely determine a number of important work outcomes such as an employee's satisfaction, organisational citizenship behaviour, performance and intention to remain within an organisation (see Dulebohn, Bommer, Liden, Brouer & Ferris 2012; Gerstner & Day, 1997; Ilies, Nahganag & Morgeson, 2007; Rockstuhl, Dulebohn, Ang & Shore, 2012 for meta-analytical review). Therefore, attempts to examine what influences this relationship and identify ways to improve it are highly beneficial to both the individual and the organisation.

A core tenet of LMX theory is the concept of a 'developed' role which Dienesch and Liden (1986) propose is defined over time through a number of processes. The duration of this 'development

period' is a point of contention identified and investigated within this thesis. Conflicting views regarding the (in)stability of LMX quality exist. On the one hand prospective studies have described the LMX relationship as stable over time (Bauer & Green, 1996; Liden, Wayne & Stilwell, 1993; Nahrgang, Morgeson & Ilies, 2009). However, the moderately sized correlations used to infer such stability could also be considered as evidence of instability as the majority of variance in later LMX is not explained by earlier levels of LMX. This provides the impetus to explore this developmental process more thoroughly in this thesis.

Although there is much theorising related to how leadership relationships develop (Graen & Scandura, 2000; Graen & Uhl-Bien, 1995; Hogg, 2001; Liden, Sparrowe & Wayne, 1997), we still know very little about these processes (Uhl-Bien, 2006) or the mechanisms involved. Theories of LMX development, such as the Leadership Making Model (Graen & Uhl-Bien, 1995) have identified a leader delegation-follower competence pathway. However, of the handful of prospective studies available on LMX development the relative influence of performance- and delegation-based variables have been largely confined to the very early stages of development (Dienesch & Liden, 1986). Martin, Guillaume, Thomas, Lee and Epitropaki (2013) observed in a recent meta-analysis on LMX that for the most part, antecedents of LMX development have largely been assumed and not robustly tested longitudinally, and therefore making causal inferences is problematic.

A key objective of this thesis is to challenge the assumption of relationship stability in the LMX relationship over time and identify variables critical to the process of LMX development. LMX theory is described as a trust-building process (Bauer & Green, 1996), thus placing interpersonal trust at the heart of this leadership approach. Although trust has been advanced as fundamental to LMX relationships (Scandura & Pellegrini, 2008) studies investigating how trust functions and is built within this critical working relationship are yet to appear, despite numerous authors alluding to the need for such research (Erdogan & Liden, 2002; Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden, et al., 1993; Martin et al. 2010; Yukl, 2010). As observed by Bauer and Green (1996) research is needed which explicitly tests the role of trust rather than just infers its presence and importance.

A primary intention of this thesis is to address this gap in the literature by conceptualising and testing an alternative trust-building pathway to LMX development. As such, the thesis will provide the first empirical test of how trust is developed between leaders and followers with the intention of advancing LMX theory. A case is made for the critical developmental role of trust in determining LMX quality over time by drawing upon the process of trust-building previously outlined. The unique dyadic perspective of LMX theory and the assumptions of LMX research closely align with the aforementioned theories of interpersonal trust (Brower, Schoorman & Hwee Hoon, 2000). These two streams of research, however, appear to have developed largely in parallel; as a result theoretical integration is in its infancy (Brower et al., 2000).

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Within this thesis a new model of LMX development is proposed which extends Role Theory (Graen, 1976) through articulating the mechanisms (behaviours), beyond the delegation-performance pathway, involved in developing LMX quality over time. Importantly, this will be tested using a longitudinal, cross-lagged design. A benefit of such a design feature is that it allows for this research to test the developmental process of trust-building and LMX whilst controlling for baseline levels of LMX quality. It is rare for LMX researchers to measure constructs across time. Indeed, Martin et al. (2013) found in their review of the literature only five studies which had measured LMX at different multiple times. This lack of longitudinal research is surprising and illustrates a pertinent critique of the LMX literature - the overreliance on cross-sectional designs. Furthermore, within the trust literature, most studies test trust as a static construct (e.g., Glaeser, Laibson, Scheinkman & Soutter, 2000). Therefore, a considerable strength of this research, and intended contribution to both the trust and leadership literatures will be the apriori temporal sequencing of the trust building process, allowing this research to map the development of LMX. An additional contribution of this research will be to test the development of trust across time. Mayer et al. (1995) integrated a feedback loop within their model thus portraying trust as a temporal phenomenon which is highly dynamic within an interpersonal relationship. Few studies have however investigated the development of trustworthiness perceptions within a developing interpersonal relationship.

Taking a Dyadic Approach to leader and follower trust-building efforts

Within their taxonomy of trustworthy behaviour, Whitener et al. (1998) place the responsibility for building trust firmly in the hands of the manager. While this approach has some merits, it fails to account for the possibility that followers may also engage in trust-building efforts as a means of improving their relationship with the leader. Although conceptualised as a dyadic, two-way exchange process, LMX theory also typically overlooks the role of the member and their involvement in their relationship. An implication of this is that members are often portrayed as relatively passive; leaving the responsibility for relationship development largely with the manager. A key contribution of this research to both the trust-building and LMX literatures is that it will examine the trust-building behaviour of both leaders and followers. In doing so, it will be possible to see whether followers are able to influence relationship quality through trust- building behaviour. Such a research endeavour constitutes a particularly novel contribution of this thesis as a focus on the member is an area which is currently limited in scope across both bodies of literature.

The role of leader trust-building in leveraging organisational trust

A further aim of this research is to identify the ingredients which facilitate organisational trust. The trust employees have in their leaders (or managers) has been identified as a critical determinant of trust within the workplace (Lester & Brower, 2003). Interpersonal trust is developed,

maintained and violated within the context of the organisation (Searle, Weibel & Den Hartog, 2011). The objective of the first study is to explore the development of leader-follower trust, specifically within developing LMX relationships. The intention of the second study is to broaden the research scope to investigate the impact of such interpersonal trust-building processes within the wider context of the organisation. Drawing upon theoretical and empirical evidence, it is proposed that immediate managers, by virtue of their status and proximity to the employees, act as a critical referent for determining employees' trust towards the organisation. To date, the potential to leverage leader-follower trust for organisational trust, based upon leader trust-building efforts has not been tested. By adopting a multi-foci perspective, this thesis looks to contribute to the organisational trust literature, an area currently stifled by a lack of empirical research on the determinants of organisational trust. Through examining leader trust-building behaviour it will be possible to identify which trustworthy behaviours are particularly critical for determining organisational trust.

In addition this research will attend to important boundary conditions, namely the moderating role of managerial position on the link between trustworthy behaviour and organisational trust. This research will contribute to our understanding of how trust-building efforts differentially influence organisational trust as a function of the manager's standing within the organisation. As such, this thesis responds to a pertinent critique within the leadership domain concerning the tendency to test leadership phenomenon at one level of an organisation and assume equivalence in perceptions across all employees (DeChurch, Hiller, Murase, Doty & Salas, 2010). This research will examine and compare perceptions of managerial trustworthy behaviour at levels beyond the lower echelons of the organisation (lower level managers), which are typically the focus of leadership research efforts. In doing so this research will investigate whether the immediate manager really is an agent for the organisation and therefore if the potential to leverage leader-follower trust for organisational trust differs as a function of their position.

Finally, the focus on building leader-follower and organisational trust is likely to have important practical implications for leaders and followers in organisations. In the wake of the recent global financial crisis, coupled with widespread redundancy and numerous prominent examples of unethical leadership, many organisations are findings themselves in a state of crisis and uncertainty. Such conditions have led to trust within organisations being recently described as at 'an all-time low' (Hope-Hailey, Searle & Dietz, 2012), making research investigating the role of trust-building in leadership timely, warranted and potentially highly impactful for theory and practice. The insights obtained are intended to inform leaders, organisations and followers through clearly articulating ways in which to facilitate trust and support trust-building efforts within the workplace.

1.2 A summary of the objectives of the thesis and intended contributions to knowledge

To summarise, this thesis has identified five core objectives. These will be briefly outlined along with an overview of the intended theoretical and methodological contributions of this thesis.

1. The main objective of this thesis is to provide a robust test of the trust-building processes involved in the development of trust between leaders and followers. Drawing upon Whitener et al.'s (1998) taxonomy of trustworthy behaviour and guided by the Integrative Model of Organisational Trust (Mayer et al., 1995) the intention of this research is offer a more prescriptive account of the causal processes and mechanisms involved in trust building. Firstly these processes will be explored within the context of developing LMX relationships. Following this the potential to leverage such trust-building processes at a leader-follower level as a determinant of organisational trust will be investigated. The potential implications of this research to the trust literature are twofold. Firstly, this thesis looks to contribute to the trust-building literature through testing and extending a prominent model of trustworthy behaviour. Secondly, this research intends to provide theoretical insights relevant to the organisational trust literature through identifying leader trustworthy behaviour as a potential determinant of organisational trust.

2. A secondary objective of this thesis is to propose a new model of LMX development, through the integration of LMX with trust-building theory. Although the idea that trust is relevant to LMX is not new, surprisingly no empirical studies have examined both of the constructs rigorously through a prospective research design. This thesis will challenge the prevailing assumption currently present within the LMX literature of relationship stability as well as provide a robust test of the critical developmental role of trust-building processes for determining LMX quality over time. The intention of this research is to advance LMX theory through the amalgamation of LMX with the related domain of trust which is proposed to inform both literatures and contribute to theoretical synthesis.

3. An additional objective of this research is to explore the trust-building process as it applies to both leaders and followers. In doing so, this research will not only be able to establish whether trust-building efforts can facilitate relationship quality as well as drive organisational trust perceptions, but will also identify whether both the leader and follower engage in such behaviours. The primary focus of both the trust-building and LMX literature is upon the leader. This research will therefore contribute to our understanding of how much the follower can also be an agent of trust-building, thus potentially advancing both LMX theory and offering some unique insights for trust-building research.

4. An ancillary aim is to also explore relevant boundary conditions. Firstly, the role of attributions will be tested to determine whether such psychological processes moderate the mediating link between the observation of trustworthy behaviour and trustworthiness perceptions within the leader-follower relationship. In doing so, this research attends to a gap in the literature by addressing second generation research questions concerning how and when LMX quality develops (see Erdogen & Liden, 2002; Graen & Uhl-Bien, 1995; Martin et al., 2010). Furthermore, within the second study, the organisational moderator of managerial position is tested. The present boundary condition could have particularly important implications for how researchers currently conceptualise trusting perceptions within organisations. Through investigating the influence of managerial trustworthy behaviour at various levels, it will be possible to determine if there is equivalence across the organisation. Or alternatively whether different facets of behaviour and dimensions of trustworthiness are more or less important for determining organisational trust depending upon where the manager is situated within the organisational hierarchy. As such, this research should have important implications for both theory and practice.

5. A final overarching contribution of this thesis is that it integrates three dominant theoretical frameworks; the integrative model of trust (Mayer et al. 1995), a taxonomy of trustworthy behaviour (Whitener et al., 1998) and LMX theory within one comprehensive conceptual model. In doing so, valuable insights can be obtained which are intended to have implications for both the leadership and trust literature. Importantly, not only does this thesis look to extend each model significantly in isolation as described above, theoretical synergy is also achieved through the combination of the three. Taken together, each model provides a unique perspective through which to investigate how trust is built within interpersonal working relationships. Whitener et al.'s (1998) model provides the behaviours, the finer distinctions of trust and its development are delineated by Mayer et al. (1995) and the LMX relationship provides the context. Furthermore, the insights obtained at this dyadic level are integrated within the wider context of the organisation and this should contribute to our understanding of trust-building process when different managers are the target referent.

1.3 Thesis overview

Having outlined the objectives of the thesis and how it intends to extend current theory and research in chapter one, the central aim of chapter two is to provide a literature review of both the trust and leadership domain. The construct of interpersonal trust will be introduced and the dominant trust and leadership frameworks of this thesis will be identified. A discussion of the Integrative Model of Organisational Trust (Mayer et al., 1995) will be followed by an overview of the Leader-Member Exchange (LMX) Theory. This chapter will end with the integration of these two theoretical frameworks and a discussion of social exchange theory which provides a theoretical basis for both models. Within chapter three the mediating role of trust within leadership is discussed and the trust-building literature reviewed. A typology of trustworthy behaviour is then introduced (Whitener et al., 1998) and links are drawn between this framework and the model of trust adopted within this thesis. Chapter three will also provide theoretical support for the relevance of the independent, moderating, mediating and dependent variables which make up the full conceptual model. In addition, a series of theoretical hypotheses will be proposed. Chapters four and six will detail the methodology adopted for study one and study two respectively. These chapters will include an overview of the subjects, procedure, data collection methods, results and a discussion of the findings. A review of the organisational trust literature is provided within chapter five. Distinctions will be drawn between interpersonal and organisational trust and leader trustworthy behaviour will be identified as a key linking pin. A second conceptual model is proposed along with related hypotheses which build upon the findings from study one and importantly advance the research to the broader more distal referent of trust in the organisation. A general discussion is provided within chapter seven. The research findings of both studies will be reflected upon and this will be followed by a discussion of the significance and contributions of the research findings to the literature. Also within this chapter practical and theoretical implications will be highlighted, followed by a discussion of the strengths and limitations of the research. The objectives of this thesis will be summarised again and future research directions will also be identified. The chapter will close with a conclusion for the research.

CHAPTER TWO: INTERPERSONAL TRUST AND LEADER-MEMBER EXCHANGE (LMX) THEORY: A LITERATURE REVIEW

2.0 Chapter Summary

Within this chapter two of the key theoretical frameworks underlying this thesis are described. The chapter begins with an introduction to the trust domain. A literature review is then provided which described the different definitions, conceptualisation and models of trust found within the literature. The Integrative Model of Organisational Trust (Mayer et al., 1995) will then be reviewed and justification for adopting this theoretical framework is provided. Within the following section the role of trust and leadership is discussed and the prevalence of trust within leadership models is considered. A literature review of Leader-Member Exchange (LMX) Theory follows and gaps in knowledge are identified. The next section is concerned with the integration of these two frameworks and points of conceptual and theoretical overlap are highlighted. A new model of LMX development is introduced and the chapter closes with some early proposals regarding the role of trustworthy behaviour and the trust-building literature.

2.1 The trust domain

As a social construct, trust has been described as the variable that has perhaps the strongest influence on interpersonal and group behaviour (Ferrin, Bligh & Kohles, 2008). Many scholars acknowledge the critical role of trust as a fundamental ingredient to any social interaction. With this in mind it would be fair to assume that the literature on this topic would have flourished. However, as Gambetta (1988) observes often researchers allude to its importance, only to move on to deal with less intractable matters.

On the surface trust may seem intuitively simple to understand in that you either do or do not trust someone. Though, as discussed within this chapter, in reality a great deal is involved in the process of trust between two people. As eloquently noted by Deutsch (as cited in Simpson, 2007), a founder of modern theory and research on trust, "trust involves the delicate juxtaposition of people's loftiest hopes and aspirations in relation to their deepest worries and darkest fears" (p.1). Such an observation captures the quintessential features of interpersonal trust but also alludes to its multifaceted nature. Trust is a highly complex phenomenon which is characterised by both multilevel (individual, group, organisation) and multiple causal role considerations (trust as a cause, outcome and moderator). As such, Rousseau, Sitkin, Burt and Camerer (1998) refer to trust as a 'messo' concept, integrating micro level psychological processes and group dynamics with macro level organisational arrangements.

The number of uses and meanings ascribed to trust within the literature exemplifies the complexity involved in the study of trust. Another pertinent issue concerns the tendency of researchers to operationalise trust differently across studies, leading to notable confusion as to its conceptualisation. Although some established assumptions prevail, the literature is still quite fragmented across many topics, in part due to the adoption of different disciplinary lenses. For example, no universally accepted scholarly definition of trust exists. Clear discrepancies in approaches are particularly salient in the discussion of the dimensional nature of trust and distrust (Lewicki, McAllister & Bies, 1998; Sitkin & Roth, 1993). As illustrated, there often exists a lack of synthesis in contemporary trust research; nevertheless there are encouraging points of agreement (Rousseau et al., 1998). These include the common belief that trust is important for determining cooperative behaviour (Gambetta, 1988) and for promoting adaptive organisational forms such as network relations (Miles & Snow, 1992). Furthermore, across disciplines researchers fundamentally appear to agree on risk and uncertainty as critical conditions for the emergence of trust (Rousseau et al., 1998). The nature and extent of such conditions of trust vary with interdependence levels and this constitutes another point of convergence in views across scholars.

2.1.1 Defining trust

Trust has been identified as one of the most frequently examined constructs in the organisational literature (Bunker, Alban & Lewicki, 2004) and a myriad of definitions of trust now exist (Burke et al., 2007). Just as the accurate conceptualisation of trust has acted as a serious impediment to collective efforts to advance the study of trust (Pfeffer, 1993), the lack of consensus regarding the correct definition has also caused confusion. As Hosmer (1995,) observed "there appears to be widespread agreement on the importance of trust in human conduct, but unfortunately there also appears to be equally widespread lack of agreement on a suitable definition of the construct" (p. 380).

Different operational definitions are found within the literature, which often reflects the conceptualisation of trust as multidimensional. Various scholars posit subcategories of trust when defining the construct. McAllister (1995) suggests there are two bases of trust which are driven by different antecedents. The first form is termed cognitive-based trust which is grounded in cognitive judgements about another's reliability and competence. The other base is referred to as affective-based trust which is founded upon affective bonds among individuals (Bigley & Pearce, 1998). Taking a similar approach, Cummings and Bromiley (1996) also included a consideration of behavioural-based trust as well. Most definitions of trust have a common conceptual core (Rousseau et al. 1998). Two dominant definitions emerged in the mid to late 1990's with Mayer et al. (1995) defining trust as the "willingness to be vulnerable to the actions of a trustee based on the expectation that the trustee will perform a particular action, irrespective of any monitoring or control mechanism"

(p. 712). Similarly, Rousseau et al.'s (1998) cross-discipline review defined trust as a "psychological state comprising the intentions to accept vulnerability based on positive expectations of the intentions of another" (p. 395). Both definitions have two primary components: the intention to accept vulnerability and positive expectations (Colquitt et al., 2007), although Mayer et al. (1995) frame these expectations as facets of trustworthiness (i.e., attributes of the trustee which inspire trust). Note that this distinction between trustworthiness and trust will be discussed in more detail in the following section.

Within the present thesis trust will be defined using the definition provided by Mayer et al. (1995). There is general consensus among scholars that vulnerability is an essential precondition for trust (Bigley & Pearce, 1998; Korsgaard, Brodt & Whitener, 2002; Rousseau et al. 1998). The notion of vulnerability is embedded directly within this definition and there is evidence to suggest that defining trust as a willingness to be vulnerable has merit (Mayer & Davis, 1999). With the increasing complexity of organisational arrangements levels of vulnerability between one another have become broader and deeper (Bigley & Pearce, 1998). Furthermore, empirical research supports this versatile definition. For example, Schoorman, Mayer and Davis (1996) found that the delegation of risky-tasks by veterinary doctors to hospital staff members was significantly driven by trust in that staff member. Using the same operationalization of trust, Davis, Schoorman, Mayer and Tan (2000) found in a longitudinal study within a restaurant chain that employee's willingness to be vulnerable to the general manager significantly influenced key outcomes due to higher trust.

2.1.2 Conceptualising trust

Early trust efforts were characterised by the lack of a clear differentiation among the factors which contribute to trust, trust itself, and the outcomes of trust. Some much needed conceptual clarity was provided by Mayer et al. (1995) in their Integrative Model of Organisational Trust. One of the reasons why this framework has been so influential is that the authors actually try to truly define what trust is (and what trust is not). The model clearly extricates trust from the factors which contribute to it in terms of antecedents, as well as identifying the outcomes of trust. Other models of trust, such as the one by McAllister (1995) do not explicitly distinguish between trust and it's antecedents. Mayer et al. (1995) differentiate between trust as a belief, as a decision, and as an action. This approach has since been adopted by a number of subsequent models (McKnight, Cummings & Chervany, 1998; Ross & LaCroix, 1996; Williams, 2001). Indeed in a recent paper, Dietz and Den Hartog (2006) found that the three key elements of trust extracted from the most quoted definitions of trust revolved around the Mayer et al. (1995) approach. Such a conceptualisation is mirrored by McEvily et al. (2003) who viewed trust as three necessary constituent parts made up of "an expectation, a willingness to be vulnerable and a risk-taking act" (p. 93), thus supporting the continued relevance of the conceptualisation of trust provided by Mayer et al. (1995).

The first form of trust described above relates to a subjective, aggregated and confident set of beliefs about the other party and one's relationship with him/her. Such beliefs result in the trustor assuming that the actions of the other will have positive consequences for oneself (Dietz & Den Hartog, 2006). This belief is often described as an assessment of the other party's trustworthiness (Mayer et al., 1995). For a long time this belief-expectation definition of trust largely dominated the literature (Dietz & Den Hartog, 2006). The confusion was brought about largely by the everyday connotations and uses of the word 'trust' where trust as a belief, decision and a resulting action were regularly conflated (Dietz & Den Hartog, 2006; Mayer & Davis, 1999). Although similar, these two constructs are now considered distinct with trustworthiness reflecting a quality that the trustee has, whilst trusting is something that the trustor does. An individual's perception of another's trustworthiness is now viewed as a strong predictor of the subsequent decision to trust (Mayer et al., 1995).

The second form of trust reflects the actual decision to trust the other party. A genuine state of trust exists when both an expectation of trustworthy behaviour and the intention to act based upon it are present (Dietz & Den Hartog, 2006). This decision to trust reflects a willingness to be vulnerable (Mayer et al., 1995; Rousseau et al., 1998), but only an intention to act (Dietz & Den Hartog, 2006). In order to demonstrate actual trust the trustor needs to engage in any of the trust-informed risk taking behaviours proposed by a number of different authors (Costa, Roe & Taillieu, 2001; Mayer et al., 1995; Sitkin & Pablo, 1992). Gillespie and Mann (2004) categorises such risk-taking behaviours into either a 'reliance' category, with related behaviour being the involvement in decision making or a 'disclosure' category with behaviours such as sharing important information as representing this type of risk (Dietz & Den Hartog, 2006). Engaging in an action of risk-taking behaviour constitutes the final part of the present conceptualisation of trust.

The clear differences provided by authors such as Mayer et al. (1995) between trust, antecedents to trust and trusting behaviour outcomes has provided clarity and structure to the literature. An increase in the operational definition of trust as a behavioural-intention, rather than a trustworthiness belief, has also been observed (Colquitt et al., 2007). Most models of trust however do not incorporate all three parts of trust into their conceptualisation. A failure to include actual trusting behaviour within models of trust is an area of contention within the literature as it often overlooked. In the case of Mayer et al. (1995) the critical role of risk is clearly specified in their model and trust is differentiated from its outcomes of risk-taking in the relationship. However the model is at times critiqued for a lack of specificity in the outcomes of trust (Burke et al., 2007) as they do not explicitly discuss risk-taking behaviours within their model.

2.1.3 Models of trust development

The psychological tradition of trust provides the basis for the majority of models on trust development. According to this perspective, scholars attempt to understand the complex, interpersonal states associated with trust, including expectations, intentions, affect and dispositions (Lewicki & Bunker, 1996). Accordingly, this psychological tradition emphasises cognitive and affective processes. The work by McAllister (1995) on interpersonal trust development within organisations provides evidence to suggest that cognition-based trust precedes affect-based trust. McAllister (1995) began to tease out the more dynamic nature of trust over time and helped to address a concern within the literature relating to the often static view of trust typically provided (Rousseau et al., 1998). One of the most prominent models to emerge in recent years is the Transformational Model of Trust Development proposed by Lewicki and Bunker (1996), founded upon the work of Shapiro, Sheppard and Cheraskin (1992). Within their theoretical framework the authors sought to conceptualise and measure trust development within interpersonal relationships. Different types of trust were identified and that the nature of trust itself was proposed to transform over time (Lewicki & Bunker, 1996). Three distinct dimensions of trust were outlined- calculus-based trust (CBT), knowledge-based trust (KBT) followed by identification-based trust (IBT). The authors proposed a developmental sequence wherein sufficient levels of the former base of trust provided a foundation for the subsequent trust dimension. CBT and KBT are believed to reflect the cognitive forms of trust identified by McAllister (1995) whilst IBT reflects more affective-based dimensions of trust, defined as 'relational trust' by Rousseau et al. (1998). Although the heuristic value of this framework is significant, the model remains largely untested.

In contrast, the Integrative Model of Organisational Trust provided by Mayer et al. (1995) has been the subject of substantial research attention. This model of trust is perhaps the most popular framework to fall within the psychological tradition, for some of the reasons already touched upon. Mayer et al.'s (1995) model provides critical insights into the finer distinctions of trust and is one of the few models to explicitly incorporate a feedback loop from the outcome of trusting behaviours to the factors of trustworthiness, thus also integrating trust development. The framework has been found to be a robust test of interpersonal trust and this is likely due to the conceptual strength of the model, which has been shown to be relevant for a number of different contexts and dyadic relationships (Schoorman et al., 2007). Early efforts to study trust were plagued by some of the conceptual issues outlined previously, many of which were addressed by the work of Mayer et al. (1995). This framework provides a dyadic interpersonal theory of trust in the context of organisations, thus highlighting the relevance of this trust framework for organisational research, and in particular research examining trust in leadership.

2.2 An Integrative Model of Organisational Trust

The Integrative Model of Organisational Trust (Mayer et al., 1995) represents one of the broadest and most systematic research efforts within the trust literature. This highly influential framework offers a parsimonious model of trust which provides a strong empirical basis for the study of trust between two specific parties. Prior to this models of trust had typically focussed on trust in generalised others (e.g., Rotter, 1967) or a social phenomenon (e.g., Lewis & Weingert, 1985). In contrast the present model sought to outline a manageable number of factors about both the trustee and trustor thus helping to clarify why within a dyadic relationship a trustor would trust a trustee. The specific focus upon the dyadic trusting relationship constitutes a pertinent strength of this model and was a driving factor behind the decision to utilise this model in the present thesis.

2.2.1 Antecedents to trust: Propensity to trust

Within trust research and the present framework, two different categories of antecedents to trust can be identified (Searle et al., 2011). Mayer et al. (1995) propose that the manifested level of trust within a relationship is a function of both the trustee's perceived trustworthiness and the trustor's propensity to trust. Propensity to trust reflects an individual's general willingness to trust others, with some parties being more likely to trust than others. Early trust theorists such as Rotter (1967) discussed this propensity for generalised trust as a type of personality trait. Mayer et al. (1995) consider it to be a stable within-person factor which people will inherently differ in. For a long time trust theorists have argued for the relevance of internal dispositional trust when making trust judgements in addition to more contextual cues (Rotter, 1967). Although an individual's propensity to trust is a significant antecedent of trust, as depicted within Mayer et al.'s (1995) model, research has found that its relevance is most critical for trusting judgements in the absence of trustworthiness information (Gill, Boies, Finegan, & McNally, 2005; Grant & Sumanth, 2009). When information about trustworthiness is present however, trustors rely more heavily on this information to form their judgements. Indeed, Dirks and Ferrin (2002) found in their meta-analysis that propensity to trust had only a small relationship with trust in leadership. When compared to the strong and robust relationships found between certain leader behaviours and trustworthiness perceptions, the authors conclude that future research should focus its attention on leadership behaviour and the trustworthiness it inspires. Accordingly, such an approach is adopted within the present thesis.

2.2.2 Antecedents to trust: The role of trustworthiness

In their model, Mayer et al. (1995) highlight the need to consider the attributes of the trustee when trying to understand why a given party will have a greater or lesser amount of trust in the other party. The present model confirms the relevance of trustworthiness dimensions as key antecedents of the decision to trust. Although Mayer et al. (1995) provide clarity regarding the most dominant

attributes to consider, trustworthiness in some form had been considered repeatedly in the literature prior to 1995. For example, Ring and Van de Ven (1992) argued that due to the risk inherent in transactions, it was critical that managers consider the trustworthiness of the other party. Similarly Hovland, Janis and Kelley (1953, as cited in Mayer et al., 1995) in their research on attitude change found that credibility was predicted by expertise and trustworthiness. In their review of the literature, Mayer et al. (1995) found that some authors identify a single trustee characteristic whilst others identified as many as 10 (e.g., Butler, 1991). Following a synthesis of the available research the factors of ability, integrity and benevolence emerged prominently and appeared to explain concisely the within-trustor variation in trust for others (Mayer et al., 1995). Therefore, a conceptualisation of trustworthiness based upon the perceptions of ability, integrity and benevolence was introduced and has been the dominant approach adopted since.

The model provided by Mayer et al. (1995) echoes Gabbarro's (1978) suggestion that trustworthiness was a multifaceted construct that captures both the competence and character of the trustee (see also, Butler, 1991; Butler & Cantrell, 1984; Kee & Knox, 1970). Gabarro's early work provided valuable insights into the bases of trust and their related concepts. In a longitudinal study Gabarro (1978) examined how working relationships with subordinates develop. Over a 3 year time period, interviews were conducted with newly appointed managers focussing specifically on the 'bases of trust'. One of the first bases was competence or ability, which captures the knowledge needed to succeed in an organisation (Gabarro, 1978). Character was another of the bases of trust discovered. This was found to reflect a multifaceted construct which subsumes concepts such as honesty, fairness, caring motives and predictability. According to Mayer et al.'s (1995) definition, ability reflects the 'can-do' component of trustworthiness by describing if the trustee has the skills and abilities needed to act in an appropriate fashion (Colquitt et al., 2007). The character-based dimension reflects the 'will-do' component of trustworthiness by describing whether the trustee will choose to use those skills and abilities to act in the best interest of the trustor (Colquitt et al., 2007). Such 'can-do ' and 'will-do' explanations for volitional behaviour are believed to exert effects independent of one another (Campbell, 1990).

2.2.2.1 Ability trustworthiness

Ability has become one of the most commonly discussed components of trustworthiness (Butler, 1991; Butler & Cantrell, 1984; Kee & Knox, 1970). The ability dimension reflects assessments of an individual's objective competence, skills and reliability. As mentioned previously, other researchers have examined similar constructs as affecting trust, using synonyms such as expertise (Hovland et al., 1953, as cited in Mayer et al., 1995), all of which are similar to ability in its current conceptualisation. Ability trustworthiness perceptions may vary across contexts within the same individual. Consequently this essential element of trust is considered domain specific. An

instance might occur wherein an individual may be highly competent in one area (e.g. some technical area), affording the individual trust within that context but this trust may not necessarily extend to other skills and settings (e.g., interpersonal communication).

2.2.2.2 Integrity trustworthiness

The second dimension of trustworthiness outlined by Mayer et al. (1995) is integrity, which reflects the character based component defined Gabarro (1978). Integrity refers to a cognitive element of trust which is subjective in nature. Integrity trustworthiness is defined as the extent to which a trustee is believed to adhere to sound moral and ethical principles, with synonyms including fairness, justice and promise fulfilment (Colquitt et al., 2007). Perceptions of integrity reflect a consistency in actions, strong sense of justice and behaviour which is congruent with his or her words. McFall (1987) highlighted the relevance of acceptability when integrity is under consideration. Importantly, McFall (1987) notes that it is not just the adherence to a set of principles which is important for integrity but also that the trustor finds those principles acceptable. As with ability, the inclusion of integrity in the current model was well grounded in previous approaches to trust. For example, Butler (1991) included consistency, integrity and fairness as conditions of trust. Unlike ability trustworthiness, the character dimension of integrity is not considered to be domain specific, having said that assessments of integrity can be influenced by context. For example, a manager's actions may not be consistent with previous statements and knowing nothing else about the situation the employee may judge that manager as having low integrity. However, if that employee was to learn that the manager's actions were in response to orders from senior management, the integrity of the manager would be less likely to be in question.

2.2.2.3 Benevolence trustworthiness

The third trustworthiness dimension of benevolence reflects the extent to which a trustee is believed to want to do good to the trustor, without any profit motive. Synonyms to this dimension include loyalty, openness and caring (Colquitt et al., 2007). Considerable support for the relevance of benevolence can be found within the trust literature, with many authors focussing on the specific relationship with the trustor (Soloman, 1960; Strickland, 1958). Benevolence perceptions are integral to the current model of trust (Mayer et al., 1995) and reflect a personal orientation towards the trustor. Benevolence is considered a relationship-specific dimension of trustworthiness which will differ both across situations and relationships.

2.2.3 The three dimensions of trustworthiness

The three dimensions of ability, integrity and benevolence are considered to vary independently in their influence upon trust and capture unique elements of trustworthiness (Mayer et al., 1995). Although the dimensions are separable they are still related to each other in that the presence of one is not sufficient for a person to be deemed as trustworthy. The three factors vary along a continuum wherein high perceptions of all three would likely result in an individual being considered trustworthy; however there may be situations in which a meaningful amount of trust can develop with lesser degrees of the three (Schoorman et al., 2007). How these factors are combined is idiosyncratic, both between individuals and situations. In some situations, an individual's integrity may be much more important than the other two factors, whilst in other situations ability may have a greater impact upon trust (Mayer & Davis, 1999). As Dirks and Skarlicki (2004) theorise, organisations which espouse values of care and concern (e.g., a social service agency) may require benevolence trustworthiness to be particularly high. Other organisations in contrast may place stronger emphasis on integrity-based trustworthiness (e.g., the police).

In the past, questions have been raised about the independence of integrity and benevolence due to high correlations between the two variables sometimes being observed. Furthermore, in the early conceptualisation by Gabarro (1978) these two factors were originally combined into a single character variable raising concerns of redundancy. Adding to this concern is the fact that a number of studies have failed to find significant, unique effects for both (e.g., Jarvenpaa, Knoll & Leidner, 1998; Mayer & Gavin, 2005; Searle et al., 2011). Schoorman et al. (2007) in a discussion of several empirical studies observed that the findings as a whole were completely consistent with their original model. The authors suggest that such concerns usually arise when trustworthiness is measured within a cross-sectional laboratory study. An issue with such designs is that they only provide a snapshot of trustworthiness at a particular time and fail to capture the two dimensions as distinct, therefore highlighting the need for prospective research designs, as used in the first study.

Mayer et al. (1995) provide compelling theoretical reasons as to why to expect integrity and benevolence to have unique relationships with trust. Integrity represents a very rational reason to trust someone. A sense of moral character provides the kind of long term predictability needed, whilst in contrast benevolence can create an emotional attachment to the trustee (Colquitt et al., 2007). Therefore, a situation may arise wherein a trustor can value an individual's integrity without holding a personal orientation towards them (i.e., high integrity trustworthiness coupled with lower benevolence trustworthiness). In further support, Colquitt et al. (2007) found in a recent meta-analysis strong evidence to support the importance of all three trustworthiness dimensions. Each factor was empirically found to contribute a unique and separable perspective to consider the trustee, whilst also providing a solid and parsimonious foundation for the empirical study of trust (Lapidiot, Kark &

Shamir, 2007; Mayer et al., 1995). Further empirical backing was provided by Mayer and Davis (1999) in a longitudinal quasi-experimental study. Results showed significant support for the role of the three trustworthiness factors as mediators between the implementation of a new appraisal system and trust in top management. Employees who experienced a new improved performance appraisal reported higher levels of trust in top management 5 months later whilst no significant change in trust levels was found for those employees who were not exposed to the new appraisal system. Furthermore, trust for top management was fully mediated by the separate facets of trustworthiness. Such findings are consistent with the theoretical predictions of Mayer et al. (1995) in that the development of trust was affected by a combination of the three trustworthiness factors.

As illustrated above, the three dimensions of trustworthiness have been linked to trust both theoretical and empirically (e.g., Colquitt et al., 2007; Davis et al., 2000; Mayer & Davis, 1999; Mayer et al., 1995; Mayer & Gavin, 2005). However, the relationship between the dimensions has been less well established, with some inconsistent findings. For example, Mayer and Davis (1999) provided evidence that all three factors contributed to trust whilst Davis et al. (2000) found support for integrity and benevolence but only marginal support between perceived ability and trust. Typically, researchers operationalize trustworthiness as a single factor and therefore less is known about how they influence outcomes in conjunction with each other. Much of the research assumes the factors work in an additive manner (Dirks & Skarlicki, 2004). Therefore, further research is needed to explore the interdependencies of these trustworthiness dimensions in determining valued outcomes. Accordingly, in this thesis the dimensions of trustworthiness are considered separately in terms of the role they play in the trust-building process.

2.2.4 Measuring trust

In a recent review examining 14 measures of intra-organisational trust, Dietz and Den Hartog (2006) found that of the forms trust can take, most measures are of the trustworthiness belief. As already discussed, this is partly due to the fact that prior to Mayer et al.'s (1995) model of trust, researchers often viewed and measured trust as synonymous with trustworthiness. Encouragingly, Dietz and Den Hartog (2006) found that the intention to trust was a stronger predictor of future behaviour than solely an assessment of another's trustworthiness. The authors advised that it is important to include both a 'belief' measure alongside measures which tap into the respondent's positive and willing decision to trust and intention to act. Such intention measures of trust should follow directly as an outcome of the 'belief', ideally then followed by a measure of actual risk-taking behaviours (Dietz & Den Hartog, 2006).

Consistent with the recommendations of Dietz and Den Hartog (2006) and in line with the proposed theoretical constructs featured within their model, separate measures of trustworthiness, trust and propensity to trust have been developed (Schoorman et al., 1996a). Mayer and Davis (1999) measure trust as a disposition with a propensity to trust scale. Trust as a belief is measured with a scale which taps into the three dimensions of trustworthiness (ability, integrity and benevolence). Finally trust as a 'willingness to be vulnerable' is operationalized by a measure which asks respondents about their willingness to allow the trustee to have significant influence over their working life (Mayer & Davis, 1999), thus tapping into vulnerability.

Within a recent meta-analysis Colquitt et al. (2007) provide a review of the 'intention to trust' measurements typically adopted within the literature. Three types of measurements were found to dominate when assessing trust relationships. Some scholars were found to have focussed more on the positive expectations component of trust (see McAllister, 1995 for an example), whilst other have relied on scales that focus on the willingness to be vulnerable component (Mayer & Davis, 1999; Mayer & Gavin, 2005). Finally, some researchers have adopted direct measures which simply ask people to rate the extent to which they 'trust' (e.g., Ball, Trevino & Sims, 1993; Driscoll, 1978; Earley, 1986). Colquitt et al. (2007) found that the relationships between trust and its antecedents and consequences did not vary significantly across the three different approaches to measurement. Mayer et al. (1995) acknowledge that the most problematic aspect of their model is in terms of measurement of trust itself. Therefore, due to concerns regarding the reliability of measures of trust based upon the willingness-to-be-vulnerable definition, both this definition and direct measures of trust were adopted within this thesis.

2.3 The leadership domain

The construct of trust has been introduced and the dominant framework, definition and measurement of trust guiding the present thesis have been delineated. Within the following section a brief overview of the leadership domain is provided which is followed by a discussion of trust within the context of leadership.

Within organisational theory, trust is most commonly discussed with reference to leadership. Leadership is a topic which has captivated the attention of scholars, practitioners and the public alike (Barling, Christie & Hoption, 2010). Leadership is anchored within the social sciences and has enjoyed 100 years of extensive research enquiry. A plethora of theories have emerged (Avolio, Walumbwa, & Weber, 2009), many of which have dominated the literature unwaveringly; some have seen their popularity ebb and flow over the years, whilst others, which had previously been considered redundant have seen revivals in scholarly interest. According to Yukl (2010) there are five major paradigms in the development of leadership theories; trait, behaviour, power- influence, contingency

and integrative approaches. A fundamental question within the domain of leadership concerns the understanding of how effective leadership processes are achieved and each paradigm approaches this question from distinctly different perspectives.

2.3.1 Trust and leadership

As scholarly interest in trust has built over the past four decades it is the role of trust and leadership which has generated the most research interest across multiple disciplines (Tyler & Kramer, 1995). This is likely due to the widely held belief that leadership is one of the strongest determinants of organisational success. As a result, research efforts became focussed on understanding how this is achieved and the important role played by trust. As Brockner, Siegel, Daly, Tyler and Martin (1997) observed "perhaps now more than ever, managers' effectiveness depends on their ability to gain the trust of their subordinates" (p. 558). This has led to trust being considered a research theme in its own right (Dirks & Ferrin, 2002). Indeed, Kramer (1999) noted that trust is moving from a "bit player to centre stage in contemporary organisational theory and research" (p. 594).

A large body of research has emerged which investigates the antecedents, as well as proximal and distal outcomes of trust across levels (e.g., individual, team and organisation) within organisational settings (Burke et al., 2007). Significant developments have been observed, particularly at the interpersonal level. The facilitative effects of trust have often been revealed and many studies have documented that when employees trust their leader's positive work outcomes result. Two recent meta-analyses provided strong evidence for the significant role trust plays in predicting workplace behaviours and attitudes (Dirks & Ferrin, 2002; Colquitt et al., 2007). The first by Dirks and Ferrin (2002) explored the theoretical underpinnings of the trust domain, examining the primary relationships between trust in leadership and other constructs. Following a review of 93 articles examining the consequences of trust, Dirks and Ferrin (2002) found the following. As expected, trust in leadership was strongly predictive of firstly work attitudes, such as job satisfaction ($r = .51$), followed by citizenship behaviours ($r = .19$) and finally job performance ($r = .16$). Contrary to the general trend in the literature to focus on the behavioural- and performance- based outcomes of trust, this review suggested that although trust is relevant in determining these more bottom-line outputs, trust has an even stronger impact upon people's evaluation and attitudes regarding the workplace. In further support for the relevance of trust, the effect sizes obtained for behavioural and performance outcomes were comparable to the effect sizes observed between similar criterion and other attitudinal variables such as procedural justice. The authors concluded that trust should be considered as important as other established perceptual variables also found within the literature in predicting these key organisational outcomes.

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The latter meta-analysis by Colquitt et al. (2007) is of particular relevance to the present thesis as they adopted the conceptualisation of trust provided by Mayer et al. (1995). Colquitt et al. (2007) distinguished between trust and trustworthiness and explored the relationships between these trust concepts in determining the outcomes of trust, specifically focusing upon risk-taking behaviours and job performance. Mayer et al. (1995) cast trust as the most proximal predictor of risk-taking and related outcomes such as citizenship behaviour and counterproductive behaviour (Williams, 2001). In support of this, Colquitt et al.'s (2007) results revealed moderately strong relationships between trust and three facets of job performance, with higher trust predicting better task performance, more citizenship behaviour and less counterproductive work behaviour. Such findings confirm that trust is a vital component of effective working relationships.

A further unique contribution of this review, over the one provided by Dirks and Ferrin (2002) is that the authors tested the assumptions made by Mayer et al. (1995) regarding the extent to which trust completely mediates the relationship between trustworthiness and trust propensity and related outcomes. Colquitt et al. (2007) found that all three trustworthiness dimensions had a unique relationship with trust. Interestingly, the three dimensions of trustworthiness were found to not only play a key role in inspiring trust but also to have significant, unique relationships with the behavioural outcomes when trust was considered simultaneously (i.e., trust acted as a partial mediator of the trustworthiness-trust-related outcomes link). For example, integrity had incremental effects on risk-taking and benevolence had incremental effects on counterproductive work behaviour over and above trust. The authors suggested that one possible explanation for the unique relationships observed may be that the trustworthiness dimensions reflect both cognition-based and affect-based sources of trust (Lewicki & Bunker, 1996; McAllister, 1995, 1997; Rousseau et al., 1998; Shapiro et al., 1992). For example, a cognitive calculation of the skills and values of the trustee (in the form of ability and integrity trustworthiness) may be supplemented by a more affective acknowledgment of the mutual concern inherent in the relationship (in the form of benevolence).

2.3.2 Trust and Leadership Models

By far the most dominant contemporary theory of leadership is the transformational leadership framework (Burns, 1978). At a conceptual level, four separate behaviours provide the foundation for transformational leadership; these include idealized influence, inspirational motivation, intellectual simulation, and individualized consideration. Research on transformational leadership has found robust relationships between these facets of behaviour and various metrics of organisational effectiveness such as job satisfaction, motivation and leader effectiveness (see Judge & Piccolo, 2004 for meta-analytical evidence). Not only has this form of leadership been linked to key organisational outcomes, links to more employee-based outcomes such as health and well-being have also been

shown (Barling et al., 2010). Such findings underscore the relevance of this leadership theory for organisational functioning and justify the enduring interest in the topic.

As shown above, much is known about the outcomes of leadership, but less is known about how and why such effects occur. Increasingly, scholars are also looking to explore the various means through which these effects come about. For example, remaining with transformational leadership, research has explored links between transformational leadership behaviours and various attitudes, including commitment to the organisation (e.g., Barling, Weber & Kelloway, 1996), turnover intentions (e.g Bycio, Hackett & Allen, 1995), identification with the leader (e.g., Epitopaki & Martin, 2005) and trust in the leader (Kirkpatrick & Locke, 1996; Podsakoff, MacKenzie, & Bommer, 1996). This last relationship is of particular relevance to the current thesis. It is proposed that transformational leaders build trust through the employee's perceptions that leaders have attributes which promote trust (e.g., Kirpatrick & Locke, 1996; Podsakoff, MacKenzie, Moorman & Fetter, 1990). Although followers trust in the leader is thought to mediate the relationship between transformational leadership and leadership effectiveness, this theory adopts a largely individualistic approach when examining this process. The focus is upon looking at the actions of leaders and how they gain followers' trust, thus making them more effective (Hogan, Curphy & Hogan, 1994). Pillai, Schriesheim & Williams (1999) suggest that transformational leaders may operate by establishing a social exchange relationship with followers, through demonstrating individualised concern (Jung & Avolio, 2000). Although social exchange is theorised, this 'relationship' is only conceptualised as a unidirectional process stemming from leaders to followers. In a similar vein, trust appears throughout the leadership domain and most theories integrate the importance of trust into their models, however the degree to which trust is incorporated and the knowledge pertaining to trust within these models differs significantly.

Typically leadership models which involve trust take a similar approach to that of the transformational framework, in that the focus is upon what the leader does to inspire the followers trust in them. Furthermore, these theories often detail generalised behaviours and traits which are provided to all followers. As a result, such leader-centric approaches largely dominate the literature. Considering the dyadic emphasis of trust theories, these predominantly leader-focused approaches are likely to provide an overly simplified view of trust within leadership. Such perspectives largely fail to account for the mutual, dynamic nature of the construct between two trusting parties or the fact that trust is a relationship-level phenomenon. In contrast, the Leader-Member Exchange (LMX) Framework (Dansereau et al,, 1975) offers an alternative approach which is more congruent with the trust construct. LMX theory focuses upon the unique relationship that exists between a leader and a follower, with trust occupying a central role. The linkages between leadership processes and organisational outcomes are investigated purely within the context of this relationship (Graen & Uhl-

Bien, 1995). This thesis will adopt LMX theory as the primary leadership framework upon which to explore the intricate processes of interpersonal trust development for the following reasons. The focus of LMX is well aligned with many contemporary theories of trust due to its unique adoption of the dyad as the level of analysis. Like models of interpersonal trust, LMX is based upon social exchange theory - a two way process wherein leader-follower dyads together produce leadership through a series of social exchanges. Further rationale for utilising the present leadership framework is provided throughout the remainder of this chapter.

2.4 Leader-Member Exchange (LMX) Theory

When first developed the leader-member exchange (LMX) theory challenged the prevailing assumption within the leadership domain for the existence of an average leadership style. Early LMX research indicated that leaders differentiate among followers rather than enacting one style with all members (Dansereau et al., 1975; Cashman, Dansereau, Graen & Haga, 1976) thus supporting the view for heterogeneous relationships as typical rather than homogenous leader-member relations. These relationships were found to fall along a continuum ranging from low to high in quality (Dienesch & Liden, 1986; Graen & Scandura, 1987). With some members leaders form low quality exchange relationships in which interpersonal interaction is largely restricted to fulfilling contractual obligations. Whilst with other members, leaders form high quality exchange relationships that comprise of social exchange patterns which transcend contractual obligations (Liden & Graen, 1980) and are characterised by high levels of support, respect and loyalty (Graen & Uhl-Bien, 1995).

There is consistent empirical support for the prevalence of differentiated relationships within work teams (Graen & Uhl-Bien, 1995). For example, a longitudinal study by Nahrgang et al. (2009) found that over an 8 week period from initial interaction leaders did develop significantly different LMX relationships with subordinates. A wealth of research exists which identifies numerous postulated antecedents and outcomes of the LMX relationship. Antecedents at the individual, dyadic and team level have been found to significantly predict the quality of LMX relationships. Examples from research include the member characteristics of locus of control (e.g., Kinicki & Vecchio, 1994; Martin, Thomas, Charles, Epitropaki & Mcnamara 2005), implicit leadership theories (Engle & Lord, 1997; Epitropaki & Martin, 2005), extraversion (Phillips & Bedeian, 1994) cognitive style (Allinson, Armstrong & Hays, 2001), self-efficacy (Murphy & Ensher, 1999) and personality traits (Bernerth, Armenakis, Feild, Giles & Walker, 2007). Leader characteristics have also been the found to predict LMX, with leader agreeableness (Nahrgang et al., 2009), downward influence tactics (Sparrowe, Soetjipto & Kraimer, 2006), leader intuitiveness (Allinson et al., 2001) and affectivity (Day & Crain, 1992) all demonstrating positive relationships with LMX quality. Furthermore, it has been empirically shown that the nature of this relationship can determine a number of important work outcomes at the individual and organisational level (Liden et al., 1997). Strong associations have been shown between

LMX quality and employee satisfaction, organisational citizenship behaviour, performance and intention to remain within an organisation (see Dulebohn et al., 2012; Gerstner & Day, 1997; Ilies et al., 2007; Rockstuhl et al., 2012 for meta-analytical reviews). Therefore, attempts to examine what influences this relationship and identify ways to improve it are highly beneficial to both the individual and the organisation.

The LMX framework draws upon social exchange theory (Blau, 1964) and the norm of reciprocity to describe the motivational basis for the development of leader-member exchange relationships (Graen & Cashman, 1975). Social exchange theorists have identified numerous material and non-material resources which can be exchanged within the context of the relationship (Liden & Maslyn, 1998). Such theorists suggest that influence is stronger when it is derived through processes of social exchange as it engenders unspecified obligation between dyadic partners to repay favourable treatment (Henderson, Liden, Glibkowski, & Chaudhry, 2009). The principle is that, if the exchange behaviour is positive and the person who initiated the exchange is satisfied with the response then the exchange relationship will be likely to continue. However, if the behaviour is not reciprocated then there will be limited opportunity for the relationship to progress (Dienesch & Liden, 1986).

2.4.1 The evolution of LMX Theory

Given the expanse of the LMX literature, Graen and Uhl-Bien (1995) detailed the developmental trends of LMX research into four distinct areas, which usefully conceptualised how the theory has progressed. The stages are made up of the discovery of differential dyads, the focus on the LMX relationship and its outcomes, the description of dyadic partnership building and the examination of LMX at the group and networks level. Graen and Uhl-Bien (1995) observed that most research has been fairly narrow in focus with an over-reliance on establishing the theory through the identification of antecedents and outcomes. An implication of this is that the latter two stages of the theory's development have been relatively neglected. This is despite frequent calls for such research within the literature (e.g., Avolio et al., 2009; Erdogan & Liden, 2002; Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden et al., 1993; Martin, et al., 2010; Yukl, 2010). Of particular interest to the present thesis is the third stage of the theory's development. In a review of the literature it was found that essentially the profiling of how leaders and members develop good quality LMX relationships has been largely left to theory (Scandura, 1999). There appears to be minimal research which empirically examines the specific processes through which LMX relationships develop. There have been even fewer attempts to determine contextual factors (moderators) of the relationship that determine when constructs will either enhance or impede LMX development (Dirks & Ferrin, 2002). Thus, the utility of LMX theory is therefore restrained due to its lack of clarity relating to how LMX relationships are developed or maintained (Graen & Uhl-Bien, 1995). Improved theorising on the

basic process of LMX development therefore constitutes an area in need of future research attention (Dienesch & Liden, 1986).

LMX theory does propose a number of models mapping the developmental process: the Role-Making Model (Graen & Scandura, 1987) and the Leadership Making Model (Graen & Uhl-Bien, 1995). The earlier work by Graen and Scandura (1987) provides a theoretical basis for the more recent Leadership Making Model (Graen & Uhl-Bein, 1995). This framework outlines three stages of development: the 'stranger stage', the 'acquaintance stage' and the 'maturity stage'. The stranger stage relates to the 'role making' stage of the founding model, and constitutes the early part of the relationship wherein the leader and member occupy independent roles, and the nature of the exchange is based upon the job requirements. If either dyad member was to the make an 'offer' for an improved working relationship through certain career-orientated social exchanges, if accepted and later reciprocated, the relationship may progress to the second stage. The acquaintance stage (role-making) is when the nature of the relationship becomes defined though the mutual exchange of resources within the dyad. The final stage relates to the mature stage of the relationship (role-routinization) where the exchanges between the leader and member are highly developed. The leader and member will have become more interdependent and this stage of development is proposed to correspond to a high quality LMX relationship (Martin et al., 2010).

Although of value, both frameworks only provide a broad description of LMX development. The two models fail to offer a prescriptive account of what variables are critical to the process or define the content of the exchanges (Martin et al., 2010). With the exception of Maslyn and Uhl-Bien (2001), who examined the role of effort in LMX relationships, albeit in a cross sectional design, the content of these social exchanges has not yet been sufficiently researched. The lack of integrative theory available to explain the process of LMX development has likely contributed to a dearth of empirical research into LMX development (Martin et al., 2010). Such a lack of prospective studies therefore illustrates how social exchange theory is extensively applied within LMX, but not empirically supported. A second reason for the lack of research within this area is that assessing relationship development robustly is a methodologically demanding task. A recent review of the LMX literature by Martin et al. (2013) anticipates that there will be an increased shift in research emphasis toward the later stages of LMX theory development, therefore making the current research highly relevant to what is currently most needed within the LMX domain.

2.4.2 LMX (in)stability

A further potential reason as to why research on LMX development has been largely overlooked may be due to the conclusions drawn by the prospective research detailed below. Of the handful of studies which have measured LMX quality at more than one time point, a consistent

pattern of results have been found with perceptions of LMX quality over time generally correlating at around .5. For example, Bauer and Green (1996) found a correlation of .54 between LMX at the start of the relationship and 9 months later. A correlation of .45 was reported by Liden et al. (1993) between the start of the relationship and 6 months later. Narhgang et al. (2009) found on average that LMX quality increased considerably over the first few weeks and then became stable at 8 weeks (.33 for member; .39 for leader LMX at week 1 and week 8 respectively). Based upon such findings, the authors describe the developmental cycle of the LMX relationship as evolving in a smooth continuous fashion from the initial interaction, plateauing quickly, and then remaining essentially stable over time (Bauer & Green, 1996; Liden et al., 1993; Nahrgang et al., 2009). This general interpretation implies that LMX development is largely confined to the first few weeks of the relationship.

This conclusion, however, is somewhat surprising. On an empirical level, the correlations (.54 and .45) used to infer such stability are not as high as would be expected for such a well-accepted assumption within the LMX domain. Indeed a more plausible alternative interpretation, given that there is more unexplained than explained variance in the LMX construct over time, is that even established LMX relationships experience significant levels of change and instability. This begs the question as to what antecedents are influencing this development in the LMX relationship. Research within related fields of psychology has demonstrated the value of exploring the unexplained variance of developmental constructs. Through the use of statistical techniques such as cross lagged modelling designs, it is possible to identify what is causing changes in constructs across time. For example, prospective research within developmental psychology and relationship science have routinely explored correlations of a similar magnitude to those found in the LMX literature, as they would be interpreted as evidence of a significant degree of developmental instability, and are often followed by empirical investigation of how other variables may account for the remaining unexplained variance (e.g., Fincham, Harold & Gano-Phillips. 2000).

Furthermore, within related domains scholars have examined the temporal nature of constructs over time. George and Jones (2000) assert that in order to build useful theories of organisational behaviour discerning the rate of change in constructs is essential. For example, Holtz and Harold (2009) found considerable support for their proposition that significant variance in overall justice perceptions existed across time. Rhoades, Eisenberger and Armeli (2001) found temporal changes in affective commitment across time. Eisenberger, Stinglhamber, Vandenberghe, Sucharski and Rhoades (2002) found significant changes in employees level of perceived organisational support across time whilst Ilies and Judge (2002) found that 36% of the total variance in employees overall job satisfaction reflected within person variance across time. When turning to the attitude literature, further support can be garnered as changes in attitudes over time are well documented. For instance research has shown that people change their attitudes to be more consistent with the behaviour and

attitudes of others around them (Norton, Monin, Cooper & Hogg, 2003). Equally, studies have found attitudes change occurring over time even in the absence of new information (Lord, Paulson, Sia, Thomas & Lepper, 2004).

In addition to the empirical evidence for LMX instability, theoretical arguments also exist for variation in the way LMX relationships develop. In a recent paper, Ferris et al. (2009) describe relationship development as being marked by change and expansion, something which is not accommodated for in either the Role Making or Leadership Making Models, or considered in the earlier prospective research. The dyadic relationship is likely to progress through a series of ups and downs which cause shifts in the attitudes and behaviours of the two parties (Yukl, 2010). Already established relationship quality is likely to be re-evaluated and vulnerable to change through enhancement or deterioration (Ferris et al., 2009). Within their theoretical paper two models are described. The first, by Dwyer, Schurr and Oh (1987), outlines 5 phases of development in buyer-seller relationship: awareness, exploration, expansion, commitment and dissolution. Whilst the second model by Kram (1983) looks at mentor-mentee relationship development and outlines the following stages: initiation, cultivation, separation and redefinition. Ferris et al. (2009) describe a new integrative model of work relationships which is founded upon the above frameworks but is broader in terms of application. The first two stages of relationship development are largely consistent with the early developmental stages outlined in the models of LMX. It is the author's description of the third stage of the relationship's development which represents a divergence from the traditional conceptualisation of LMX development and is supportive of the propositions made in the present thesis. This new conceptualisation describes how relationships, even once developed, are subject to considerable degrees of instability and change, rather than fixed as previously implied. The final stage of relationship development is marked by the presence of mutual accountability where individuals help maintain each other's role identities and encourage behavioural consistency.

In a paper by Scandura (1999) titled 'rethinking LMX', Scandura acknowledges that although the LMX relationship is considered stable, exchange status can change, however it is not yet clear why or how. Relatively little is known about how the quality of a relationship between a leader and follower develops, changes, and fluctuates over time. Addressing such a gap in knowledge constitutes a major aim of this thesis. Based on the preceding theoretical and empirical arguments, it is anticipated that the LMX relationship will be reasonably stable over time. It is predicted that correlations of a similar magnitude to those observed in previous longitudinal studies will be found in the present research. Specifically I propose that the correlation between LMX quality measured in the first few weeks of the relationship and LMX quality measured again at time 3 (6 months later) will be around .50, thus providing support for the view that the LMX relationship is reasonably stable over time. Therefore, the intention of this study is to firstly find support for the proposition of reasonable

stability and secondly, identify what accounts for the identified unexplained variance. There is a clear need for research to re-examine the currently held perceptions relating to LMX (in)stability and provide a more prescriptive account of the mechanisms involved in the development of the LMX relationship.

Hypothesis 1: The LMX relationship will be reasonably stable over time.

2.4.3 Developmental variables

A pertinent critique of LMX theory is that the majority of research is cross-sectional in design and the casual role of variables associated with LMX quality have been largely inferred (Gerstner & Day, 1997). Of the prospective studies which have examined LMX development, a number of antecedents have been found to predict the early stages of LMX development. These include leader and member expectations, similarity and liking (Liden et al., 1993); positive affectivity, performance and delegation (Bauer & Green, 1996); role expectations (Major, Kozlowski, Chao & Gardner, 1995) and member extroversion and leader agreeableness (Nahrgang et al., 2009). Bauer and Green (1996) suggest that variables have differential impact depending upon the stage of the relationships development. For instance, early in interactions when there is limited information available, salient characteristics such as perceived similarity are found to predict early LMX quality (Liden et al., 1993). Other variables, such as performance and delegation are believed to play a stronger role in the subsequent development of LMX. Nahrgang et al. (2009) examined the developmental trajectory of LMX across the initial 8 weeks of the LMX relationship and found that leader delegation and member performance were the critical development variables.

Despite the importance of member competence, Dienesch and Liden (1986) suggest that the LMX dyad consider more than just performance in determining LMX quality across time. In fact in the present research it is proposed that although such competence based variables do play a role in determining initial relationship quality, certain socio-emotional dimensions may be even more relevant in expanding LMX quality. Indeed, in a longitudinal study Liden et al. (1993) found both leader and member reports of liking predicted LMX at all time points except one whilst performance only predicted early LMX. Such findings support the proposition that although a performance-delegation pathway to LMX development exists, it is mostly confined to the early stages of the LMX relationship (Bauer & Green, 1996). Taken together, the findings suggest that performance is not the only dominant variable responsible for determining LMX development and that affective variables may also have an important part to play in shaping the development process. Moreover, unless members engage in deliberate efforts to increase leader's perceptions of their competence, then the effect of performance on LMX development is likely to be confined to the initial stage of the relationship. Although researchers have alluded to the key role affective variables may play in the

developmental process of LMX, related empirical research is scarce. Therefore, considerable insights are yet to be achieved.

In order to more accurately understand the dynamics of LMX relationship development, this thesis will explore variables critical to this process. These variables are likely to be subject to change over time and influence LMX development accordingly. Following the discussion of trust previously, the interpersonal, dynamic nature of trust as a construct offers a solid rationale for considering this particular affective variable as important to these social exchange relationships.

Lewicki and Bunker (1996) observed that increasingly scholars are turning to trust as a perspective for re-examining many of the basic assumptions about human relationships in organisations. Support for a significant and positive relationship between the two constructs of trust and LMX has been found (Dulebohn et al, 2012; Gomez & Rosen, 2001; Wat & Shaffer, 2005) however the lack of longitudinal research has meant the direction of the relationship has largely been inferred. According to Scandura and Pellegrini (2008) empirical research integrating LMX and trust is timely and warranted for such limitations to be addressed. Nevertheless, little effort has been made to amalgamate research on trust to advance LMX theory and the two bodies of literature have generally developed independently (Brower et al. 2000). As a result theoretical synthesis is in its early stages and is consequently a highly relevant area to investigate in this thesis.

2.4.4 Trust and LMX theory

The justification for advancing trust as a construct that is key to LMX development is largely due to trust being arguably the most critical feature of virtually any kind of dyadic relationship (Fisher & Brown, 1988). It is important to note that historically such a view was not always supported within the literature with trust initially being considered a defining feature of LMX (Liden & Graen, 1980). Despite this, the majority of research now conceptually and empirically distinguishes LMX from trust, viewing the constructs as related but distinct (Dienesch & Liden, 1986). Dirks & Ferrin (2002) noted the complexity of the relationship between trust and LMX, but advocated based upon a meta-analytic review of relevant studies, that trust should be treated as a construct separate from LMX. In a cross-sectional study, Scandura and Pellegrini (2008) found through confirmatory factor analysis, significant discriminant validity between trust and LMX. In LMX research, relationship quality is typically measured as a unidimensional construct. Furthermore, no discussion of trust as a dimension of LMX is found in the measurement process, thus providing additional support for the separation of the two constructs. When LMX was conceptualised as multidimensional in nature, Liden and Maslyn (1998) found that additional dimensions to LMX did exist: contribution, loyalty, professional respect and affect. Liden and Maslyn (1998) confirmed that trust, although related, was not a dimension of the relationship. Similarly, when trust is measured as multidimensional, relationship quality is not

conceptualised as a dimension of trust. Finally, within the relationship literature, relationship quality and trust are empirically shown to be partly interdependent but not synonymous (Fletcher, Simpson, Thomas, 2000). Therefore, both literatures view conceptual space between the two constructs; and this perspective is adopted within the present thesis.

Despite the majority of scholars being in agreement regarding the distinction between trust and LMX, disparity still remains regarding whether trust acts as an antecedent or consequence of the relationship. Some studies examine trust as an antecedent of the relationship (Gomez & Rosen, 2001) whilst others contend that trust is an outcome or consequence of LMX (van Knippenberg, De Cremer & van Knippenberg, 2007; Wat & Shaffer, 2005). In the present thesis, trust is conceptualised as a critical developmental variable for LMX quality in that trust is both as an antecedent, outcome and continued construct of influence. In the following section the relevance of trust for influencing LMX development is considered in further depth.

2.4.5 Trust, LMX and Social Exchange

Both theories draw heavily upon the principles of social exchange (Blau, 1964). Rousseau et al. (1998) describe social exchange as the co-operation of two exchange partners for mutual benefit. The tenuous nature of reciprocation in social exchanges leads to concern regarding whether exchange individuals will actually fulfil their obligation and reciprocate, as opposed to taking advantage of the partner (Dirks & Skarlicki, 2004). Due to such concerns, trust is considered vital to the development and deepening of social exchange relationships because it serves as a process of uncertainty reduction (Holmes & Rempel, 1989) whilst fostering a sense of obligation (Blau, 1964). The presence of trust guides decisions about cooperative behaviour where vulnerability is present (Colquitt, LePine, Piccolo, Zapata & Rich, 2012). Due to the inherent uncertainty pertaining to the exchange of unspecified favours over an indefinite time horizon (Colquitt et al., 2012) trust provides individuals with more confidence in their exchange partner. Over time, recurring reciprocal exchanges will provide trusting parties with security which will engender further trust (Creed & Miles, 1996).

Without trust the quality of the LMX relationship will be low and only economic exchanges made up of cooperation will exist (Whitener et al., 1998). Taken together, it is widely agreed by theorists that trust is pivotal in determining relationship quality as social exchange relationships cannot develop in the absence of trust (Simpson, 2007). Indeed, Liden and colleagues (Dienesch & Liden, 1986; Liden et al., 1993) conceptualised LMX as a trust-building process thus reinforcing the critical role of trust. Despite this, the fine-grained distinctions of how the trust-building process unfolds have not been considered. Neither has the role of trust for developing and influencing LMX quality over time been tested. Through returning to the literature on trust development, it becomes possible to map the causal processes of LMX development in a greater level of specificity. A new

model of LMX development is introduced and the opportunity to achieve valuable insight through this theoretical integration is highlighted.

2.4.6 LMX Theory and the Integrative Model of Organisational Trust

As previously discussed, LMX scholars assert that LMX relationships form quickly and remain stable over time (Bauer & Green, 1996; Dienesch & Liden, 1986; Nahrgang et al., 2009). In contrast, trust is considered a process made up of continued evaluations. The development of trust has been described as a spiral reinforcement process (Zand, 1972) and more recently as a social exchange process (Kramer, 1996; Whitener et al., 1998), in that the two individuals influence each other through an on-going process. Mayer et al. (1995) explicitly identified time as playing a key role in the meaningfulness of the variables within their model, thus portraying trust as a temporal phenomenon. Indeed, the model incorporates a feedback loop, showing that the authors construe trust to be an iterative process which develops over time. Although the model largely describes trust at a given time point, the authors contend that a more complete understanding of trust would come from consideration of its evolution within a relationship (Mayer et al., 1995).

In a more recent review of their model, Schoorman et al. (2007) note that more research is needed to establish more specifically the process and time frames through which each of the trustworthiness dimensions contributes to trust. What constitutes sufficient perceptions of trustworthiness at early stages of relationship development may differ considerably to those used to gauge trustworthiness in more developed interpersonal relationships (Simpson, 2007). For example, Mayer et al. (1995) acknowledge that trustworthiness perceptions are vulnerable to change and updating, in particular benevolence trustworthiness perceptions may take more time to develop and be more influential for later relationship quality. Equally, early perceptions of an individual's integrity trustworthiness may change over time following repeated interactions. Indeed, Simpson (2007) states that trust might be construed differently and take on varying importance at different stages of relationship development.

In stark contrast, LMX relationships are believed to be characterised by either high or low trust depending on relationship quality. These trust levels are thought to be formed early on and are presumably considered to remain constant, along with relationship quality over time. Although intuitively compelling, when a more comprehensive conceptualisation of trust is adopted, such an assumption appears to provide an overly simplistic view. No accommodations are made within the LMX literature for the multidimensional bases of trust or its dynamic nature. Furthermore, little consideration has been given to antecedents of trust, such as trustworthiness perceptions and their impact on this relationship process. Put simply, theorists are yet to delve into the true and complex nature of trust within LMX relationships. This thesis intends to address this oversight. If trust is

indeed critical to LMX development and is dynamic over time as suggested within models of trust development then it is proposed that LMX may be comprised of more complex and multifaceted processes than previously suggested (Lapidot et al., 2007). In line with the propositions made by Ferris et al. (2009) it is anticipated that such a view may provide a more accurate account of how LMX relationships actually develop (Brower et al., 2000) and account for the unexplained variance in the construct over time.

As the majority of trust and LMX research is cross-sectional in design often only fixed views of both constructs can be obtained. Nevertheless, valuable insights have still been garnered to support the above propositions. In one of the first studies to explicitly test trust and LMX, Scandura and Pellegrini (2008) found that trust may sometimes be fragile even in high quality LMX relationships. Guided by Lewicki and Bunker's (1996) model of trust development, the authors found evidence of both identification-based trust (IBT), which represents an emotional bond between the two parties and mature interpersonal trust, along with calculus-based trust (CBT) which is characterised by an economic calculation of the costs and benefits of remaining in the relationship within high quality LMX relationships. Such findings challenge the prevailing belief that high LMX relationships are only associated with high trust. Scandura and Pellegrini (2008) propose that relationships may not be as stable as suggested by prior research and therefore are vulnerable to change and require maintenance. In this study, feelings of being taken advantage of within high LMX relationships were associated with reports of calculus-based trust. These findings imply that high trust is not assured in high LMX relationships; rather it is subject to change based upon behaviour. Due to the cross-sectional design of their study, the authors emphasise that longitudinal research is needed to understand the complex underlying trust characteristics prevalent within these relationships.

It is hypothesised within this thesis that the level of trust present within early LMX relationships will evolve as the parties within the dyad interact. Further support for such theorising comes from studying the emergence of trust in game theory where the dynamic interplay between experience and trust is easily observed (Mayer et al., 1995). Research has shown that within a repeated decision game, trust emerges and changes based upon cooperative or non-cooperative behaviour. Mayer et al. (1995) propose that the outcomes of engaging in trusting behaviour will affect trust indirectly through the trustworthiness perceptions of integrity, ability and benevolence at the next interaction. For example, if a follower sticks to their word and stays at work late to complete a project, the leader's perception of their trustworthiness, specifically integrity will be enhanced. Conversely, if a follower does not do as they said they would the leaders perception of their integrity trustworthiness will be diminished and will influence subsequent risk taking actions, thus stifling the social exchange. Therefore, although LMX relationships may be relatively stable in terms of overall levels of trust, these relationships are vulnerable to changing trustworthiness perceptions. LMX

research has yet to examine the impact of the different trustworthiness dimensions both directly and indirectly via trust upon LMX quality (Scandura & Pellegrini, 2008).

To summarise this chapter, leader-follower relationships have a built-in element of vulnerability which makes trust necessary if the relationship is to function effectively and develop. Trust is considered central to facilitating the initiation and expansion of social exchanges within LMX relationships. Trust emerges gradually through repeated exchanges, which, if successful should influence perceptions of trustworthiness (Whitener et al., 1998). Trustors are likely to make judgements of the other parties' trustworthiness in terms of ability, integrity and benevolence and act accordingly. Therefore, a new model of LMX development has been outlined within this chapter which draws from the trust literature, in particular utilising the insights provided by Mayer et al. (1995) wherein the finer distinctions of trust are described. As discussed in the next chapter, research has shown that such trustworthiness perceptions are based upon the observation of behaviour. Such proposals place trust and trustworthiness, as key determinants of the developing LMX relationship which are hypothesised, to be driven by certain behaviours. Therefore, the intention of the following chapter is to identify which behaviours are likely to be particularly relevant for demonstrating trustworthiness, and thus for building trust in the developing LMX relationship.

CHAPTER THREE: CONCEPTUAL MODEL DEVELOPMENT

3.0 Chapter summary

Within this chapter a model of trust-building is described. A comprehensive conceptual model of trustworthy behaviour is delineated including the antecedents, mediating and moderating processes, all of which are theorised to occur within the context of a developing LMX relationship. The chapter begins with an overview of related research which has tested leadership behaviours which inspire trust. Theoretical and empirical support for the mediating role of trust is then provided. Within the following sections, the antecedent variable of felt trustworthiness is introduced along with The Model of Trustworthy Behaviour (Whitener et al., 1998). The relevance of this theoretical framework to LMX relationships is highlighted and a brief literature review of the trust-building literature is provided. The integration of this trustworthy behaviour typology and the Integrative Model of Trust (Mayer et al., 1995) is described and a more complex conceptualisation of trust within LMX relationships is achieved. Attributions are discussed as a relevant boundary condition and the role of member trustworthy behaviour is discussed. The chapter closes with a conceptual model and a summary of the thesis hypotheses.

3.1 The role of trust as a mediator

In 1990, Podsakoff and colleagues (1990) called for research to examine how a wide range of leadership practices impact on followers' trust. Several studies have since shown that employee trust in leaders can be fostered by a number of leader actions, including procedural justice (DeCremer & Tyler, 2007; Korsgaard, Schweiger & Sapienza, 1995; Yang, Mossholder & Peng, 2009), organisational justice (Ayree, Budhwar & Chen, 2002), transformational leadership (Podsakoff et al., 1990), servant leadership (Schaubroeck et al., 2011), rewards (Ferrin & Dirks, 2003) and interpersonal emotion management (Williams, 2001). Gillespie and Mann (2004) also identified three leadership practices (transformational, transactional and consultative) which had an impact upon follower trust, albeit to varying degrees. Dirks and Ferrin (2002) confirmed within their meta-analysis that several management practices, such as the provision of fair outcomes, participative decision making and organisational support are associated with increased trust. Links have therefore clearly been drawn between a broad set of leader behaviours and trust, however inconsistent results have at times emerged (Dirks & Ferrin, 2002; Gillespie & Mann, 2004), suggesting a need for further research. For example, Dirks and Ferrin (2002) in their review found mixed support for the influence of specific transformational practices upon subordinate trust (Gillespie & Mann, 2004).

The studies detailed above have depicted trust as a key outcome of certain leader behaviours. However, trust is also often modelled as a mediator thus portraying trust as both a key antecedent of valued organisational outcomes, an outcome of leader behaviour as well as an important process

variable. To date, only a handful of studies have examined the mediating role of trust (e.g., Ayree et al., 2002; Yang et al., 2009; Schaubroeck et al., 2011). Fewer still have investigated trustworthiness perceptions within this mediating process, despite their prominence within the trust literature (see Caldwell & Hayes, 2006 and Frazier, Johnson, Gavin, Gooty & Snow, 2010 for notable exceptions).

A more complete and accurate view of the mediating role of trust may be achieved through also considering the role of trustworthiness. Typically, studies focus on demonstrating the direct link between leader behaviour and the intention to trust, thus bypassing trustworthiness considerations. As a result, the exact causal processes through which the effect occurs is often unclear and not fully explored, which may in part explain the inconsistencies often found. For example, Gardner, Avolio, Luthans, May and Walumbwa (2005) suggest that authentic leaders create trust through their actions. The authors found that leader transparency and positivity predicted performance when mediated by affective and cognitive trust (respectively). Although Norman, Avolio and Luthans, (2010) theorise that the indirect mechanism of the effects between the behaviours and trust is likely operating through trustworthiness perceptions, this is yet to be tested. If Norman et al. (2010) had pursued this line of thought and tested for indirect effects via trustworthiness, it is likely that the behaviours would have been relevant to one or two of the trustworthiness dimensions (integrity and possibly ability, as theorised by the authors).

The behaviours outlined so far largely relate to leadership actions which inspire trust. For example, transformational leaders are considered effective due to their ability to inspire followers and provide a compelling vision. Although facets of the leader's behaviour promote trust, the focus is largely upon influencing follower's perception of trust rather than demonstrating themselves as trustworthy and building interpersonal trust. The identification of actual trust-building behaviours represents an area in need of research attention. Dirks and Ferrin (2002) suggest that future research should focus on identifying the key leadership behaviours for building trust within interpersonal relationships. To date, scholars have largely been left to infer how and why managers actually promote their trust within the organisation (Mayer et al. 1995) and demonstrate trustworthiness (Whitener et al., 1998). The guiding question of this thesis becomes, 'what are the key behaviours for targeting trust via trustworthiness perceptions'? Moreover, which behaviours are particularly effective for building trust within the context of a developing LMX relationship, and what are the relevant boundary conditions? Of the theorising available on the topic, scholars have attributed trust-building to cognitive and affective processes which occur at the individual level, driven by the behaviour of the dyadic other (Shamir & Lapidot, 2003). Within the trust literature, research has confirmed the separate influence of each of the dimensions of trustworthiness on trust (Colquitt et al., 2007). Therefore, it would be informative to identify specific behaviours which tap uniquely into each of the trustworthiness facets.

If, as proposed within this thesis LMX instability can be largely accounted for by changes in trust over time then identifying what drives these trusting perceptions is of critical importance. Therefore, the intention of this chapter is to identify the mechanisms (behaviours) and map the causal processes responsible for LMX development. Before proceeding onto the trust-building literature in the quest for trustworthy behaviours, a potential antecedent of these behaviours will firstly be considered. It is likely within a dyadic relationship that individuals form perceptions of the other party before initiating trust-building efforts. Identifying the nature of these perceptions is the focus of the following section.

3.2 Antecedents of trustworthy behaviour: Felt trustworthiness

A potential determinant of an individual's intention to engage in trust-building behaviours with a dyadic other might be based upon their trust in that individual. However, based upon the seminal work of Brower and co-authors (Lester & Brower, 2003; Brower Lester, Korsgaard & Dineen, 2009) an alternative perspective is adopted within this thesis. Instead of investigating how trusting others may influence subsequent behaviour, which would be the typical approach, the focus will be upon the influence of oneself feeling trusted as an antecedent of trustworthy behaviour.

The vast majority of research examining trust and leadership is unidirectional in focus based almost exclusively upon subordinate trust in the leader (Brower et al., 2009; Dirks & Skarlicki, 2009). Schoorman et al. (2007) acknowledge that their earlier theoretical model of trust (Mayer et al. 1995) had not explored the potential for reciprocity in trusting relationships. As a result, little is known about the potential influence of being trusted (Dirks & Ferrin, 2002). In an extension to the trust framework outlined by Mayer et al. (1995), Brower et al. (2000) propose that trust is not necessarily mutual and is not reciprocal. An implication of this argument is that, in a relationship A might trust B but B may not trust A. Brower et al. (2000) argue for the importance of examining trust from the perspective of both sides of the dyad as it is likely for the leaders trust in the subordinate to not be equal to the subordinates trust in the leader. Such a view is consistent with the trust literature but inconsistent with the dominant theoretical view of LMX where high quality LMX relationships are considered to only involve high mutual trust (Schoorman et al., 2007). Brower et al. (2000) suggest that LMX in fact comprises of two trust constructs, the leader's trust in the subordinate (LTS) and the subordinates trust in the leader (STL). These two relational constructs are viewed as separate, which are shaped by a complex interaction of perceptions and behaviours which are expected to differ in strength at times across the development of the relationship.

Support for the argument that LTS and STL may operate along alternative mechanisms has recently been provided by Lester and Brower (2003) who introduced a new perspective for examining trust. The authors found that subordinates' perceptions of their leaders trust in them (LTSs), termed

'subordinates' felt trustworthiness' was a more significant predictor of outcomes such as performance, citizenship behaviour and job satisfaction than subordinates' perception of their leaders' trustworthiness. Subordinates appear to pick up cues (whether accurate or not) from their leader based upon early risk-taking behaviour, such as participative decision making, that help to create perceptions about how much their leaders view them as trustworthy (Lester & Brower, 2003), which in turn motivates subordinates' behaviour and their level of reciprocation.

Therefore, although trust is a perception held within an individual (Mayer et al. 1995), someone external can observe another's behaviour towards them and make attributions about the trustor's beliefs about them (Lester & Brower, 2003). Judgments of a leader's trustworthiness are important perceptions for a number of key outcomes (Dirks & Ferrin, 2002). Indeed, work by Malhotra and Murnigham (2002) suggests that the trust individuals have in their exchange partner affects their subsequent efforts to build trusting relationships. Here it is proposed that it is the motivation that subordinates feel when they sense that their leader trusts them that explains additional variance in employee behaviour and attitudes, over and above perceptions of leader trustworthiness. This is likely due to social exchange processes wherein feeling trusted creates a feeling of obligation to reciprocate as well as high expectations of reciprocation. The employees in this study were likely to have felt motivated to engage in actions which served to preserve the relationship and this guided behaviour. In contrast, when an employee does not feel trusted by the leader, they may be less likely to engage in behaviours which are of benefit to either the leader or the relationship. Hence, this study demonstrates the significance of a trustee's awareness that the trustor perceives them to be trustworthy and the behavioural implications of this.

The present research will investigate the reciprocal linkage of how a perception of one party's trust affects the other party's trust and behaviour in return. The unique perspective of 'felt trustworthiness' will be adopted and will be examined at the dimension level (e.g., felt ability, integrity and benevolence trustworthiness) rather than as one construct, which represents a novel contribution to the empirical literature.

Hypothesis 2: Felt trustworthiness perceptions at time 1 will be positively related to the engagement in trustworthy behaviours at time 2.

Hypothesis 2a: Felt integrity trustworthiness at time 1 will positively influence the engagement in behavioural integrity and behavioural consistency behaviours at time 2.

Hypothesis 2b: Felt ability trustworthiness at time 1 will positively influence the engagement in open communication and competence-related behaviours at time 2.

Hypothesis 2c: Felt benevolence trustworthiness at time 1 will positively influence the demonstration of concern behaviours at time 2.

3.3 A model of trustworthy behaviour

Although the relationship between trustworthiness, trust and various outcomes has been the subject of significant research efforts (e.g., Colquitt et al., 2007; Dirks & Ferrin, 2002), little attention has been focussed on the antecedents to trustworthiness perceptions. It is proposed that such perceptions are informed by the observation of relevant behaviour. Schoorman et al. (2007) contend that the consideration of ability, integrity and benevolence trustworthiness as important facets in the development and maintenance of trust between managers and employees merited further consideration as an approach to building trust in management. Therefore, this thesis looks to identify which specific behaviours engender each of these separate trustworthiness perceptions. In order to do so, the work of Whitener et al. (1998) was drawn upon to provide a solid theoretical foundation. Following their synthesis of a large body of diverse literature, Whitener et al. (1998) proposed a streamlined framework which identified five major dimensions of managerial trustworthy behaviour.

Trustworthy behaviours are defined as 'volitional actions to engender trust' which are proposed to provide a necessary, but not sufficient, foundation for subordinate's trust in the leader (Whitener et al., 1998). Such voluntary behaviours are considered an important source of information about the internal character, motives and ultimately trustworthiness of a dyadic other (Ferrin, Dirks & Shah, 2006). Whitener et al. (1998) outlined five categories; behavioural consistency, behavioural integrity, demonstrating concern, sharing and delegating control and openness in communication. These behavioural markers were informed by the work of Butler (1991) and Clark and Payne (1997). Butler (1991) identified various 'conditions of trust' which included constructs such as fairness, loyalty and openness. The dimensions identified within these early pieces of work, although informative, primarily reflected general qualities attributed to the trustee by the trustor. Taking an alternative perspective, Whitener et al. (1998) sought to explicitly answer the question 'what is trustworthy behaviour and what can organisations do to support such behaviour?' The unique approach of this model meant that the focus was less upon how can managers influence the perceptions of the trustor, but rather looked to establish which actual behaviours are relevant for demonstrating trustworthiness and building trust. A further strength of this theoretical framework is that it embeds the question of trust within the organisational context and therefore considers organisational, relational and individual factors which may influence managerial trustworthy behaviour. To date, with the exception of Korsgaard et al. (2002) which will be discussed shortly, little effort has been made to empirically test Whitener's model of trustworthy behaviour. Burke et al. (2007) noted in a recent review that there are few frameworks which actually examine what it is

leaders do in terms of behavioural markers to build trust. Furthermore, the authors note that of those available the one proposed by Whitener et al. (1998) is a particularly promising model.

3.3.1 The integration of two theoretical frameworks

Whitener and colleagues (1998) identify trust as a willingness to be vulnerable and discuss the key role of dependency between the two trusting parties. Such elements of trust mirror the definition provided by Mayer et al. (1995) indicating that the two models are well aligned theoretically. Further points of conceptual overlap relate to the fact that the former model also makes reference to trustworthiness perceptions. Whitener et al. (1998) propose that judgements of trustworthiness are likely to arise from inferences based on observations of managerial behaviour. The behavioural dimensions outlined by Whitener et al. (1998) were considered to be conceptually well justified and when reviewed for the purposes of this thesis appeared to map consistently onto the three dimensions of trustworthiness identified by Mayer et al. (1995). It is worth noting that although Whitener et al. (1998) allude to trustworthiness perceptions and identify competence, integrity and benevolence as critical conditions for trust (Butler, 1991; Mayer et al. 1995), they do not discuss trustworthiness with reference to each of the behavioural dimensions. Instead, a direct relationship between trustworthy behaviour and interpersonal trust is proposed.

This thesis therefore, sought to integrate these two theoretical frameworks with the intention of advancing our current understanding of the trust-building process. Using Whitener et al.'s (1998) model, a causal sequence from the observation of a trustee's trustworthy behaviour to updated trustworthiness perceptions on the part of the trustor is proposed. Furthermore, the trustworthy behaviours are hypothesised to influence these trustworthiness dimensions in a differential way. Despite the tripartite conceptualisation of trustworthiness described by Mayer et al. (1995), trustworthiness is largely measured as a composite construct, combining all three elements. In order to fully understand the role of trust within an on-going exchange relationship, research is needed to provide a simultaneous examination of all three dimensions (ability, integrity and benevolence) of trustworthiness and the behaviours which relate to them.

As shown in the following paragraphs, the three dimensions of trustworthiness were used as an organising framework upon which to explore and contextualise the behavioural antecedents further. The configuration of trustworthy behaviour to trustworthiness dimension adopted within this thesis is supported by the theoretical propositions made by Burke et al. (2007) in their recent review. The addition of trustworthiness dimensions to Whitener et al.'s theoretical framework helps to map out the causal processes of trust-building in more detail, whilst also extending this model. In order to delineate the behaviours which may serve as markers for an individual's ability, integrity and benevolence trustworthiness, each of the dimensions will be briefly discussed again.

Hypothesis 3: The dimensions of trustworthy behaviour will differentially influence ability, integrity and benevolence trustworthiness perceptions.

3.3.2 Antecedents of trustworthiness perceptions

3.3.2.1 Trustworthy behaviour which inspires integrity trustworthiness

The first two dimensions of trustworthy behaviour, as outlined by Whitener et al. (1998), are termed behavioural consistency and behavioural integrity. These behaviours are conceptualised within this thesis as being closely related to the integrity trustworthiness dimension described by Mayer et al. (1995). Behavioural consistency is defined as predictability or reliability in behaviour (Whitener et al. 1998). If managers behave consistently over time and across situations, the follower can better predict their future behaviour and are therefore more confident taking risks and making themselves vulnerable. Mayer et al. (1995) argue that integrity is judged by examining the similarity between the leader's previous and current behaviours and the consistency between word and actions. Put simply, inconsistencies between words and actions decrease trust (McGregor, 1967, as cited in Lewicki & Bunker, 1996). Consistent behaviour displays commitment and predictability, which are key attributes for promoting trust according to Burke et al. (2007). Few things are observed more readily or considered more significantly than a discrepancy between what an individual says they will do and what they actually do (Lewicki & Bunker, 1996). Therefore, if an individual is consistent in their behaviour, this should contribute to perceptions of higher integrity trustworthiness as it provides the trustor with a sense of certainty regarding the actions the trustee will undertake in the future.

Integrity is a popular and often broadly defined construct within the literature, with a myriad of different conceptualisations. Palanski and Yammarino (2007) found that integrity is used in at least five different ways: as wholeness, as consistency under adversity, as consistency between words and actions, as being true to oneself and as a general sense of being moral or ethical. Mayer et al.'s (1995) conceptualisation and other similar more general approaches take a more focussed and narrow view of integrity based upon perceived consistency between words and actions and alignment with internal beliefs. Whitener et al. (1998) in their definition of behavioural integrity as a trustworthy behaviour also discuss word-deed consistency, along with honesty, promise fulfilment and moral character. Such a definition is consistent with the view of integrity offered by Mayer et al. (1995). Hence, a conceptual argument is made in this thesis proposing that when a leader demonstrates behaviours such as keeping to promises and acting in accordance with earlier stated intentions, they are likely to be considered to have integrity trustworthiness.

Although behavioural consistency and behavioural integrity both reflect a consistency that serves to reduce employees' perceived risk in trusting their managers, the two dimensions are considered distinct. The former refers to the reliability of managers based upon past actions whilst the

latter refers to consistency between what a manager says and what he or she does (Whitener et al., 1998). Furthermore, as Mayer et al. (1995) observed, "being consistent is insufficient to integrity, as the trustee may consistently act in a self-serving manner" (p. 720). Such statements highlight the relevance of demonstrating both behavioural consistency and behavioural integrity for judgements of integrity trustworthiness.

Hypothesis 3a: Engaging in behavioural consistency and behavioural integrity trustworthy behaviours will positively influence integrity trustworthiness perceptions.

3.3.2.2 Trustworthy behaviour which inspires ability trustworthiness

Ability trustworthiness has been defined as 'that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain' (Mayer et al., 1995, p. 717). In order to delineate the behaviours that may serve as markers for ability trustworthiness, two of Whitener et al.'s (1998) dimensions of trustworthy behaviour are considered: communication; and sharing and delegating control. Communications skills are known as drivers of ability, in that one who is able to communicate openly and effectively is viewed as more competent (Mayer et al., 1995). Mayer et al. (1995) highlight the importance of interpersonal communication as a potential influencing factor on the ability facet of trustworthiness. Research has shown that open communication, in which managers exchange thoughts and ideas freely with employees, enhances perceptions of trust (Butler, 1991). The definition of communication is comprised of three factors within the current model; accurate information, explanations for decisions and openness. A leader who can provide explanations for tough decisions, be candid in their communications, and do so in a timely manner should be perceived as more capable within their given domain by followers (Frazier et al., 2010).

Whilst communication focuses on sharing and exchanging ideas, the behavioural dimension of sharing and delegating control is also hypothesised to build ability trustworthiness perceptions. Gillespie and Mann (2004) found that consultative leadership (e.g., consulting others) predicted 67% of the variance in subordinates trust towards leadership. Similarly, Podsakoff et al. (1990) argue that leaders can gain trust through consulting with followers on important decisions. Follower's perceptions of leaders' ability trustworthiness will not only be determined by leaders' skills and expertise within their relevant domain, but also by their ability to do their job as a leader. The extent to which managers involve employees in the decision making process has been shown to influence the development of trust (Driscoll, 1978). Being given the opportunity to voice opinions is also significantly related to trust (Alexander & Ruderman, 1987). A leader who engages employees is likely to be considered more capable as they are able to delegate and share control in an effective

manner. From a social exchange perspective, sharing and delegating control[1] acts as a social reward for employees which demonstrates trust and respect for the employee, which is likely to lead to reciprocation from the employee in the form of desired behaviour.

Based upon the definition provided by Mayer et al. (1995) an additional behavioural dimension was also added to the present model. A trustee with ability-based trustworthiness is perceived by the trustor as someone who can effectively perform in a given domain (Davis et al., 2000). Competence is conceptualised as a boundary condition within Whitener et al.'s (1998) framework in that the influence of a given behavioural dimensions on trust will be moderated by the perceived competence of the leader. Although the rationale for this variable as a moderator is sound, there is also an argument to be made for behaviours which denote competence acting as a direct antecedent of ability trustworthiness perceptions due to the confidence it instils in a trustor's capability.

Hypothesis 3b: Engaging in open communication and competence-based trustworthy behaviours will positively influence ability trustworthiness perceptions.

3.3.2.3 Trustworthy behaviour which inspires benevolence trustworthiness

Benevolence trustworthiness perceptions are fostered when a trustor is perceived as having a positive orientation toward the trustee (Mayer et al., 1995). Such a positive orientation is manifested through care and concern for the well-being of the other, which maps perfectly onto Whitener's final behavioural dimension, demonstrating concern. Within their description of this trustworthy behaviour, Whitener and colleagues observe that managers who show sensitivity and consideration for employee needs, act in a way that protects employee interests and refrain from exploiting others will be considered more benevolent. Such behaviours denote a genuine interest in the employee's welfare and imply an attachment to the employee. In contrast, if a leader does not engage in such behaviours and takes advantage of their follower's vulnerability, they will be considered to lack benevolence trustworthiness. Podsakoff et al. (1990) suggests that leader consideration of the follower's interests and welfare may be highly relevant to employee trust.

Hypothesis 3c: Engaging in trustworthy behaviours which demonstrate concern for the trustor will positively influence benevolence trustworthiness perceptions.

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[1] For the remainder of this chapter sharing and delegating control will not be discussed as a behavioural marker of ability trustworthiness. This is due to the focus on member trust-building within this study. Sharing and delegating control will however be tested within study 2 when the leader is the trust-building referent. Therefore it was considered appropriate to outline this theoretical pathway at this point.

3.3.3 Trust-building behaviour research

Trust-building has been an area of interest for a number of years, yet the emergence of empirical research has been slow. Butler (1991) identified 11 supervisor behaviours as facilitating trust, including behaviours such as, consistency, competence and fairness. Deluga (1994) in a study of manager-employee dyads also examined supervisor trust-building behaviour adopting similar behavioural items as Butler (1991) such as promise fulfilment and availability. Of most relevance to the present research is a trust-building study by Korsgaard et al. (2002) which tested aspects of Whitener et al.'s (1998) trustworthy behaviour taxonomy. The two trustworthy behavioural dimensions of open communication and demonstrating concern were found to play a critical role in the development of trust between employees and management, as well as employee citizenship behaviour. The work by Korsgaard et al. (2002) supports the predictions made within this thesis regarding the influential role of trustworthy behaviour for trust within a dyadic working relationship. However, the above research did not consider trustworthiness or allow for causal inferences to be made due to the cross-sectional design of the study.

Although trustworthiness has largely been overlooked as a mediator within the trust literature, two notable exceptions exist. Frazier et al. (2010) examined the relationship between justice perceptions (procedural, interpersonal and informational) and trust, via trustworthiness perceptions. Similarly, Cladwell and Hayes (2007) adopted Chemers (1997) Integrative Theory of Leadership, with three categories of leadership behaviour (relationship development, resource utilisation and image management) to explore the relationship between these behavioural dimensions and trust via trustworthiness perceptions. Both studies lend support to the current research hypotheses as they illustrate how different behaviours and justice perceptions can significantly influence outcomes via their effects on trustworthiness perceptions at a dimension level. These studies provide a finer distinction of trust through examining the causal process and help to explore the interdependencies of these constructs and their joint and independent influence on trust.

The propositions of this research are supported by the work described above, however importantly this research will make a number of contributions beyond the extant literature. Firstly, the research will be longitudinal and will examine all five dimensions of trustworthy behaviour outlined by Whitener et al. (1998) in their theoretical framework. As mentioned previously, the use of a prospective design (as opposed to the cross-sectional designs used in previous studies) provides a better test of the role of trust-building in developing trusting relationship. Secondly, the data collected will be cross-source in that different referents will rate engagement in behaviour and subsequent trustworthiness perceptions. Such an approach helps to circumvent the methodological problems associated with common source measurement. Finally, the trust-building process will be examined within the context of a developing leader-member exchange relationship.

3.4 Updating trustworthiness perceptions as a second mediator

In this thesis, trustworthiness perceptions are cast as crucial cognitive evaluations which trustors make in response to observed trustworthy behaviour engaged in by the trustee. Considerable support exists for the proposition that trustworthiness perceptions will follow from trustworthy behaviour. Within the workplace, individuals constantly interpret and evaluate implicit messages of trust and trustworthiness based on overt behaviours (Brower et al., 2000). Creed and Miles (1996) describe the trust decision as a 'conceptual calculus', whilst Kramer (1999) describes trustors as decision makers who use information from their history of interactions with a partner to draw inferences about the person's trustworthiness. Since one of the best predictors of future behaviour is past behaviour, individuals are likely to derive expectations about others' trustworthiness by observing their most recent behaviour to see if they appear trustworthy (Butler, 1991; Korsgaard et al., 2002; Whitener et al., 1998).

Furthermore, both of the theoretical models which provide the foundation for this thesis support the causal links at the heart of this thesis. A core tenet of Mayer et al.'s (1995) cognitive approach to trust is the idea that parties process information about others, based upon the observation of behaviour in order to come to decisions about how much risk to take. Furthermore, Whitener et al. (1998) also advance the idea that trustors use specific dyadic behaviours as a core factor for diagnosing trust. Taken together, considerable support exists for the relevance of updated trustworthiness perceptions of the trustor, based upon the observation of the trustees' trustworthy behaviour. Such perceptions are therefore cast as a second sequential mediator. Although the length of time needed for this process to unravel will vary across individuals, it is bounded by the opportunity to experience repeated interactions upon which trustworthiness perceptions may be updated (Cropanzano, Bryne, Bobocel & Rupp, 2001).

Whitener et al. (1998) made a call for future research to not only test their proposed model but also explore the antecedents of the behaviours identified within their framework. Therefore, this research responds to both of these calls through the consideration of felt trustworthiness as an antecedent to behaviour and subsequent updated trustworthiness perceptions in response to the observed behaviour.

3.5 LMX quality as an outcome

Through the integration of these two trust-based frameworks, a process of trust-building has been described. Specifically, a causal sequence has been outlined beginning with initial felt trustworthiness perceptions at the start of the relationship. These early perceptions of felt trustworthiness along the dimensions of ability, integrity and benevolence are proposed to trigger engagement in the identified trustworthy behaviours to a lesser or greater extent. Upon the

observation of such trustworthy behaviours by the trustor, updated trustworthiness perceptions are believed to ensue, thus capturing the dynamics and developmental nature of trust over time. This trust-building process is all believed to significantly influence LMX quality over time. The rationale for portraying LMX quality as the outcome variable within this research is provided below.

The prevailing assumption within the LMX literature is that relationships are characterised by either low or high trust (Schriesheim, Castro & Cogliser, 1999) and not subject to change once established (Bauer & Green, 1996; Liden et al., 1993; Nahrgang et al., 2009). However, it is unlikely that individuals in either high or low LMX relationships stop actively monitoring their relationship and attending to trustworthiness perceptions. As shown by Scandura and Pellegrini (2008) even within high LMX relationships an element of vulnerability can be present and people continually evaluate the costs and benefits of remaining within that exchange relationship and allowing themselves to be vulnerable. There currently exists a paucity of research which examines the role trust actually plays in LMX and how this social exchange process is achieved (Ayree et al., 2002). Trust-building is believed to facilitate social exchange through providing individuals with valuable information upon which to base their willingness to be vulnerable decision upon, and provides a base for reciprocation and obligation judgements. Risk-taking, reciprocation and feelings of obligation therefore stem from this trust-building process and predict LMX quality.

During an on-going relationship, individuals will re-evaluate how well they trust each other based upon interactions to date. These perceptions are proposed within this thesis to be driven by updated trustworthiness perceptions along the dimensions of ability, integrity and benevolence. These perceptions will then inform subsequent exchange based behaviour which will likely impact relationship quality across time in either a positive or negative direction (Ferris et al., 2009). For example, if a leader observes a follower sticking to their word and behaving in a way which is consistent with their previously stated intentions, this may lead to the leader updating their perceptions of this employee's integrity trustworthiness. This updating may involve either assuring or changing previously held beliefs based on the observation of behaviour. In this instance, based upon such updated perceptions, the leader will be more likely to engage in behaviours which involve risk with the follower, such as delegating important tasks, or less monitoring and surveillance (Mayer et al., 1995).

Risk-taking behaviours follow from trust with the amount of risk taken being related to the level of trust (Brower et al., 2000). Likewise, risk-taking behaviours such as delegation have been found to be significant predictors of LMX quality (Bauer & Green, 1996; Nahrgang et al., 2009). In the present example, delegation is an outcome of trust but an antecedent of LMX quality, therefore illustrating a feedback loop evolving through a function of social exchange and facilitated by trust. If said employee was to demonstrate integrity again in their actions, trustworthiness is likely to be

further assured, and trust is reinforced and LMX quality will be strengthened, thus illustrating the iterative process. If however, an individual is deemed to have acted in a way which raises doubts as to his or her previously assumed trustworthiness (e.g., showing incompetence on the job or breaking promises) this is likely to contribute to reduced trustworthiness perceptions. These perceptions in turn will guide social exchange behaviour and are likely to lead to less risk-taking. Mayer and Gavin (2005) propose that when trust is degraded trustors will expend energy 'covering their backs' to protect themselves. Such actions stifle the social exchange process and diminish LMX quality.

In support of the above propositions, Brower et al. (2000) argue that leader perceptions of trustworthiness were likely to drive risk taking behaviours such as delegation. Indeed, research exists to support the view that leaders will adjust their behaviour according to their trustworthiness beliefs about the follower. Hakimi, van Knippenberg & Giessner (2010) found that leader empowering behaviour was influenced in part by the leaders trust in the follower's integrity and ability. Due to the risk inherent within empowering behaviours such as delegation, leaders needs to make an accurate assessment of whether they are willing to make themselves vulnerable to the actions of the employee. The authors found that leaders drew inferences about employee trustworthiness, which in turn influenced their behaviour.

Successful on-going reciprocation from both parties reinforces and stabilizes trust, which is the axis upon which social exchange revolves (Ayree et al., 2002). The LMX and trust relationship is therefore proposed to be bidirectional, such that trust facilitates social exchange and social exchange behaviours help to build trust. In summary, relationship quality at the start is therefore not assured; it is subject to revisions and qualifications based upon the interaction and observation of behaviour within this dyadic relationship. This serial chain of events is part of the previously theorised trust-building process described by Liden and colleagues (Dienesch & Liden, 1986; Liden et al., 1993). Importantly, this research looks to actually measure the content of these social exchanges and identify how this trust arises (e.g., through which behaviours and what processes) rather than merely inferring the presence and importance of trust (Bauer & Green, 1996).

Hypothesis 4a: Updated integrity trustworthiness perceptions of the leader at time 2 will positively influence member rated LMX quality at time 3.

Hypothesis 4b: Updated ability trustworthiness perceptions of the leader at time 2 will positively influence member rated LMX quality at time 3.

Hypothesis 4c: Updated benevolence trustworthiness perceptions of the leader at time 2 will positively influence member rated LMX quality at time 3.

3.5.1 Understanding the underlying mechanisms

In a recent empirical paper, Colquitt et al. (2012) provide valuable insights into the underlying mechanisms of trust as a mediator, as conceptualised within this thesis. The authors proposed that one function of trust was that of 'exchange deepener', whilst a second form of trust served as an 'uncertainty reducer'. Colquitt et al. (2012) found that justice perceptions differentially influenced performance via these two trust pathways which were mapped onto affective and cognitive trust respectively. Drawing upon McAllister's (1995) multidimensional view of trust, affective trust was found to foster a deeper sense of obligation within an exchange relationship as a function of normative commitment, while cognitive trust served to reduce the uncertainty associated with work. Although Mayer et al. (1995) and McAllister (1995) define the trust concept itself in different ways, the two perspectives are still complementary in describing the trust process and parallels can be drawn (Colquitt et al., 2012). Indeed, Colquitt et al. (2012) observe that all of their predictions could also be made operationalizing Mayer et al.'s (1995) view of trust. For example, the authors describe how benevolence trustworthiness has much in common with affect-based trust, whilst integrity and ability can be closely aligned with cognitive-based trust.

The underlying mechanisms described within the above research can be used to support the propositions made within this thesis linking trustworthiness perceptions to LMX quality. Specifically, cognitive based considerations are likely to be determined by integrity- and ability-based trustworthiness perceptions. Therefore, the demonstrations of trustworthy behaviours, relevant to these dimensions of trustworthiness are likely to reduce uncertainty and facilitate risk-taking behaviours within LMX relationships. Benevolence-based considerations, which are proposed to develop less quickly, are likely to influence relationship quality. Trustworthy behaviour which denotes benevolence trustworthiness through signalling care and concern serve to facilitate exchange deepening. The trust determined by benevolence trustworthiness informs the individual about the nature of their exchange relationship.

Colquitt et al. (2007) in their meta-analysis call for research to look at the differential relationships between the dimensions of trustworthiness and the antecedents or consequences of trust. It is proposed that these facets of trustworthiness serve different but complementary roles in developing LMX relationships through facilitating social exchange. Cognitive-based considerations give confidence whilst affective-based trust leads to reciprocation (Dirks & Ferrin, 2002). Both can occur simultaneously within a relationship, but the former likely precedes the latter. As highlighted by Burke et al. (2007), research is needed to establish whether all three dimensions of trustworthiness are equally necessary for LMX quality. Research has yet to consider the relative weight and importance of these three dimensions of trustworthiness and their independent influence on relationship quality. This research directly addresses this gap in our knowledge.

Hypothesis 5: Felt integrity trustworthiness at time 1 will indirectly influence LMX quality at time 3, via integrity based trustworthy behaviour and updated integrity trustworthiness perceptions at time 2.

Hypothesis 6: Felt ability trustworthiness at time 1 will indirectly influence LMX quality at time 3, via ability based trustworthy behaviour and updated ability trustworthiness perceptions at time 2.

Hypothesis 7: Felt benevolence trustworthiness at time 1 will indirectly influence LMX quality at time 3, via benevolence based trustworthy behaviour and updated benevolence trustworthiness perceptions at time 2.

3.6 Trustworthy behaviour and its referents

For the most part leadership research focuses almost exclusively on the leader. Even LMX theory which has been set apart from the majority of the leadership domain for its unique adoption of the dyad, still focuses largely on the behaviour of the leader within this relationship. As a result, we know very little about follower behaviour and how it influences and is influenced by leader behaviour (Barling et al., 2010). Such a tendency is also observed within the available trust-building literature in that much of the existing research places the responsibility for building and maintaining trust in the hands of the leader (Dirks & Skarlicki, 2004), much to the exclusion of the follower. Indeed, Whitener et al. (1998) assert that the manager's behaviour provides the foundation for trust and that it is the manager who is responsible for initiating the first step in trust building. Such a view is understandable due to the power asymmetries inherent in most leader-follower dyadic relationships, wherein follower vulnerability and dependency can often be more salient (Yang et al., 2009). The follower depends upon the leader for a wide range of resources (such as money and information). Nevertheless, that does not mean that the leader is not also vulnerable to, or influenced by the actions of the member as the leader might also depend upon the follower for similar resources (Wilson, Sin & Conlon, 2010). Therefore, a leader must also consider the trustworthiness of a member before delegating important tasks or confiding sensitive information as such actions place them at risk to the motives of the member.

Any act of leadership requires the active involvement of, and agreement by, followers (Barling et al., 2010). Therefore, a unique contribution of this thesis is that it attempts to readdress this bias through the consideration of the follower and their efforts to build trust. To do so, this research will focus upon member engagement in trustworthy behaviour. The adoption of a follower-centric approach within this thesis accommodates the shift in more contemporary leadership approaches to a view of the member as active and influential upon the relationship rather than dependant, as is typically portrayed in traditional models of leadership. As will be discussed shortly, a persuasive case

can be made for the important part that members may play in building trust within the context of a leader-member exchange relationship.

3.6.1 Member engagement in trustworthy behaviour

In this thesis, the members are considered to represent a potentially important source of influence in the trust-building process. It is proposed that based upon felt trustworthiness perceptions, members may actively seek to improve their LMX relationship through engaging in behaviours in an instrumental manner to reassure the leader of their ability, integrity and benevolence trustworthiness. Trustworthy behaviour may therefore act as a mechanism that can either help kick start the exchange process if it did not start as expected, or enhance the relationship further. Although Whitener's framework is orientated towards managerial trustworthy behaviour, many of the behavioural dimensions readily translate and are applicable to the member as well. Such a shift in focus means that it is the leader's updated perceptions of the member's trustworthiness which are of interest, rather than the subordinate's assessment of the leader's trustworthiness, as is normally the case. Mayer et al.'s (1995) integrative model of trust de-emphasises the trust referent, focussing instead on any identifiable party who acts with volition towards the trustor, and therefore generalises well to the adoption of the member as the trust referent.

LMX theory essentially describes a process through which members 'evolve' their roles through interaction with the leader (Wayne & Ferris, 1990). Little research, however, has articulated what members can actively do to influence the quality of relationship which develops between themselves and the leader. Followers feature prominently within LMX theory with an emphasis being upon a two-way exchange. Despite this, the majority of LMX research typically conceptualises the member as relatively passive in their efforts to influence their LMX relationship and its development (Bolino & Turnley, 2009). Furthermore, consistent with the trust literature, researchers have typically argued that it is the leader's task to seek to develop high quality LMX relationships with all employees (Bolino & Turnley, 2009). Evidence exists, however, of member's playing an active role in shaping the perceptions and evaluations of the leader in other contexts, thus suggesting that such conclusions may not be entirely accurate. For example, research has shown members actively try to improve their performance through negative feedback seeking behaviour which influences subsequent LMX quality (Chen, Lam & Zhong 2007). Similarly, research by Wayne and Ferris (1990) has shown that member engagement in influence tactics during initial interactions can be effective to influence early relationship quality. The authors found that influence tactics which were supervisor focussed were particularly successful.

According to Gomez & Rosen (2001) from an employee perspective, identifying and engaging in actions that engender managerial trust may be one important strategy for expanding

personal control. Employees should look initially to demonstrate their competence on the job and then build benevolent perceptions. Gomez & Rosen (2001) recommend that research should consider the actions of employees in strengthening the relationship, and conclude that both parties need to contribute to the development of trust within the relationship. Indeed, Maurer, Pierce and Shore (2002) observed that increasingly followers are taking personal responsibility for their own development and career success. When subordinates trust their leader, they are more willing to provide benefits such as discretionary effort, increased job performance (Brower et al. 2009) and should have more favourable attitudes towards the relationship and be more willing to maintain it (Dirks & Ferrin, 2002; Konovsky & Pugh, 1994; Mayer & Gavin, 2005). From an alternative perspective, leader trust in the follower is associated with the followers increased self-esteem and more favourable benefits (Pierce & Gardner, 2004). Due to the potential benefits obtained from high quality LMX relationships, it is highly likely that individuals will exert effort in the pursuit of an improved relationship through the enhancement of trust.

Support for the suggestion that leaders will attend to the trustworthy behaviour of the member when determining trustworthiness is also available. Bauer and Green (1996) contend that it is the actual behaviour of the member which exerts strong influences on relationship quality. A shift in focus towards the concept of followership is being observed within a number of literatures as research considers the role of the follower as determining important outcomes. Palanski and Yammarino (2011) highlighted the relevance of follower's behavioural integrity as an important consideration in addition to leader behavioural integrity. Within the authentic leadership literature (Gardner et al. 2005), the role of followers and the characteristics of authenticity have also being examined in addition to the leaders. Taking a social cognitive perspective, scholars have also examined Implicit Followership Theories (IFTs). In an extension to the body of literature on Implicit Leadership Theories (ILT's) (Engle & Lord, 1997; Epitropaki & Martin, 2005), IFT's are defined as individuals' personal assumptions about the traits and behaviours that characterise followers (Sy, 2010).

Through adopting the member as the trustee this research takes a unique view of trust within dyadic relationships. The implications of this are twofold. Firstly, this research will provide some key insights into the role of leader trust in the follower as a determinant of LMX, rather than the more commonly investigated role of follower trust in the leader. The leader's perceptions of the followers trustworthiness is an area of research currently underexplored. Indeed, in both of the recent meta-analyses (Dirks & Ferrin, 2002; Colquitt et al., 2007), no studies of manager trust in the subordinate were included, due to the rarity of such an approach. This thesis therefore provides the opportunity to explore the dynamics of leaders' trust in followers from two perspectives: both the followers' perception of it (felt trustworthiness), and the leaders subsequent trustworthiness perceptions based

upon the observation of trustworthy behaviour. Such a novel approach is intended to significantly inform both literatures.

A second implication of this research is that it will provide support for the view that members are also able to influence and cultivate their LMX relationship, and identify which forms of trustworthy behaviour are particularly relevant to achieve this. Research has often identified leader integrity as a key determinant of employee trust (Colquitt et al., 2007). This is likely due to employees desire to ascertain whether a leader will do what they say they will do. Integrity-based considerations stemming from perceptions of promise fulfilment, reliability and fairness are found to be more important in cases in which authority dynamics are particularly salient (Colquitt et al. 2007). For member trust-building, different behavioural markers may be important determinants of leader trust. For example, a primary concern for the leader may be the ability of the member or it may be evidence of benevolent intentions.

Ultimately, the relevance of the trustworthiness dimensions is likely to be contingent upon relationship development. Drawing upon the earlier propositions regarding the temporal nature of trust it is hypothesised that ability-based trustworthiness assessments will be most influential on leader trust in the follower at the start of the relationship when interactions are minimal and ability-based behaviour are the most salient. Integrity trustworthy behaviours are likely to have an enduring impact on relationship quality whilst benevolence-based considerations will be most impactful at later stages of the relationships development. These predictions are based upon the underlying belief that more cognitive bases of trust serve to reduce uncertainty whilst proving the foundation for more affective forms of trust which act to deepen exchange quality (Lewicki & Bunker, 1996).

3.7 Moderation: The role of leader attributions

The leader-member relationship occurs within a complex motivational context wherein numerous factors may act to facilitate or constrain the trust-building process. It is therefore important to consider any potential moderators which may place boundary conditions on when member trustworthy behaviour is successful in mediating the relationship between trust and LMX quality.

Individuals are motivated to understand why good or bad events happy. In this sense, according to attribution theory, we are all naive scientists trying to work out the reasons behind why an event occurs (Heider, 1958). Within both social psychology and the close relationship literature, attributions are consistently highlighted as relevant when investigating relationship development. Despite providing valuable insights within these related domains this dominant framework has been far less applied within the context of LMX theory. As there is usually a large amount of interaction between a leader and a member, there is ample opportunity for each to make attributions about each other, thus making attributions highly relevant to consider.

A number of authors have recognised that attributions may play a key role in the leader-member relationship, with Green and Mitchell (1979) being the first to suggest the link. Dienesch and Liden (1986) stressed that attributions serve as critical inputs to the development of the relationship between leaders and those who follow them. During early interactions, attributions are made after the initial delegation of responsibilities by the leader and members make attributions about the leader's attitudes and behaviour based upon the nature of these initial assignments. These attributions go on to influence how members perform for the leader and determine whether they will respond with loyalty and high performance. Conversely the leader will make attributions related to the member's performance on these initial assignments, and this will then influence assignments of further responsibilities to the member. Therefore, attributional processes can serve to enhance or impede the nature of early LMX development. Whilst the aforementioned model is intuitive the role that attributions play in the development of the leader-member relationship does not have empirical support due to the lack of prospective studies testing their influence.

Researchers have stated that supervisors make attributions about subordinate's behaviour and that such attributions will affect leader's perceptions of, and actions towards, these subordinates (Kelley, 1967). According to Dirks and Ferrin (2002), attributional processes also outline key factors in trust development. Building from this premise, it is proposed that leaders will interpret the motives behind member trustworthy behaviour. Attributions are hypothesised to moderate when the relationship between trust and LMX is stronger or weaker, via their impact on the trustworthy behaviour – trustworthiness link. An attribution which may be associated with trustworthy behaviour is that of impression management motives. Impression management motives refer to a desire to control how one appears to others (Lam et al., 2007).

Trustworthy behaviours which are considered by the leader as driven by impression management motives are less likely to positively influence trustworthiness perceptions. People who are seen to be using impression management tactics may be perceived as untruthful, unreliable and manipulative (Grant, 2000). Therefore, if a leader attributes the motives behind a member's trustworthy behaviour as insincere and inauthentic, such behaviours will not be associated with positively updated trustworthiness perceptions. This is especially likely to be true for the integrity trustworthy behaviour-integrity trustworthiness path and the benevolence trustworthy behaviour-benevolence trustworthiness link. These trustworthiness dimensions are reflective of the trustee's real nature, moral code and orientation towards the trustor, and provide key information about the trustee's 'good will'. Upon observing integrity- or benevolent-based behaviours, if the leader does not consider the behaviours to reflect genuine and authentic trust-building intentions, then the impact of the behaviour on subsequent trust may be minimal.

Research by Lam, Huang and Snape (2007), looking at negative feedback seeking behaviour lends support for the above propositions. Based upon their findings, Lam et al. (2007) argue that the proactive behaviour of subordinates may not necessarily build better relationships and may even have a negative impact on these relationships. This was found to be dependent upon whether leaders attributed member's motivation for such behaviour as driven by altruistic or impression management motives. The authors found that when the motives behind negative feedback seeking were attributed to impression management the members were less likely to receive the additional support desired, compared to when performance enhancement motives were attributed. Individuals who were perceived to be trying to influence the leader through impression management were no better off than people that refrained from such behaviour as the behaviour was perceived as untruthful or manipulative.

Such research confirms that attributions of motives play a vital role in interpreting follower behaviour, within the context of LMX theory. It also shows that leaders do not merely take members' proactive behaviour at face value, but instead try to detect the underlying motivation for such behaviour to determine whether it is a genuine and authentic representation of the members' character, ability and orientation towards them. Regardless of the members real intended motives, it is the leader's attributions which are proposed to strengthen or weaken the relationship between trustworthy behaviour and trustworthiness perceptions. In the context of the present research, investigating how leaders attribute and interpret the motives of members who engage in trustworthy behaviour is essential for a full understanding of the effects of such behaviour upon subsequent LMX quality. Specifically, it is predicted that attributions of insincerity will significantly moderate the trustworthy behaviour-trustworthiness link across all three models (ability, integrity and benevolence). The relationship between trustworthy behaviour and updated trustworthiness perceptions is hypothesised to be strengthened when attributions of insincerity are low but weakened when attributions of insincerity are high.

Hypothesis 8: Attributions of insincerity will moderate the integrity trustworthy behaviour-LMX quality link via integrity trustworthiness perceptions. When attributions of insincerity are low the positive relationship between behavioural consistency and behavioural integrity and LMX quality will be strengthened due to the mediating role of updated integrity trustworthiness perceptions.

Hypothesis 9: Attributions of insincerity will moderate the benevolence trustworthy behaviour- LMX quality link via benevolence trustworthiness perceptions. When attributions of insincerity are low the positive relationship between demonstrating concern and LMX quality will be strengthened due to the mediating role of updated benevolence trustworthiness perceptions

Hypothesis 10: Attributions of insincerity will moderate the ability trustworthy behaviour-LMX quality link via ability trustworthiness perceptions. When attributions of insincerity are low the positive relationship between open communication and competence-based behaviours and LMX quality will be strengthened due to the mediating role updated ability trustworthiness perceptions.

Figure 3.01 depicts a version of the full conceptual model. Note, however, that within this thesis three distinct conceptual models are proposed which correspond to the three dimensions of trustworthiness. Each model is made up of different trustworthy behavioural facets and either ability, integrity or benevolence trustworthiness perceptions (both felt and leader-rated). In the interest of parsimony only the full conceptual model is depicted within this chapter. Please see appendices 1, 2 and 3 for the integrity, ability and benevolence conceptual models respectively.

Figure 3.01: Conceptual Model

Time 1   **Time 2**   **Time 3**
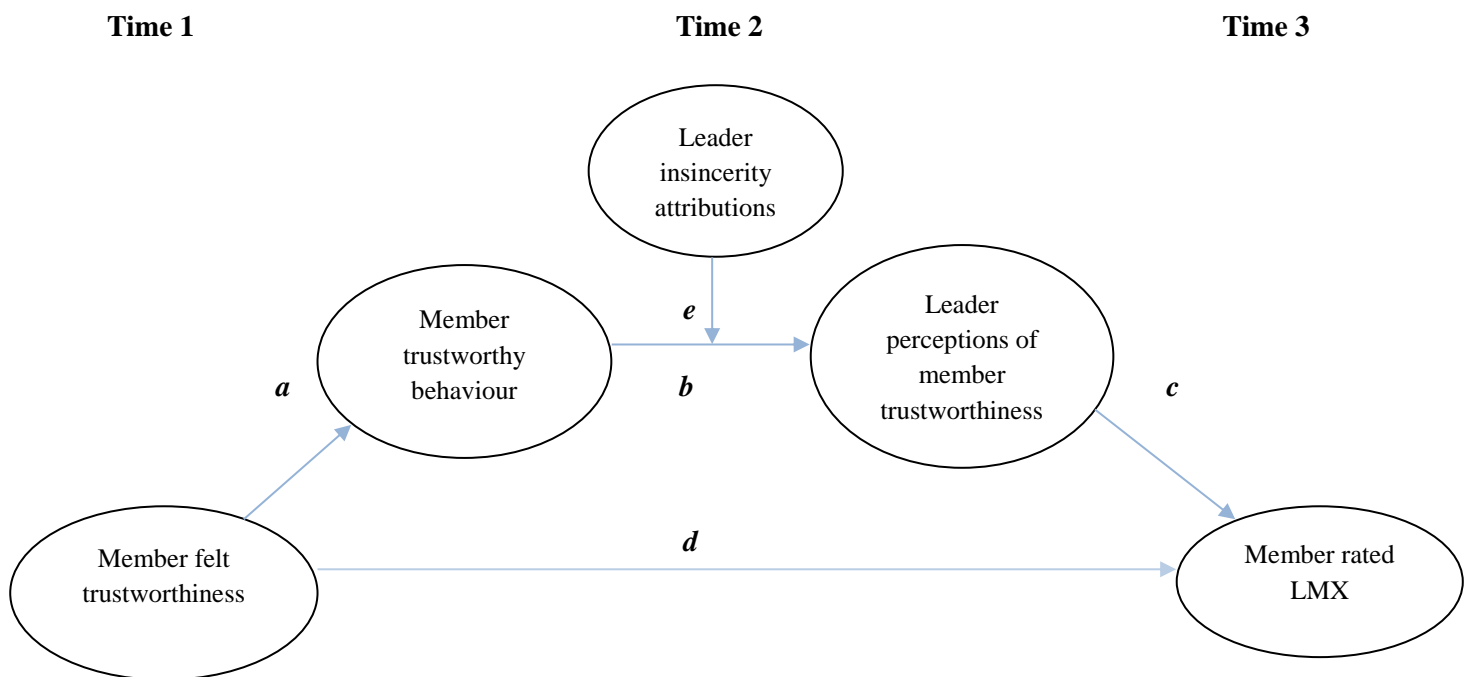
The overall conceptual model for the first study is shown in figure 3.01. The path labels (*a, b, c, d and e*) within the model are used to describe the key pathways of the present research. Starting from the left the independent variable is presented, felt trustworthiness. As shown in path *a*, it is hypothesised that felt trustworthiness perceptions drive engagement in trustworthy behaviour (mediator 1). This pathway is hypothesised to be positive; in that the more a member feels trusted the more likely they are to engage in trustworthy behaviour. Engagement in such behaviours helps improves relationship quality over time (member-rated LMX as the dependent variable) due to a change in leaders perceptions of member trustworthiness (mediator 2, path *b*) based upon the observation of such actions. The change in LMX is proposed to occur as a function of the leader's updated trustworthiness perceptions (whilst controlling for LMX quality at time 1). The rationale for this is based on the premise that the more trustworthiness is assured, the more the leader trusts and are therefore more

likely to allow themselves to be vulnerable to that member and engage in risk-taking behaviours which predict subsequent LMX quality. Path *e* illustrates the potential influence of leader insincerity attributions as a moderator of the trustworthy behaviour – trustworthiness link. It is hypothesised that this relationship will be enhanced when insincere attributions are low but will diminish or not occur when attributions are high (particularly for integrity and benevolence based considerations). Trust is conceptualised within this research as a dynamic variable which changes over time, with updated trustworthiness perceptions modelled as an immediate antecedent. Such changes are hypothesised to be pivotal in determining LMX relationships development, through facilitating social exchange.

Table 3.01: Summary of thesis hypotheses

Hypothesis	
H_1	The LMX relationship will be reasonably stable over time.
H_2	Felt trustworthiness perceptions at time 1will be positively related to the engagement in trustworthy behaviours at time 2.
H_{2a}	Felt integrity trustworthiness at time 1 will positively influence the engagement in behavioural integrity and behavioural consistency behaviours at time 2.
H_{2b}	Felt ability trustworthiness at time 1 will positively influence the engagement in open communication and competence-related behaviours at time 2.
H_{2c}	Felt benevolence trustworthiness at time 1 will positively influence the demonstration of concern behaviours at time 2.
H_3^2	The dimensions of trustworthy behaviour will differentially influence ability, integrity and benevolence trustworthiness perceptions.
H_{3a}	Engaging in behavioural consistency and behavioural integrity trustworthy behaviours will positively influence integrity trustworthiness perceptions.
H_{3b}	Engaging in open communication and competence-based trustworthy behaviours will positively influence ability trustworthiness perceptions.
H_{3c}	Engaging in trustworthy behaviours which demonstrate concern for the trustor will positively influence benevolence trustworthiness perceptions
H_{4a}	Updated integrity trustworthiness perceptions of the leader at time 2 will positively influence member rated LMX quality at time 3.
H_{4b}	Updated ability trustworthiness perceptions of the leader at time 2 will positively influence member rated LMX quality at time 3.
H_{4c}	Updated benevolence trustworthiness perceptions of the leader at time 2 will positively influence member rated LMX quality at time 3.

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[2] Hypotheses 2a – 2c refer to processes which will be tested within time 2

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H_5	Felt integrity trustworthiness at time 1 will indirectly influence LMX quality at time 3, via integrity based trustworthy behaviour and updated integrity trustworthiness perceptions at time 2.
H_6	Felt ability trustworthiness at time 1 will indirectly influence LMX quality at time 3, via ability based trustworthy behaviour and updated ability trustworthiness perceptions at time 2.
H_7	Felt benevolence trustworthiness at time 1 will indirectly influence LMX quality at time 3, via benevolence based trustworthy behaviour and updated benevolence trustworthiness perceptions at time 2.
H_8[3]	Attributions of insincerity will moderate the integrity trustworthy behaviour- LMX quality link via integrity trustworthiness perceptions. When attributions of insincerity are low the positive relationship between behavioural consistency and behavioural integrity and LMX quality will be strengthened due to the mediating role of updated integrity trustworthiness perceptions.
H_9	Attributions of insincerity will moderate the benevolence trustworthy behaviour- LMX quality link via benevolence trustworthiness perceptions. When attributions of insincerity are low the positive relationship between demonstrating concern and LMX quality will be strengthened due to the mediating role of updated benevolence trustworthiness perceptions.
H_{10}	Attributions of insincerity will moderate the ability trustworthy behaviour- LMX quality link via ability trustworthiness perceptions. When attributions of insincerity are low the positive relationship between open communication and competence-based behaviours and LMX quality will be strengthened due to the mediating role updated ability trustworthiness perceptions.

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[3] Hypotheses 8 – 10 are theorised to occur within time 2

CHAPTER FOUR: THE TRUST DYNAMICS OF LMX RELATIONSHIPS;

STUDY ONE

4.0 Chapter Summary

This chapter describes the method and results of the first study. The chapter begins with a discussion of the study setting and the sample characteristics. This is followed by an outline of the study's design in terms of procedure and the measures used. The different forms of statistical analysis adopted within this research are introduced and the results from the preliminary analysis are described. This is followed by a presentation of the key findings. The same analysis is conducted three times on the different conceptual models based upon the dimensions of trustworthiness (ability, integrity and benevolence). Each model is presented in turn and the results are described. Within the following section a summary of the main findings is provided. The chapter closes with a brief discussion of how the research findings can be expanded upon in study two.

4.1 Method

4.1.1 Research design

A longitudinal design was adopted to collect questionnaire data from participants at three time points across a 6 month time period. Such a research design helped to minimise methodological problems related to common method variance as the data was cross source and collected over time. One critical advantage conferred by a longitudinal research design is that it can highlight variability across time in the focal constructs; an important benefit not afforded by cross-sectional research (Holtz & Harold, 2009). Moreover, the use of a cross-lagged design within this prospective study is ideal for addressing the key intention of this research as it allows for the investigation of how LMX relationships unfold whilst controlling for the influence of earlier LMX quality. Such an approach means that the unique influence of trust-building on the development of LMX quality could be more robustly tested. The above research design features also help to avoid any correlations between two variables being artificially inflated due to measures being collected by the same person at the same time using the same data collection technique.

4.1.2 Study setting

This research was conducted during a second year undergraduate module within an international business school at a major British University. The module is structured around computer-based simulation software of a virtual market (EUROCAR, 2008), with companies operating in the car manufacturing and marketing industry. The module runs for three academic terms (25 weeks), and is compulsorily to all second year students studying towards a business degree or a

combined honours student having business as one of their degree programmes. Students are required to work in teams for the duration of the module, and engage in a wide range of assessed and developmental activities.

The EUROCAR simulation is a complex and realistic computer-based simulation of the European automobile industry. Students form a company board and work closely within this team whilst competing against the other teams. The module has a number of different elements. Within the first term, students within their teams, attend 10 weekly one hour lectures, 10 one-hour weekly tutorials. Within these sessions, students learn the core skills associated with developing a company, run the simulation and produce a business plan. Time is also dedicated within these tutorials for group interaction, to allow time for students to discuss within their teams their current strategy, make decisions regarding their company, allocate workload and organise meetings.

There were 27 tutorial groups in total, each tutorial session was run by a single tutor (of which there were 9) whilst the lecture was run by the module leader. The first four tutorials are delivered before any practical sessions involving the simulation, whilst the remaining 6 tutorials alternate with weekly practical sessions. The practical sessions make up the final component of the module which are facilitated by two individuals: the tutor and an umpire. The umpires are members of academic staff from the Economics and Strategy Group who are responsible for the running of the simulation, and also are familiar with the economic models which underlie the virtual financial market in which the car companies compete. The practical sessions take place within a dedicated computer lab, and there are 7 practical sessions in total. The students sit within their teams and work on one computer per team, where one individual is responsible for inputting decisions into the software. The software simulation requires students to input various decisions such as production location, purchasing of raw materials, capital investment, sales, human resources, research and development, operations, pricing allocation across various markets, monitor production levels, production targets and quality. The simulation runs for the whole session, and within this time the students in their teams have to run the company and make quick, informed decisions which are responsive to their competitor's actions, and the fluctuating market they are operating within.

Each hourly session represents approximately 6 weeks of production. Further activities include negotiating steel contracts with the umpire for bulk purchasing, purchasing shares in competing companies based upon their analysis of competitor's strength and performance within the simulation, and collaborating with competitors on joint R&D projects. The simulation runs for approximately 3 (virtual) years and within this time the team are expected to expand their company significantly through a diverse portfolio. The teams need to monitor their company's performance, and to evaluate the strength of their competitors in order to make informed strategic decisions. The teams base their analysis of their company's strength in terms of their position in the market upon a

number of indices of performance. These include both graphical and tabular outputs of the company's balance sheets, profit and loss accounts, production reports, product quality, employee morale and share price. These outputs are produced on a monthly, quarterly and yearly basis.

The tutorial groups are made up of between 24 and 32 students allowing for between 5 to 7 teams made up of 4 to 5 members. In allocating students to tutorial groups, efforts are made to ensure a mix of genders, home or international students, of varying degree programmes and mixed academic past performance. Tutorial groups are divided into teams by the undergraduate administrative staff; therefore students are not able to choose their own teammates and for the most part will not have met their fellow team members before. Within the first tutorial session the tutor allocates students to their teams. The students are instructed to introduce themselves, swap details, allocate roles and decide on a company name. The roles to be allocated include; Managing Director, Finance Director, Human Resources Director, Operations Director and Marketing Director. Each Director is responsible for the corresponding role. Each director needs to ensure that their decisions and suggestions relating to their role are in line with the short term and long term objectives of the company, and are well aligned with the company's overall strategic direction and financial targets.

Students are encouraged to discuss their preferences and relevant expertise for a given role. Often when allocating roles two people want the same role - typically the Managing Director position. Since this is the official leading role within the group it is usually settled by a vote, which is preceded by a pitch from each student regarding why they would be more suited to the position. At times, one student may take on more than role and in such instances they are encouraged to combine the Operations and Human Resources role, as these two positions are most closely related and involve the least complexity in terms of decision making. In teams of 5 members, the above two roles may be combined so that there can be two Financial Directors, as this is the most demanding function in the simulation.

To ensure adequate motivation, performance on the simulations has an impact upon participant's grades. Students are also required, as a group to submit a number of group-based pieces of assessment, including a business plan and group report and present their business plan orally in front of external examiners. The teams are also required to participate in informal company presentations to the rest of the tutorial group throughout the academic terms. These informal presentations, although not marked, are subject to questions and comments from other teams, and are designed to strengthen presentation skills as well as increase competitor awareness. In addition to these four forms of group-based assessment, the students also have to produce a 3000 word individual reflective assignment at the end of the module which contributes to 35% of their overall mark. In terms of the group-based work, the weightings are as follows; 15% for a company presentation of the business plan (week 10), a 2500 word 3-year business plan which contributes to 25% of the final mark

(week 11) and a 1500 word business plan (week 24) which equates to 15% of their overall mark for the module. The remaining 10% of the overall module mark is allocated by the tutor on the basis of each company's performance on the simulation. Primarily this judgement is based upon the final share price of the company, as this is a composite indicator of performance. Other metrics which are also taken into consideration are the morale of employees, product quality, etc.

The class is designed to model the organisational context with the Managing Director occupying the official leader role. In order to simulate 'real world' experiences and enhance generalizability of the results, the managing director is responsible for team formation, development and performance across the three terms. Furthermore, the Managing Director is responsible for scheduling and conducting team meetings and communicating with the class tutor, the umpire, and undergraduate office as well as representing the company to external stakeholders. Although the managing directors did not have any form of power (either coercive or reward based), they are responsible for conflict resolution, task allocation and making the final decisions.

The teams have extensive interaction, both inside and outside the class setting. The module is highly demanding and each team works together intensively over the three terms. In addition, team meetings, which are set up by the Managing Director, are held on average once a week. As well as building their company from scratch and deciding on the strategic direction the company will take, the teams also often engage in additional activities which give the team a shared sense of purpose and meaning. Such activities include drafting a team charter, and therefore putting into words their shared objectives, targets and performance expectations. Teams also attended workshops for skill development throughout the academic year and work together to design their company logo and company-related merchandise. Attendance to the module is monitored by the group tutor and students are expected to inform the Managing Director and the tutor if they are unable to attend one of the sessions. The Managing Director is also encouraged to raise any problems with attendance or contribution with the students, and to try to increase commitment to the module prior to approaching the tutor. Factors such as the extensive interaction, highly interdependent tasks, shared objectives and responsibility all contribute towards creating a true team-working environment that reflects real team working conditions rather than a university setting.

The present sample was well suited to the intended objectives of this thesis and was chosen because of this suitability. It is important to note that the use of student teams and computer-based simulations are not uncommon within organisational research. These student teams work like many other project teams within the organisational setting, with a formally appointed team leader on a common task for a fixed duration. The teams are also embedded in a wider organisational context where they have to interact with other teams and various other people outside their team (such as tutors, the lecturer and administrative staff). Thus, the interpersonal dynamics of these student teams

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and the nature of the task are largely comparable to those that occur in teams within the organisational setting.

Researchers often draw conclusions based on the findings of student samples within organisational research (Greenberg, 1987). Although student samples have been subject to a degree of criticism in the past for asking students to role play as members of an organisation (Gordon, Slade & Schmitt, 1987), there is growing consensus that such student teams, providing the business simulation is realistic, can encapsulate the key characteristics of an organisation (such as genuine team relations, and more importantly for the purposes of this thesis, leadership and leader-member relations). Consistent with this view, there are an increasing number of empirical studies that have used student samples in the context of a business simulation. Of particular relevance to the present research, is a longitudinal study by Nahrgang et al. (2009) which used a student sample to examine LMX development over time. The students were engaged in a business simulation task which involved working with teams with an appointed team leader. Also within the leadership literature, Palanski and Yammarino (2011) used a longitudinal student sample to test their propositions relating to leader behavioural integrity and follower performance. Mathieu and Rapp (2009) used project teams made up of MBA students to examine team processes using a 'Business Strategy Game' (BSG). The nature of the interactive BSG simulation software was similar to the one used by students within this study. The participants were required to perform in teams and make decisions on all key aspects of a company's operations, within the footwear industry. The competitive environment of this study is designed to emphasise integration across functions and all teams were rewarded in the same way on the basis of their performance. The authors contended that the interdependent nature of the teams in which they interacted with other teams and the need for teams to make a series of realistic and interrelated business decisions meant that the teams had clear features of real work teams. Often studies adopting the business-game based methodology have investigated the effects of group cohesion on performance. Norris and Niebuhr (1980) examined the differences in team performance as a result of cohesion in self-selecting and non-self-selecting teams through the use of the Executive Game simulation. Wolf and Box (1987) also examined group cohesion and performance in similar settings and provide an extensive discussion on the use of such approaches to data collection and student samples.

The above studies lend support to the view that student samples and business simulations offer a viable means of data collection for testing theoretical propositions. Moreover, student samples, such as the one used within this study, offer several advantages to studying the development of leader–follower relationships. First, it is be possible to assess leader–member relationships from early stages of interaction and through the subsequent 6 months of relationship development. During this 6 month period the students work intensively within their teams both within and outside of the class

setting. Second, the study design provides a relatively stable and controlled environment where it is possible to have access to a large number of study participants who all engage in a homogenous task across individuals and groups, whilst external factors remain constant. Finally, a further benefit of such a design is that it allows for differences in tasks, tenure, and group size to be controlled for, variables which might otherwise influence the development of the relationship.

4.1.3 Access and ethics

Following a successful application to the University Research and Ethics Committee, permission was granted to conduct a module-wide questionnaire for all undergraduate students enrolled on the course. The intended questionnaire and procedure for data collection across the time points were discussed in detail with the module leader and agreed prior to the start of the module.

4.1.4 Procedure

The data for this study was conducted in three waves at various time points during the module. Questionnaire-based surveys were used and participants were given the opportunity to complete the questionnaires during their tutorial sessions in weeks 5, 15 and 21 of the academic year. A detailed overview of the data collection process indicating the length of time between each time wave is provided in appendix 4. Provided in appendix 5 is the questionnaire for the member detailing the measures used for times 1, 2 and 3, and within appendix 6 is a copy of the leader's questionnaire. The questionnaires, which were distributed in paper and pencil form during the start of each tutorial, took approximately 15 minutes to complete, and no inducement or reward was offered for participation, and confidentiality was assured.

Matched data was collected at the three different time points. Specifically, member reports of leader-member exchange (LMX) quality, felt trustworthiness and subsequent engagement in trustworthy behaviour directed at the leader were matched with the leader's perceptions of that given member's trustworthiness. Therefore, complete dyad-level data for every leader-follower dyad in every team was collected at three time points. To aid the matching process, participants were required to provide their student numbers as a unique identifier as well as their team number.

4.1.5 Study Sample

The total study sample consisted of 749 second year undergraduate students registered for the *Foundations of Management II: Business Game Module* for the academic year of 2010-2011. Of this sample 172 were leaders (the Managing Directors) and the remaining 577 were team members (occupying various Director roles). In total, there were 27 tutorial groups and within these 170 teams (or companies). Each team had four to five members, with the vast majority of teams comprising both genders, at least two nationalities and a variety of undergraduate majors. Such a demographically

diverse distribution across the sample reduced the need to include such variables as controls, thus optimising the degrees of freedom in the statistical analysis. All students were given the opportunity to participate in the research. Those who were not present at the tutorial at the time of data collection were emailed a version and asked to complete the questionnaire and return it to the researcher within 4 days.

For time one, 656 questionnaires were completed representing a response rate of 87.58% (a response rate of 90.69% for Managing Directors and 84.74% for Directors). For time two, 592 students participated in the study giving a total response rate of 79.03% (85.46% and 75.42% for Managing Directors and Directors, respectively). Finally, for time three of data collection 593 (79.57%) completed questionnaires were returned which is well above the average response rate in most organisational research (Baruch & Holtom, 2008). In total, 432 (57.67%) students participated in all three waves of data collection (111 Managing Directors and 321 Directors) with a total number of 294 dyads of matched data across the three time points. Of this final sample, 47% were female and the average sample age was 20.96 years (SD = 4.0).

4.2 Data collection

4.2.1 Choice and adaption of items to suit sample and setting

In order to fully test the conceptual model, a number of scales were completed by both the Managing Director and the team members, at the three different time points. For the most part, established measures were used for the questionnaire. In the case of the trustworthy behaviour scale items relating to behavioural consistency were compiled anew for the purposes of this research. Validated scales were used to formulate items for the behavioural integrity, communication and demonstrating concern dimensions. For many of the measures slight changes to the wording were made to reflect the role of Managing Director rather than leader or manager, which is the wording typically used within such scales. The measures are described below and are discussed in the order in which they were collected across the three time points. At time 1, the team members (directors) completed the independent measure of felt trustworthiness along with a measure of trust in the leader and leader-member exchange (LMX), which acted as control variables for later analysis. At time 2, team members reported their engagement in trustworthy behaviour which represents the first mediator in the conceptual model, while the Managing Directors rated their perceptions of the member's trustworthiness (representing the second and serial mediator within the model). Also collected at time 2, was the moderator of leader attributions where the Managing Director rated the attributed motives behind the members' trustworthy behaviour efforts. Finally, at time 3 members' rated the quality of their LMX relationship with the Managing Director.

4.2.2 The issue of time in longitudinal analysis

Lewicki and Bunker (2006) highlight the need for research to explore the nature of and level of trust at several time points, sufficiently spread out to allow meaningful change to occur. When conducting longitudinal research it is important to consider the issue of time lag between data collection points so that the timeframes chosen are theoretically meaningful, (i.e., ideally short enough to allow detection of short term change, but at the same time sufficiently long enough to allow change to occur) (Mitchell & James, 2001). Van de Ven and Ferry (1980) state that the participants should not need to speculate what time frame the questions refer to, rather the researchers should specify such information, a point which was considered within this thesis. Ultimately, the decisions made regarding the timeframes of research should be preceded by consideration about the stability of the constructs of interest, as well as the expected emergence of effects. Furthermore, as advised by George and Jones (2001) time should be a central element in theorising and time frames should be based on conceptual logic. The core constructs of this research are trust and LMX quality, both of which are conceptualised as variable over time. Trust in particular is treated as a dynamic construct which fluctuates significantly. Equally, the construct of LMX quality, although often considered to be largely stable, is also believed to be subject to fluctuations as a function of the trust-building process.

Taking heed of such recommendations in the current thesis, the time frame chosen to explore LMX development was 6 months. This timeframe is similar to other prospective studies which have also examined LMX relationship development (Bauer & Green, 1996, 6 months; Liden et al., 1993, 9 months). Furthermore, this timeframe falls within the boundaries of other studies which have investigated trust over time, which have used lags from six weeks to ten months (Frazier et al., 2010; Kernan & Hanges, 2002). For example, a study by Colquitt and Rodell (2012) investigating changes in trustworthiness perceptions chose a four month time period. Within the present study measures were collected at the start of the relationship (at this point the team members had only met approximately twice previously, and therefore were in the early stages of relationship development), 3 months into relationship development and then just under 3months after that. Such short time frames were selected as research has shown that the relationship can develop fairly quickly (which should be captured in the first few weeks with time 1), and then stabilise. Therefore, in order to track the stability of LMX quality and the influential role of trust in LMX development, it was important to conduct the research over a long enough period for significance influence to occur (6 months), but to also have measurement quite frequently (a time lag of 3 months between each data collection point) so that changes could be readily observed.

It must be noted that theorising relating to the issue of time in the leadership literature is scarce and scattered (Shamir, 2011). Many theories neglect the time dimension and do not consider the reciprocal and dynamic nature of leader-follower relationships. For these reasons, the selection of time frames is

guided largely by theoretical rationale and the available empirical evidence, both of which have been reviewed above. Considerations are also made about the nature of the sample and the level of interaction frequency which is expected. It is proposed that a three month time frame between each data collection point will be an appropriate amount of time for the effects of felt trustworthiness perceptions on the demonstration of trustworthy behaviour and trustworthiness perceptions and subsequently influence LMX quality to be observed. Perceptions of how trusted the follower feels are proposed to be relatively immediate. Their subsequent engagement in trustworthy behaviour may also follow relatively soon after gauging initial trust levels. However, perceptions of trustworthiness build incrementally through the experience of repeated interactions rather than single instances of trustworthiness demonstration. Therefore a longer timeframe was considered necessary. The participants within this sample meet approximately 2-3 times a week; once during the tutorial or practical session and additionally through pre-arranged meetings. There is also a high level of interaction through emails and phone calls. Considering this level of interaction frequency it was felt that 3 months was an appropriate amount of time for the demonstration of trustworthy behaviour to occur and a history of interactions to build upon which the leader will re-evaluate and update their previously held trustworthiness perceptions. Just as the demonstration of trustworthiness takes time it was important to also allow sufficient time for such changes in trustworthiness perceptions in the eyes of the leader to manifest into risk-taking behaviour with the follower. It is proposed that LMX quality is influenced at time 3 by risk-taking actions such as delegation and disclosure. Between data collection at time 2 and time 3 the teams have to meet a number of important deadlines (as detailed within section 4.1.2). The teams ability to so, and perform effectively is likely contingent on behaviours such as delegation. Therefore, it was felt that 3 months was a sufficient amount of time for the leader to either engage in, or restrain from, further risk-taking behaviours with the follower, a decision driven by their updated trustworthiness perceptions.

A pertinent strength of this research design is the time lag. The outcome data of LMX quality was collected three months after the measures of trustworthy behaviours and trustworthiness perceptions, thus allowing time for the facilitative effects of updated trusting perceptions to manifest themselves in risk-taking behaviour, thus strengthening or diminishing LMX quality.

4.3 Measures

Guided by the theoretical model depicted in figure 3.01, the predictor and outcome variables for this research are detailed below. The measures are described in the order they appear in the model across the three time points of data collection. If not otherwise indicated, all items used likert scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

4.3.1 Measures at time 1

Felt trustworthiness perceptions: A scale developed by Schoorman, Mayer and Davis (1996) and published by Mayer and Davis (1999) was used to measure felt trustworthiness perceptions. When originally developed this scale was used as a measure of leader trustworthiness, in that the member (or follower) within the dyad rated the extent to which they perceived the leader to be trustworthy across the dimensions of ability, integrity and benevolence. The scale has since been adapted with slight changes to the wording for use with a number of different referents including perceptions of top management trustworthiness (Mayer & Gavin, 2005), organisational trustworthiness (Searle et al., 2011) and felt trustworthiness (Brower et al., 2009; Dirks & Skarlicki, 2009; Lester & Brower, 2003).

For the purposes of this thesis, the procedure developed by Lester and Brower (2003) to measure felt trustworthiness was adopted. In order to use the original scale, the authors adapted the items to reflect the self as the focal point of the question rather than the leader. The subordinate answered items about their perceptions of their supervisor's estimate of their trustworthiness (felt trustworthiness). Due to concerns regarding the length of the questionnaire the trustworthiness scale was shortened using the same criteria adopted by other studies for item elimination (Dirks & Skarlicki, 2009; Mayer & Davis, 1999). Item selection was based upon the items which were considered to most clearly reflect each theoretical trustworthiness dimension (an approach adopted by Ferrin, Dirks & Shah, 2006). In total 6 items were removed from the original 17 item scale, resulting in an 11item scale made up of 3 items reflecting benevolence ($\alpha = .83$) with an example being 'My managing director thinks that I am very concerned about his/her welfare.' 5 items were used to measure integrity ($\alpha = .79$) with an example item being 'My Managing Director thinks I have a strong sense of justice.' Finally ability was assessed using 2 items ($\alpha = .83$) reflecting issues such as 'My managing director feels very confident about my skills'. When the 11 items were combined to produce an overall felt trustworthiness scale the internal consistency reliability of the scale was $\alpha =.88$.

4.3.2 Measures at time 2

Trustworthy behaviour: In order to test the theoretical model of trustworthy behaviour described by Whitener et al. (1998), items needed to be generated to measure the different behavioural categories. Sharing and delegating control was not included in this study as it was less relevant to the member for building trust[4]. As discussed in chapter two, it was hypothesised that the facets of trustworthy behaviour would map onto the three trustworthiness dimensions outlined by Mayer et al. (1995). Item generation and selection for each of the behavioural dimensions was based upon the descriptions

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[4] Sharing and delegating control was used for the leader referent in the second study, see chapter 6 for an overview of the items

provided by Whitener et al. (1998) to ensure that the scale was reflective of the theoretical constructs. Key aspects of the definition were highlighted and items were chosen which reflected these theoretical behavioural markers, and where possible established scales were used. The items were either generalised or personalised in terms of the behaviour referent. For example, the benevolence items involved behaviours which were targeted specifically at the dyadic other and therefore were personalised. The rationale for using personalised items is that the definition of demonstrating concern denotes an attachment between the two parties rather than generalised benevolence in the member's behaviour towards everyone. In contrast, some of the integrity items were more generalised and reflect how an individual conducts themselves across situations rather than just how they behave towards the leader. The overall trustworthy behaviour scale had 10 items and produced an alpha value of α = .86.

Behavioural consistency and behavioural integrity: Two items were chosen to measure the theoretical construct of behavioural consistency. This dimension of trustworthy behaviour refers to reliability and predictability and therefore items were chosen which reflected this. Team members rated the extent to which they acted consistently across both time and situation for their leader. For the behavioural integrity dimension, a number of different literatures were consulted when generating the items. Aspects of the Whitener's definition of behavioural integrity align with the behavioural integrity literature (Palanski & Yammarino, 2007; Palanski & Yammarino, 2011) due to the focus upon word-deed consistency. Item selection was guided by these established theories and following a review of the literature two items were selected from the behavioural integrity (BI) scale (Simons, Friedman, Liu & McLean-Parks, 2007). These four items were combined to produce an integrity-based trustworthy behaviour scale with an internal consistency reliability of the scale was α =.81.

Demonstrating concern: The trustworthy behaviour of demonstrating concern was defined by Whitener et al. (1998) by behaviours such as showing sensitivity to other's needs and protecting employee's interests. Item selection was guided by a study by Korsgaard et al. (2002) in which two items were designed to measure demonstrating concern as a form of trustworthy behaviour. The two items reflect a trustor who is sensitive and considerate to the needs of the trustee and cares for their wellbeing (α =.78).

Competence-based behaviour and communication: In order to measure competency-based behaviour, an item was taken from Deluga's (1994) measure of competence, whilst a second item was generated for the purposes of this research to reflect perceived expertise. A key facet of Whitener et al.'s (1998) model is communication which is conceptualised within this research as helping to build perceptions of ability, a view which was supported in a recent review by Burke et al. (2007). The two items used to measure communication, which again were taken from a study by Korsgaard et al.

(2002), reflected aspects of communication such as providing explanations for behaviour and the consideration of other's views (α =.77).

Leader ratings of member trustworthiness: The same trustworthiness scale developed by Schoorman et al. (1996; Mayer & Davis, 1999) was used to measure leader's perceptions of member trustworthiness. Such an adaption to the scale is unique as typically the research focus is upon members ratings of the leader's trustworthiness. As with the felt trustworthiness scale in time 1, a reduced form of the scale was used with the same 11 items and the overall internal consistency reliability of the scale was α =.90. For each of the dimensions, the following alpha levels were found α = .80 for integrity trustworthiness, α = .91 for ability trustworthiness and α = .90 for benevolence based perceptions of member trustworthiness.

Leader-attributed insincerity motives: Four items were used to measure insincerity motives. The items, which were taken from a study by Lam et al. (2007) to measure impression management tactics, were derived from an original scale developed by Allan and Rush (1998). The items were used to indicate the extent leaders felt that member's trustworthy behaviour was sincere and not driven by impression management tactics. Example items include; this team member shows a… 'desire to enhance his or her image (e.g., to make me believe he or she is trustworthy)' and a 'desire to create a good impression' (α = .80).

4.3.3 Measures at time 3

Leader-Member Exchange (LMX): The quality of the leader–member exchange relationship was the key outcome of the study and was measured using the LMX-7 scale which was originally developed by Scandura and Graen (1984), and later modified by Graen and Uhl-Bien (1995). Across seven items, the member rated the extent to which they felt they had a good relationship with the leader at that point. Higher scores reflected a high quality LMX relationship. An example item includes ''My managing director recognises my potential'' (α = .90). Note that LMX quality was also rated by the member at time 1 (α = .85), as this was controlled for during the longitudinal analysis.

4.4 Results

4.4.1 Measurement evaluation

Table 4.01 presents the means, standard deviations and Pearson correlation coefficients of the predictor and outcome variables in this study, for both the leader and the member across the three different time points. Cronbach's alpha of all measures exceeded acceptable levels of scale reliability (i.e., <.70). Upon reviewing the correlations displayed in table 4.01, of notable interest is the correlation ($r =.39$) between LMX quality at time 1 and LMX quality at the last data collection point (time 3). Within the present research this reasonably-sized correlation is taken as an indicator of significant variability in the constructs stability over time. In other words, the majority of variance in later LMX is not explained by earlier levels of LMX. Such a finding supports hypothesis 1 which predicted the reasonable stability of LMX quality over time, and lends support for the relevance of examining trust as a potential important determinant of this unexplained variance.

In the following sections information on the psychometric properties of the measures used within this study are discussed. Apart from the Cronbach's alpha internal consistency reliability measure, exploratory factor analysis (EFA) was conducted upon the trustworthy behaviour scale as it was a newly formed measure for the purpose of the study. Confirmatory factor analysis (CFA) was then conducted on the trustworthy behaviour scale and trustworthiness measures as both scales comprise of several dimensions and second-order factors. The following analysis was conducted whilst controlling for variables such as the demographic factors of age, gender, ethnicity and whether the participants were home students, overseas or from within EU. In no case did controlling for these variables significantly influence the results obtained.

Table 4.01: Means, standard deviations, correlations of variables and Chronbach's alphas

Variables	Mean	s.d	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. LMX(1)	3.93	.541	(.85)														
2. FTW	3.61	.487	.47**	(.88)													
3.FTW(a)	3.79	.634	.40**	.84**	(.83)												
4. FTW (i)	3.64	.514	.43**	.90**	.71**	(.79)											
5. FTW(b)	3.34	.643	.34**	.73**	.40**	.47**	(.83)										
6.Twbeh	4.10	.440	.33**	.35**	.33**	.31**	.23**	(.86)									
7. Twbeh(a)	4.12	.556	.25**	.30**	.36**	.26**	.13**	.74**	(.77)								
8.Twbeh(i)	4.16	.493	.28**	.30**	.30**	.28**	.17**	.88**	.56**	(.81)							
9.Twbeh(b)	3.98	.574	.26**	.26**	.17**	.21**	.26**	.80**	.40**	.52**	(.78)						
10.LMTW	3.77	.608	.10*	.12*	.16**	.13**	.00	.10*	.15**	.10*	.02	(.90)					
11.LMTW(a)	3.99	.766	.16**	.18**	.16**	.17**	.09	.16**	.18**	.15**	.09	.80**	(.91)				
12.LMTW(i)	3.82	.669	.07	.08	.13**	.08	-.01	.10	.15**	.08	.03	.91**	.70**	(.80)			
13.LMTW(b)	3.46	.740	.10*	.08	.08	.08	.04	.08	.07	.08	.05	.74**	.46**	.51**	(.90)		
14.ATT	3.14	.845	.11*	.13**	.10*	.04	.20**	.06	-.03	.02	.15**	-.10*	-.19**	-.09	.02	(.80)	
15.LMX(3)	3.88	.613	.39**	.18**	.16**	.12*	.17**	.37**	.22**	.32**	.34**	.16**	.10*	.15**	.13**	.13**	(.90)

$N = 498$, ** $p < .01$ * $p < .05$. Cronbach's alpha on the diagonal in parentheses

Note: For LMX (1) denotes data collected at time 1, (3) reflects data collection at time 3.

Twbeh –Trustworthy behaviour (a) ability, (i) integrity (b) benevolence

FTW- felt trustworthiness (a) ability, (i) integrity (b) benevolence

LMTW –leader member trustworthiness (a) ability, (i) integrity (b) benevolence

ATT – insincerity attributions

4.4.1.1 Exploratory factor analysis (EFA)

Exploratory factor analysis (EFA) is the most widely used technique in scale development for data reduction or refining constructs (Ford, Maccllum & Tait, 1986; Gorsuch, 1983). The sample size for the present EFA was 434 which met and exceeded the sample size requirements of 150 recommended by Hinkin (1995) for EFA analyses. EFA analysis consists of two principle stages; factor extraction and factor rotation. Principle components analysis (PCA) was the form of extraction used within this study. PCA assesses the whole correlation matrix and attempts to explain all the variability, both shared and unique. Both orthogonal and oblique rotation methods are available for EFA analysis, in this research oblique rotation was chosen as it allows for the factors to correlate. In the social sciences, some correlation among factors is expected and using orthogonal rotation can result in a loss of valuable information. Oblique rotation should theoretically offer a more accurate solution (Costello & Osborne, 2005) and was therefore used within this thesis. The eigenvalues greater than one rule was applied to the data (Hair, Black, Babin, Anderson & Tatham, 2006) as factors with an eigenvalue greater than one are considered significant. The scree plot produced by the EFA analysis was also consulted as it graphically plots the eigenvalues and identifies the point in which they become too small and thus non-significant. A scree plot, although a useful graphical representation, should not be used in isolation when determining factor structure due to the subjective nature in interpretation (Hair et al. 2006). Therefore, both guides were used in determining the number of factors to retain within this research.

When used in scale construction, EFA often involves repeating the two principle stages of factor extraction and factor rotation several times. Often it is necessary to re-evaluate and then possibly discard items after each analysis in search of a clearly interpretable solution in which items are related to a single distinct factor. In the present study, it was important to test for the factor structure of the trustworthy behaviour scale. The items chosen were guided by the theoretical constructs taken from Whitener's conceptual model (1998) and related literatures. The items chosen tapped into four out of the five behavioural facets outlined by Whitener et al. (1998), those being behavioural consistency, behavioural integrity, communication and demonstrating concern. EFA was conducted using SPSS to confirm whether, as previously theorised, these behaviours tapped into the three-factor latent structure of the trustworthiness dimensions (ability, integrity and benevolence) as proposed by Mayer et al. (1995). As the other measures were based upon established scales it was not necessary to conduct exploratory factor analysis (EFA) as knowledge of the underlying latent structure of each scale was already known.

Before presenting the results of the EFA, the items used to measure trustworthy behaviour and the composition of the behavioural dimensions across ability, integrity and benevolence trustworthiness are described below.

Integrity trustworthy behaviours: Based upon the behavioural dimensions of behavioural consistency and behavioural integrity.

- *I behave consistently over time*
- *I act consistently across situations*
- *I demonstrate actions which are consistent with my beliefs*
- *I keep the promises I make*

Ability trustworthy behaviours: Based upon the behavioural dimensions of communication and perceived competence.

- I provide explanations for the decisions I make to my managing director

- I take my managing director's views into consideration when making decisions about the business game

- I am very capable in my business game role

- I perform my work on the business game to a high standard

Benevolence trustworthy behaviour: Based upon the behavioural dimension of demonstrating concern.

- I treat my managing director in a manner which shows I am sensitive and considerate to his/her needs

-I show concern for my managing director's well being

Through the use of principle component analysis and direct oblimin as the form of oblique rotation an incorrect factor structure emerged following the first extraction attempt. The second communication item was found to be cross-loading on the benevolence factor (.397) and the integrity factor (.558), suggesting conceptual overlap. According to Tabachnick and Fidell (2007) a cross-loading item is an item which loads .32 or higher on two or more factors and the item was therefore dropped from the analysis.

After dropping one communication item due to cross-loading issues, the second EFA attempt revealed some interesting findings. The first communication item, which was hypothesised to be a behavioural indicator of ability trustworthiness (factor 3) was found to load highly (.729) on the

benevolence factor (factor 2). The item reflects the trustworthy behaviour of taking the leaders views into consideration when making decisions about work based tasks. Although there is theoretical support for why effective communication would demonstrate ability trustworthiness, the item, which was taken from a study by Korsgaard et al. (2002), could also be considered to reflect benevolence-based trustworthy behaviour due to the emphasis upon consideration. Indeed, Mayer et al. (1995) note that open and honest communication with a subordinate is often one behavioural indication of benevolence as it reflects a positive orientation (Frazier et al., 2010). Interestingly, Frazier et al. (2009) also failed to find that communication, which was conceptualised as part of interpersonal justice, predicted ability trustworthiness. Due to the conceptual similarity of this item to the dimension of benevolence and the high loading this behavioural item was considered most relevant to benevolence trustworthiness considerations and was retained.

Following a second extraction attempt, a strong three-factor solution was produced explaining 70% of the variance with all extraction items above .5 and no cross-loading items. The results of this EFA are presented within figure 4.02. For the first factor, reflecting integrity trustworthiness, high factor loadings for the behavioural consistency and behavioural integrity items were found, ranging from .736- .823. For the second factor, which reflected benevolence trustworthiness, the demonstrating concern and communication items were found to load highly at .754 - .802. For the final factor, reflecting ability trustworthiness, high factor loadings ranging from .807-.882 were found for the perceived competence items. Further support for the strength of the three factor structure was found due to the fact that minimum cross-factor loadings were found (none greater than .20), therefore no further extraction attempts were made.

Support was therefore found for the proposition that the behavioural dimensions of trustworthy behaviour as outlined by Whitener et al. (1998) relate to different dimensions of trustworthiness. As theorised by Burke et al. (2007) and hypothesised here (*H₃*), the behaviours appear to map onto either the ability, integrity or benevolence facets of trustworthiness as described by Mayer et al. (1995). The results of this EFA provide support for the integration of these two theoretical frameworks for exploring trust within leader-member exchange relationships.

Table 4.02: Pattern matrix showing exploratory factor analysis of the trustworthy behaviour scale

Item	Component		
	Integrity trustworthiness	**Benevolence trustworthiness**	**Ability trustworthiness**
1. I am very capable in my business game role	-.005	.057	**.882**
2. I perform my work on the business game to a high standard	.077	.099	**.807**
3. I behave consistently over time for my Managing Director	**.736**	-.100	.203
4. I act consistently across situations for my Managing Director	**.823**	-.142	.156
5. I demonstrate actions which are consistent with my beliefs	**.745**	.195	-.099
6. I keep the promises I make to my Managing Director	**.774**	.150	-.109
7. I take my Managing Director's views into consideration when making decisions about the business game	.060	**.802**	.059
8. I treat my Managing Director in a manner which shows I am sensitive and considerate to his/her needs	-.075	**.834**	.071
9. I show concern for my Managing Director's well being	.098	**.754**	.005

4.4.1.2 Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) is a technique that assesses the extent to which there is shared variance-covariance among groups of observed variables that comprise of a factor or theoretical construct (Schumacker & Lomax, 2004). CFA determines how well the data meet the proposed factor structure through identifying the extent to which the observed variables are generated by the underlying latent constructs, and thus the strength of the regression paths from the factors to the observed variables (factor loadings) (Bryne, 2012). This assessment of model fit is based upon a number of fit indices. It is recommended that several indices are taken into consideration when assessing model fit (Byrne, 2012). The chi-square (X^2) test of model fit assesses the hypothesised model against the data with a non-significant low value indicating that the two covariance matrix's are not significantly different and thus a good fit. Given the prominence of the likelihood ratio statistic

(X²) in the literature it is included in this research. This measure, however, can be problematic as it can falsely indicate poor fit for models with large sample sizes or large correlations among variables (Bollen & Long, 1993) - two potential features of the present dataset. Therefore, it is not relied upon in isolation, but rather in conjunction with other fit indices.

Incremental indices, unlike absolute fit indices, use a reference model to determine model fit. Two of the most commonly used incremental indices of fit are the CFI (Bentler, 1990) and the TLI (often referred to as the non-normed fit index, NNFI; Tucker & Lewis, 1973). Both measure the proportionate improvement in model fit by comparing the hypothesised model with the less restricted nested baseline model. Values of CFI are normed and range from zero to 1.00, with values close to 1.00 being indicative of a well-fitting model (Bryne, 2012). Although originally the cut off for good fit was set at $< .90$ (Bentler, 1992), this has recently been revised so that a value closer to$< .95$ is now considered more suitable (Hu & Bentler, 1995). In contrast to CFI, TLI is a non-normed index, which means its values can extend beyond 0.0 to 1.0; however, it is still customary to interpret its values in the same way as for CFI. The final two goodness-of-fit indices used within this research were the Root Mean Square Error of Approximation (RMSEA; Steiger & Lind, 1980) and the Standardised Root Mean Square Residual (SRMR), both of which belong to the category of absolute indices of fit (Bryne, 2012). Unlike the incremental fit indices, absolute fit indices depend only on determining how well the hypothesised model fits the sample data. Therefore, whilst incremental fit indices increase as goodness-of-fit improves, absolute fit indices decrease, thus lower-bound values of zero reflect good model fit (with values of $<.05$ or less considered a good fit; Browne, MacCallum, Kim, Andersen & Glaser, 2002). Mplus version 6.11 was used to conduct CFA analysis and the series of goodness-of-fit indices outlined above (CFI, TLI, RMSEA & SRMR) were used as indicators of model fit.

Confirmatory factor analysis (CFA) was conducted to assess the dimensionality of the trustworthiness and trustworthy behaviour scales, as these constructs were treated as multidimensional in the development of the hypotheses. The purpose of CFA is to verify that the proposed factors tap into constructs distinguishable from one another, this was especially important for the trustworthiness scale as a shortened version was used within this research.

The first scale of interest was the trustworthiness scale (Mayer & Davis, 1999; Schoorman et al., 1996a). In the past, researchers have sometimes struggled to obtain a good model fit with the three proposed factors. A number of studies have failed to find significant, unique effects for components of trustworthiness; integrity and benevolence (Mayer & Gavin, 2005; Searle et al., 2011). Furthermore, the dimensions have been found to be highly correlated (Davis et al., 2000; Mayer & Davis, 1999), although still distinct constructs when subjected to confirmatory factor analysis. In the case of Lester and Brower (2003) where felt trustworthiness was the construct of interest, the authors found the three dimensions of ability, integrity and benevolence to be highly correlated ($r < .75$ in all cases).

However, following factor analysis, three eigenvalues greater than one emerged, all with acceptable fit indices, thus supporting the three factors. The authors also found that all items loaded strongly on the first factor (<.50).

Confirmatory factor analysis of the felt trustworthiness scale at time 1 revealed a good level of model fit, (X^2(41, $N = 498$) = 91.779, $p < .01$; X^2/df = 2.24; comparative fit index (CFI) = .98; non-normed fit index (NNFI) = .97; Root Mean Square Error of Approximation (RMSEA) = .05; Standardised Root Mean Square Residual (SRMR) =. 03). This model confirmed the three-factor structure proposed by Mayer et al. (1995). To ensure that the best level of model fit had been obtained this three factor structure was compared to a single-factor solution in which the trustworthiness dimensions were combined as well as a two-factor structure where the two dimensions of integrity and benevolence were combined. Judging solely on the basis of fit indices it is evident that the three-factor model fits the data better than either the single-factor or two-factor models as shown in table 4.03. The proposed three-factor solution produced the best fitting model as the change in the X^2 value was significantly reduced despite the loss in two degrees of freedom.

Table 4.03: Confirmatory factor analyses of felt trustworthiness factors (time 1)

Model	*df*	X^2	X^2/df	CFI	NNFI	RMSEA	SRMR
Three- factor model	41	91.779	2.24	.98	.97	.05	.03
Two-factor model	43	402.633	9.36	.84	.80	.13	.07
Single- factor model	44	485.927	11.04	.80	.76	.14	.08

Note: The two-factor model combines the two components of integrity and benevolence trustworthiness as a single factor, ability trustworthiness represents the second factor in this model.

Confirmatory factor analysis for the leader ratings of member trustworthiness at time 2 also found support for a three-factor structure with a good level of model fit, (X^2(41, $N = 505$) = 136.851, $p < .01$; X^2/df = 3.33; comparative fit index (CFI) = .97 non-normed fit index (NNFI) = .96; Root Mean Square Error of Approximation (RMSEA) = .06; Standardised Root Mean Square Residual (SRMR) = .03). Furthermore, when compared to the single-factor and two-factor alternative models (see table 4.04 for the relevant fit statistics), the three-factor solution still produced the best fitting model. The fit indices for both of the trustworthiness scales are above accepted standards (e.g., comparative fit indexes of .98 and .97 respectively) and provide confidence in the results obtained regarding the factor structure of these two measures. These results are consistent with the theoretical work of Mayer et al. (1995) regarding the three dimensions of trustworthiness. Interestingly, as was the case with Lester & Brower (2003), felt trustworthiness presented a better model fit than leader

ratings of member trustworthiness. In addition, the separate dimensions of trustworthiness were found to be distinctive through CFA, though positively correlated (ability with integrity $r = .50$, ability with benevolence $r = .41$ and benevolence with integrity $r = .52$) as was the case for other authors (Lester & Brower, 2003; Mayer & Davis, 1999).

Table 4.04: Confirmatory factor analyses of leader perceptions of member trustworthiness factors (time 2)

Model	*df*	X^2	X^2/df	CFI	NNFI	RMSEA	SRMR
Three- factor model	41	136.851	3.33	.97	.96	.06	.03
Two- factor model	43	764.975	17.7	.78	.72	.18	.08
Single-factor model	44	972.929	22.11	.71	.64	.20	.09

Note: Model 2 combines the two components of integrity and benevolence trustworthiness as a single factor, ability trustworthiness represents the second factor in this model.

CFA analysis for the trustworthy behaviour scale confirmed the three-factor structure found during EFA with a good level of model fit, (X^2 (32, $N = 434$) = 161.015, $p < .01$; $X^2/df = 2.64$; comparative fit index (CFI) = .92; non-normed fit index (NNFI) = .89; Root Mean Square Error of Approximation (RMSEA) = .09; Standardised Root Mean Square Residual (SRMR) = .04). Examination of the fit statistics presented in table 4.05 reveals that the proposed model provided the best fit with the data when compared to the single-factor solution. Although the three-factor model involved the loss of 17 degrees of freedom, the change in X^2 was still significantly large enough to make this a statistically stronger model.

Table 4.05: Confirmatory factor Analyses of trustworthy behaviour factors (time 2)

Model	*df*	X^2	X^2/df	CFI	NNFI	RMSEA	SRMR
Three-factor model	44	116.027	2.64	.94	.91	.09	.04
Single- factor model	27	353.884	13.1	.78	.71	.16	.07

4.4.2 Data checking

A critical assumption when conducting statistical analysis is that the data are multivariate normal. It was important to ensure such criteria had been met before proceeding with analysis. The skewness and kurtosis of the variables was therefore assessed prior to analysis in order to screen the data for normality (DeCarlo, 1997; Nunnally, 1978). According to Tabachnick and Fidell (2007), a variable is skewed when the variable's mean is not in the centre of the distribution. Kurtosis is determined by the peakedness of the distribution, wherein variables with a non-normal kurtosis have a distribution which is too flat or too peaked. Normal distribution is evident when the values of skewness and kurtosis are zero. To date, there is no consensus regarding how far a value must deviate from zero to be considered problematic (Bryne, 2012; Kline, 2011). In review of the data none of the scales showed a consistently high skewness or kurtosis so no data transformation was considered necessary (the results of this are presented within table 4.06).

Table 4.06: Kurtosis and skewness values for each of the scales (at the dimension level)

Construct	Skewness	Kurtosis
LMX quality (time 1)	-.413	.754
Integrity felt trustworthiness	.530	.257
Ability felt trustworthiness	.101	-.266
Benevolence felt trustworthiness	.166	.561
Integrity trustworthy behaviour	.027	-.274
Ability trustworthy behaviour	.037	-.149
Benevolence trustworthy behaviour	-.176	.226
Leader rated integrity trustworthiness	-1.00	2.08
Leader rated ability trustworthiness	-.791	-.793
Leader rated benevolence trustworthiness	-.232	.556
Sincerity attributions	-.045	-.322
LMX quality (time 3)	-.862	2.40

4.4.3 Hypothesis testing and statistical analysis

As previously discussed the trust literature has been a rich source of empirical study for a number of years. Typically, as a research area matures, focus inevitably shifts away from demonstrating the existence of an effect towards understanding the mechanisms through which an effect operates (Hayes, 2012). As illustrated in two recent meta-analyses (Colquitt et al., 2007; Dirks & Ferrin, 2002) the link between leadership and trust, and trust and performance, has been firmly established. Increasingly, researchers are now looking to explore how an effect comes to be as well as establishing its boundary conditions. Such efforts are in an attempt to achieve a deeper understanding of trust as a construct and how that understanding can be applied (Hayes, 2012). Mediation analysis in particular has changed significantly over recent years with the causal step process provided by Baron and Kenny (1986) no longer being considered appropriate for mediation models. Instead of the traditional piecemeal approach researchers are encouraged to adopt methods such as bootstrapping for inferences about indirect effects (Hayes, 2009) and such statistical methods have been applied within this research.

The hypotheses and beliefs about the processes through which engagement in trustworthy behaviour influences subsequent relationship quality are depicted within the conceptual model (see figure 3.01). A causal sequence of events is shown which represents the direct and indirect paths of influence from the causal or antecedent variable (felt trustworthiness) to the final outcome of LMX quality, as well as which of those causal influences are moderated. As the mediators of interest within this research are not manipulated, the serial order proposed is based upon the theoretical rationale. Based upon the theoretical work of Whitener et al. (1998) and Mayer et al. (1995) a casual association between the first and second mediator is depicted and hypothesised.

Due to the nature of the conceptual model where two mediators appear in sequence, serial multiple mediation was the main form of analysis required. A macro devised by Hayes (2012) was used as it allows for the estimation of direct and indirect effects in multiple mediator models and conditional indirect effects in moderated mediation models. As mentioned previously, significant advancements have been made in mediation based analysis. A methodological strength of macros, such as the one adopted within this research, is that they allow for sophisticated and effective mediation and moderation analysis even for highly complex models, which the present conceptual model is considered to be. Furthermore, the macro provides many of the capabilities of existing programs such as SEM in Mplus, whilst expanding the number and complexities of the models all in a single, easy-to use command (Hayes, 2012). Further rationale for the choice of statistical tool is one of consistency. Limitations relating to the size of the sample within study 2 preclude the use of SEM for serial multiple mediation analysis but not the macro, therefore providing further justification for why it was the appropriate choice.

Based upon the work of Hayes and colleagues (Hayes, 2012; Hayes, Preacher & Myers, 2011; Taylor, MacKinnon & Tein, 2008) collectively hypotheses 1 – 7 were tested through serial multiple mediation analysis. Using SPSS version 20, the conceptual model depicted in figure 4.01 was specified by syntax. The syntax was structured so that the causal chain linking the mediators, detailing the direction of causal flow was specified. The path from the causal variable felt trustworthiness, to the first mediator, trustworthy behaviour is represented by a unidirectional arrow. Trustworthy behaviours are then hypothesised to act as antecedents to the second mediator of leader perceptions of member trustworthiness. Finally, causal arrows from the second mediator to the outcome of LMX quality are depicted. It is hypothesised that the more individuals feel that they are considered trustworthy by the leader early on in the relationship the more likely they are to engage in trustworthy behaviour (M1) which in turn will lead to the leader perceiving them as more trustworthy (M2) and this will influence relationship quality over time through building trust and aiding relationship development through effective social exchanges. In these analyses LMX quality at time 1 and leader perceptions of member trustworthiness also at time 1 were controlled for. It was important to control for these variables as this research is investigating the development of LMX and therefore should control for baseline levels of LMX. Also, assumptions are made regarding the 'updating' of trustworthiness perceptions; therefore it was also important to control for initial trustworthiness perceptions to assess changes in perceived trustworthiness over time. In order to effectively test the hypotheses, each of the dimensions of trustworthiness were analysed in separate models. Note that the other dimensions of trustworthiness were not included as control variables in these analyses. The primary reason for this is one of parsimony as this would have necessitated an additional nine trustworthiness-related control variables to be included in each of the models. Thus, given the inherent complexity of the conceptual model, and the demands already placed on the data due to the number of both direct and indirect pathways being estimated, it was decided not to control for the other dimensions of trustworthy behaviour in the analyses.

Three specific indirect effects were proposed; one through trustworthy behaviour (mediator 1; *paths $a^1 b^1$*), one through leaders perceptions of member trustworthiness (mediator 2; *paths $a^2 b^2$*) and one through both mediator 1 and mediator 2 in serial (*paths $a^1 a^3 b^2$).* These equations sum to yield the total indirect effect of X on Y $(a^1b^1 + a^2b^2 + a^1a^3b^2)$. When added to the direct effect c^1, the result is the total effect of X on Y. Therefore $c^1 = c'^1 + a^1b^1 + a^2b^2 + a^1a^3b^2$ and so $c^1 - c'^1 = a^1b^1 + a^2b^2 + a^1a^3b^2$ (Hayes, 2012).

Figure 4.01: A conceptual model to show a serial multiple mediator model with three indirect effects and a direct effect specified

Time 1   **Time 2**   **Time 3**
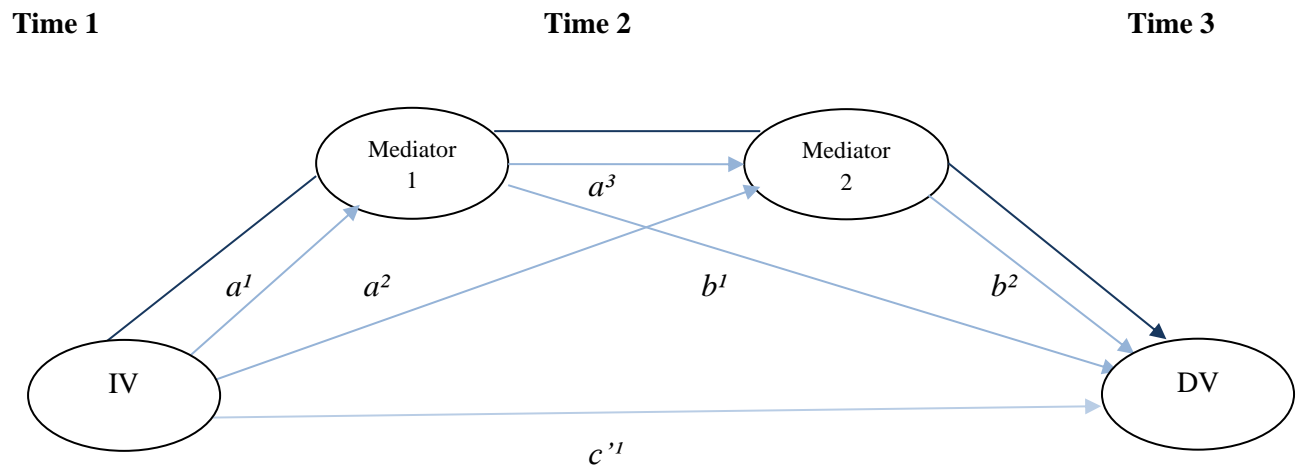
The construct of trustworthiness (both 'felt' and 'leader-rated') has been found through CFA to encompass three distinct factors; ability, integrity and benevolence. This multi-dimensional conceptualisation is consistent with previous research examining the construct of trustworthiness (Mayer & Davis, 1999; Lester & Brower, 2003) and the original theoretical framework (Mayer et al., 1995). The trustworthy behaviours delineated by Whitener et al. (1998) have also been shown through both EFA and CFA to be multidimensional, and each behavioural marker has been found to be more or less relevant to each of the trustworthiness dimensions. In order to provide a more robust test of the trusting process, the following analysis will be conducted at the dimension level and therefore 3 different models will be tested separately (see figure 4.02 below).

Figure 4.02: Conceptual model illustrating the three dimension models
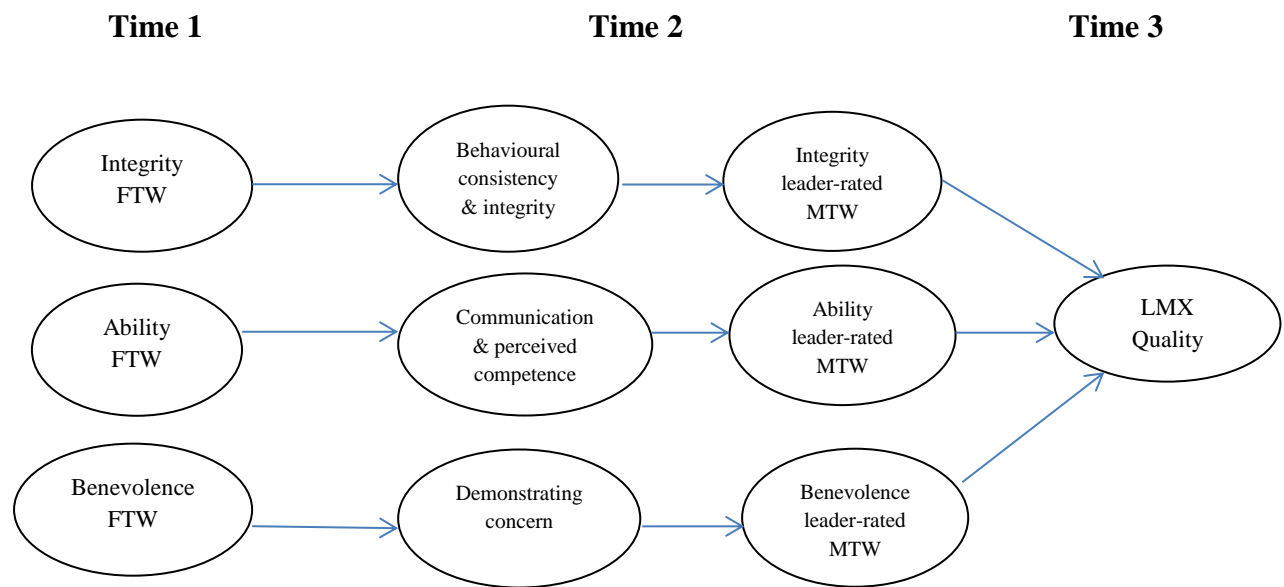
Note: FTW – felt trustworthiness, MTW – member trustworthiness

Not only will the model be tested at the dimension level, but this research will also test for boundary conditions. As shown in the conceptual model in chapter three (figure 3.01), it was hypothesised that the link between trustworthy behaviour and leader perceptions of member trustworthiness will be moderated by attributions made by the leader for the motives driving the behaviour. Insincerity attributions were predicted to significantly influence the relationship between trustworthy behaviour and subsequent trustworthiness perceptions across all three models.

Due to constraints in the current methodological tool, it is not possible to simultaneously test for indirect effects and moderation effects when serial multiple mediators are operating. Therefore, hypotheses 8 through to 10, which relate to the role of attributions as a boundary condition, were tested using moderated mediation analysis following the procedure developed by Preacher, Rucker and Hays (2007). In order to achieve this, the first predictor variable of felt trustworthiness was not included in the analysis. In the interest of clarity the presentation of the results will take the following order; the serial multiple mediation and the moderated mediation results for each dimension level model will be presented together, starting with the integrity model.

4.4.3.1 Integrity model: Mediation analysis

The first pathway of the integrity model (a^1), which reflects the link between integrity felt trustworthiness (FTW) and integrity trustworthy behaviour (M1), was found to be significant ($\beta = .31$, $t(274) = 5.2139$, $p < .00$). As predicted in hypothesis 2a, the more an individual feels their leader sees them as having integrity trustworthiness early on in the relationship positively predicts subsequent trustworthy behaviour. Specifically, felt integrity trustworthiness significantly predicted the engagement in behavioural consistency and behavioural integrity actions. Path a^2 from integrity felt trustworthiness to leader perceptions of member integrity trustworthiness (M2) was not found to be significant ($\beta = .00$, $p = n.s$). The lack of significant findings is not unexpected. The link between these two variables reflects a distal relationship which may not necessarily exist without the mediating variable of trustworthy behaviour. Although against the common wisdom for mediation analysis, researchers are increasingly acknowledging the potential for X to exert an influence on Y through a mediator even if the direct effect is not significantly different from zero (see Cerin & MacKinnon, 2009; Hayes, 2009; Rucker, Preacher, Tormala & Petty, 2011; Shrout & Bolger, 2002; Zhao, Lynch & Chen, 2010). In light of such recommendations, I proceeded with testing the model.

The pathway (a^3) from integrity trustworthy behaviour (M1) to leader perceptions of member's integrity trustworthiness (M2) was not found to be significant ($\beta = .12$, $p = n.s$), and therefore hypothesis 3a was not supported. Despite theoretical support for the causal association between these two variables, trustworthy behaviour was not found to act as an antecedent of trustworthiness perceptions as predicted. Although surprising, this pathway may be influenced by additional variables which have not yet been accounted for in this analysis and will be explored shortly. The pathway (b^1) between integrity trustworthy behaviour (M1) to LMX quality at time 3 was found to be significant, ($\beta = .23$, $t(274) = 2.9967$, $p < .05$). This finding suggests that engagement in such behaviours directly influences members' perceptions of their relationship quality. That is, if members feel they behave consistently and demonstrate integrity in their actions this positively influences LMX quality over time. Path b^2 from leader perceptions of member's integrity trustworthiness (M2) to LMX quality was also found to be significant ($\beta = .10$, $t(274) = 2.3009$, $p < .05$). These results support hypothesis 5a as the leader's updated perception of the member's integrity trustworthiness were found to significantly predict the member's reports of LMX relationship quality at time 3. The path coefficients for this model are presented in figure 4.03 and table 4.07.

The total effect (c^1) was not found to be significant within this analysis ($c^1 = -.0740$, $p = n.s$), however, as already discussed, evidence of a total effect should not be a prerequisite to searching for evidence of indirect effects (see e.g., Cerin & MacKinnon, 2009; Hayes, 2009; Rucker et al., 2011; Shrout & Bolger, 2002; Zhao et al., 2010). The total indirect effect was positive and found to be significant at .0797 with 95% bootstrap confidence intervals of .0284 to .1477. The total indirect

effect is the sum of the specific indirect effects: .0797 = .0753 + .0041 + .0003, and the total effect is the sum of the direct and indirect effects: -.0740 = -.1327 + .0797. Through examining the bootstrap confidence intervals it is possible to see which if any of the three specific indirect effects were significant, as indicated by confidence intervals which do not contain zero.

The first indirect effect, which is the product of a^1 = .3190 and b^1 = .2360 or .0753 *(X - M1-Y)*, was significant with a 95% bootstrap confidence interval of .0248 to .1430. This first indirect effect carries the effect of felt trustworthiness on LMX quality through trustworthy behaviour only, bypassing leader ratings of member trustworthiness. Members who felt more trusted by the leader, engaged in more trustworthy behaviour and this led to more positive perceptions of LMX quality, independent of leader trustworthiness perceptions. The next indirect effect flows from felt trustworthiness directly to leader perceptions of member trustworthiness and then to LMX quality, bypassing trustworthy behaviour and is defined as the product of a^2 = .0032 and b^2 = .1031 or .0041 *(X- M2- Y)*. This indirect effect was not found to be significant as the 95% bootstrap confidence intervals of -.0001 to .0171 included zero. Members felt trustworthiness did not predict LMX quality via leader trustworthiness perceptions. The last indirect effect was felt trustworthiness perceptions on LMX quality via both mediators (trustworthy behaviour and leader ratings of member trustworthiness), estimated as the product of a^1, a^3 = .1236 and b^2, or .0003, *(X - M2 - Y)*. This indirect effect was not found to be significant as the confidence intervals straddled zero (-.0191- .0188). The last two indirect effects are not consistent with the full mediation process proposed within hypothesis 5. Perceptions of feeling trusted did not influence LMX as a function of trustworthy behaviour and leader updated trustworthiness perceptions based upon the above results.

Figure 4.03: Model coefficients for each of the indirect effects and direct effect for the integrity model.
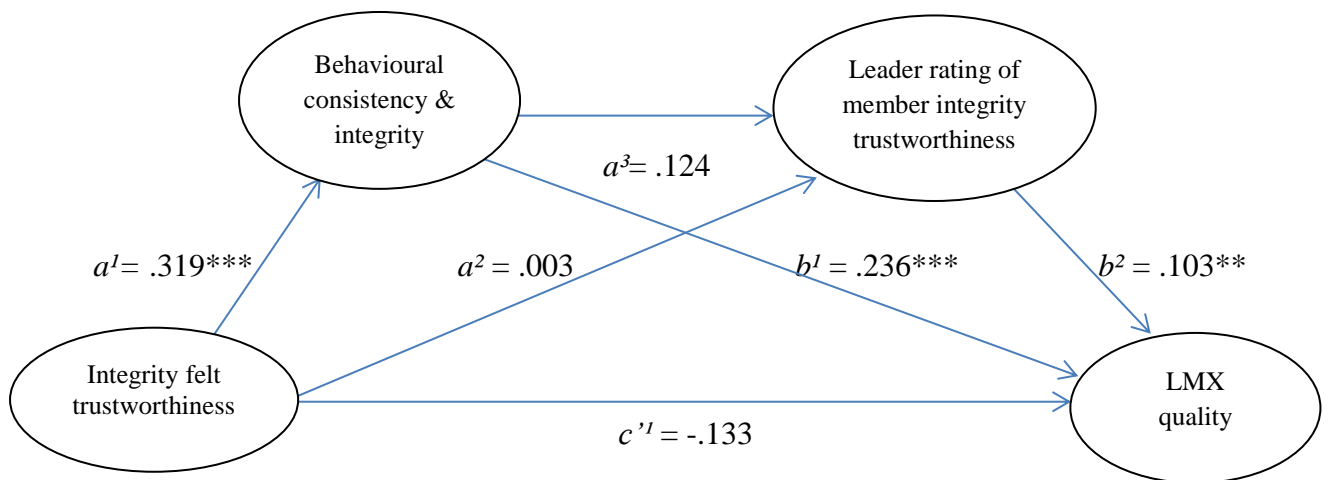
Table 4.07: Regression coefficients, standard errors, and model summary information for the serial multiple mediator model for integrity as depicted in figure 4.03

		Consequent											
		M^1 (Trustworthy behaviour)				M^2 (Leader perceptions of member integrity trustworthiness)				Y (LMX)			
Antecedent		coeff.	s.e	p		coeff.	s.e	p		coeff.	s.e	p
X (felt trustworthiness)	$a^1 \rightarrow$	0.319	0.061	.00	$a^2 \rightarrow$	0.003	0.079	.96	$c^1 \rightarrow$	-0.132	0.074	.07
M¹ (Trustworthy behaviour)					a^3	0.123	0.081	.13	$b^1 \rightarrow$	0.236	0.078	.00
M² (member trustworthiness)									$b^2 \rightarrow$	0.103	0.044	.00
Constant	$im^1 \rightarrow$	3.051	0.231	.00	$im^2 \rightarrow$	3.392	0.364	.00	$i^y \rightarrow$	1.2333	0.365	.00
		$R^2 = .101$				$R^2 = .009$				$R^2 = .247$			
		$F_{(1, 272)} = 27.18, \ p < .00$				$F_{(2, 271)} = 1.3278, \ p < .26$				$F_{(3, 270)} = 18.642, \ p < .00$			

Only partial support was found for the proposed mediating roles of trustworthy behaviour and trustworthiness for the integrity model. The significant indirect effect from the predictor of felt trustworthiness to LMX quality via trustworthy behaviour supports the proposition that trustworthy behaviour is an important mediator of this relationship. These results were obtained whilst controlling for LMX quality at time 1. Therefore, changes in LMX quality at time 3 are due to changes in trust as a function of trustworthy behaviour. If LMX quality had not been controlled for it would not be clear whether early relationship quality was driving the outcome variable or whether the changes were in fact a function of trust-building processes. These results lend support to the propositions of Ferris et al. (2009) regarding the flexibility of relationships over time and their vulnerability to change and fluctuations.

Engagement in behavioural consistency and integrity (M1) was not found to significantly predict leader perceptions of member integrity trustworthiness (M2) for path a^3 as predicted ($\textbf{\textit{H}}_{\textbf{\textit{3a}}}$). This finding may reveal insights into the nature of integrity considerations within a dyadic relationship as this relationship was hypothesised to be moderated by attributions. Furthermore, the (non-significant) latter two indirect effects both involve the moderator and therefore conclusions cannot be drawn until the influence of the moderator has been accounted for. It was proposed that insincerity attributions made by the leader about the motives behind member trustworthy behaviour would significantly moderate the link between trustworthy behaviour and updated trustworthiness perceptions. Specifically it was proposed that when attributions of insincerity were low the relationship would be strengthened (see figure 4.04). Such reasoning is tested within the following section using moderated mediation analysis.

Figure 4.04: Conceptual model of moderated mediation
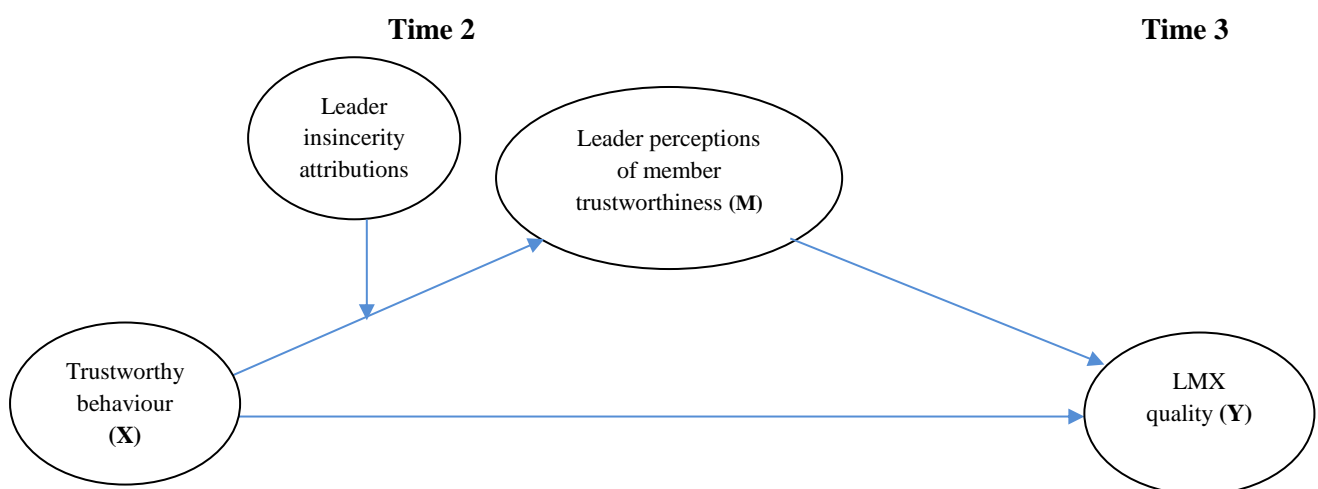
Prior to analysis all the variables involved in the interaction terms were mean-centered (Aiken & West, 1991) so that the coefficients for the two variables which define the product would be interpretable (Hayes, Glyn & Huge, 2012). This was done for all three models.

4.4.3.2 Integrity model: Moderated mediation analysis

In this analysis the indirect effect of integrity trustworthy behaviour on LMX quality through leader perceptions of member integrity trustworthiness, moderated by insincerity attributions was modelled. There are a number of steps involved in the process of moderated mediation (Preacher et al., 2007). For the first set of analysis, integrity trustworthy behaviour was regressed on LMX quality and a significant effect was obtained ($\beta = .65$, $p < .00$), thus supporting condition 1. A significant interaction between integrity trustworthy behaviour and insincerity attributions in predicting leader perceptions of member integrity trustworthiness ($\beta = -.18$, $p < .05$) was found. Support for condition 3 was found as the mediator, leader perceptions of member integrity trustworthiness, was found to significantly predict member reports of LMX quality in a positive direction ($\beta = .13$, $p < .05$). The final step is to probe the indirect effects by examining the conditional indirect effects of the independent variable on the dependant variable at specific levels of the moderator variable. Following Preacher et al.'s (2007) recommendation, high and low levels of insincerity were operationalized as one standard deviation above and below the mean score. Table 4.08 presents the estimates, standard errors, z statistics and significance value of the conditional indirect effects for integrity trustworthy behaviour across high and low levels of attributed insincerity. Results show that for the moderating variable of insincerity motives, the conditional indirect effects of integrity trustworthy behaviour were stronger and marginally significant when the leader attributed low levels of insincerity but were weaker and non-significant when high levels of insincerity motives were reported by the leader.

Table 4.08: Regression results for conditional indirect effect for LMX quality with integrity based constructs and insincerity attributions

Mediator Variable Model				
Predictor	*B*	*SE*	*T*	*p*
Leader perceptions of member integrity trustworthiness				
Constant	0.986	1.1836	0.8331	.40
Integrity trustworthy behaviour	0.712	0.275	2.5858	.01
Insincerity attributions	0.706	0.348	2.0284	.04
Interaction	-0.180	0.080	-2.2279	.02
Dependent Variable Model				
Predictor	*B*	*SE*	*T*	*p*
Leader-member exchange (LMX) quality				
Constant	1.8414	1.0379	1.7742	.07
Leader perceptions of member integrity trustworthiness	0.1371	0.0514	2.6661	.00
Insincerity attributions	*Boot indirect effect*	*Boot SE*	*Boot z*	*Boot p*
Conditional indirect effect at insincerity attributions = ± 1 SD				
-1SD (-.8455)	.0406	0.021	1.856	.06
M (0.01)	.0178	0.012	1.515	.12
1SD (.8455)	-.0006	0.013	-0.078	.93

The results were as expected and support hypothesis 8. It was predicted that attributions relating to motives of insincerity would moderate the integrity trustworthy behaviour- integrity trustworthiness link due to the character based nature of the construct. According to this rationale, integrity trustworthy behaviour is likely to be particularly important as it contains information about the trust intention or moral code of the follower (Shamir & Lapidot, 2003). Behavioural consistency and behavioural integrity were found to positively influence subsequent relationship quality, via their effect on the leader's integrity trustworthiness perceptions, when insincerity attributions were low. However, when the motives attributed for the behaviour were considered insincere (high insincerity attributions) the effect of the behaviour on relationship quality was reduced and non-significant. In such instances the leader is likely to have felt that the member's actions were untruthful or manipulative and that the member was trying to create a false impression of themselves. The present findings help explain the non-significant pathway observed for path a^3, along with the non-significant indirect effects and provide support for hypothesis 3a. These findings indicate the vulnerable nature of integrity based perceptions within dyadic relationships as the relationship between integrity trustworthy behaviour and integrity trustworthiness perceptions only became significant when attributions were taking into consideration. As suggested by Lam et al. (2007) leaders do not just have a simple appreciation for proactive behaviour of members, rather they consider the motives behind the behaviour. The reasoning for this is simple. Due to the risk inherent within a working relationship, trustors want to ensure that they have appropriately judged the trustworthiness of the trustee prior to making themselves vulnerable to them through risk-taking behaviour. Such considerations appear to be particularly pertinent for integrity trustworthy behaviour, as indicated by a non-significant result when insincerity attributions were high. Overall, when considering the results of both forms of analysis support was found for hypothesis 5 as integrity felt trustworthiness was found to indirectly influence LMX quality at time 3, via integrity based trust-building processes however only when leader attributions of insincerity were low .

4.4.3.3 Benevolence model: Mediation analysis

Serial multiple mediation analysis revealed a similar pattern of results when benevolence was the dimension of interest. Firstly, path a^1 from benevolence felt trustworthiness to benevolence based trustworthy behaviour (M1) was found to be significant ($\beta = .27$, t (274) = 5.0018, $p < .00$), thus supporting hypothesis 2c. This positive relationship suggests that, as predicted, the more the member feels that the leader sees them as having benevolence trustworthiness early on in the relationship, the more likely they are to subsequently behave in a way which denotes concern for the leader and engage in open communication. The pathway between felt benevolence and leader perceptions of the member as having benevolence trustworthiness (M2) was not found to be significant ($\beta = .11$, $p = n.s$). As with the integrity dimension this failure to obtain a significant relationship between these two distal variables does not preclude the pursuit of mediation effects (Hayes, 2009). Path a^3, which reflects the relationship between the two serial mediators (benevolence trustworthy behaviour and leader perceptions of member trustworthiness), produced a non-significant result ($\beta = .00$, $p = n.s$) and therefore support for hypothesis 3c was not found. However, this pathway is also hypothesised to be moderated by leader attributions which may influence the relationship significantly and are yet to be explored further.

A positive and significant path (b^1) between the benevolence trustworthy behaviour and LMX quality at time 3 was found ($\beta = .27$, t (274) = 4.2548, $p < .00$). This finding would imply that the more members engage in behaviours which demonstrate care and concern for the leader and communicate openly the stronger they perceive their LMX relationship at a later date. It had been predicted that when leaders observe such trustworthy behaviour they update their perceptions of that member's benevolence trustworthiness accordingly and that this in turn influences relationship quality. This effect was proposed to be due to the impact of such updated trusting perceptions on risk-taking behaviours which facilitated social exchange. Support for this suggestion was found for the integrity dimension as path b^2 was found to be significant, however within this model changes in benevolence based trustworthiness perceptions did not significantly predict later relationship quality ($\beta = .06$, $p = n.s$), therefore hypothesis 4c was not supported. The path coefficients for this model are presented in table 4.09 and figure 4.05.

The results for the indirect effects are similar to those found for the integrity-based model. Firstly, through examining the confidence intervals it can be seen that the total indirect effect was positive and found to be significant at .0833 with 95% bootstrap confidence intervals of .0437 to .1422. The first indirect effect, which is the product of $a^1 = .2798$ and $b^1 = .2725$ or .0762 and flows from felt trustworthiness to LMX quality via benevolence trustworthy behaviour *(X - M1- Y)* was significant with a 95% bootstrap confidence interval of 0.0367 to 0.1304. These results support the prediction that the extent to which a member feels they are considered to have benevolence

trustworthiness by their leader significantly predicts their benevolence trustworthy behaviour towards the leader during the first few months of the relationship. Such behaviours are to reciprocate for the felt trust and motivated by an attempt to demonstrate a positive orientation towards the leader. The engagement in demonstrating concern behaviours and open communication were found to positively influence perceptions of relationship quality over time (whilst simultaneously controlling for the influence of initial LMX quality). The next indirect effect of felt trustworthiness on LMX quality via leader perceptions of member's benevolence trustworthiness, bypassing trustworthy behaviour *(IV – M2 –DV)* is defined as the product of a^2 = .1102 and b^2 = .0624 or .0069 and was not found to be significant as the 95% bootstrap confidence intervals of -.0007 to .0061 straddled zero. The final indirect effect includes both mediators flowing from felt trustworthiness to LMX quality, via benevolence trustworthy behaviour and leader perceptions of member trustworthiness *(X-M1-M2-DV)*. This relationship is estimated by a^1, a^3 = .0072 and b^2, or .0001 and was found to be non-significant (bootstrap confidence intervals ranged from -.0029 - .0049). Both of these latter indirect effects involve the causal pathway between the two mediators which is hypothesised to be moderated by attributions. Therefore, before drawing firm conclusions on this model the role of attributions will be tested.

Figure 4.05: Model coefficients for each of the indirect effects and direct effect for the benevolence model.
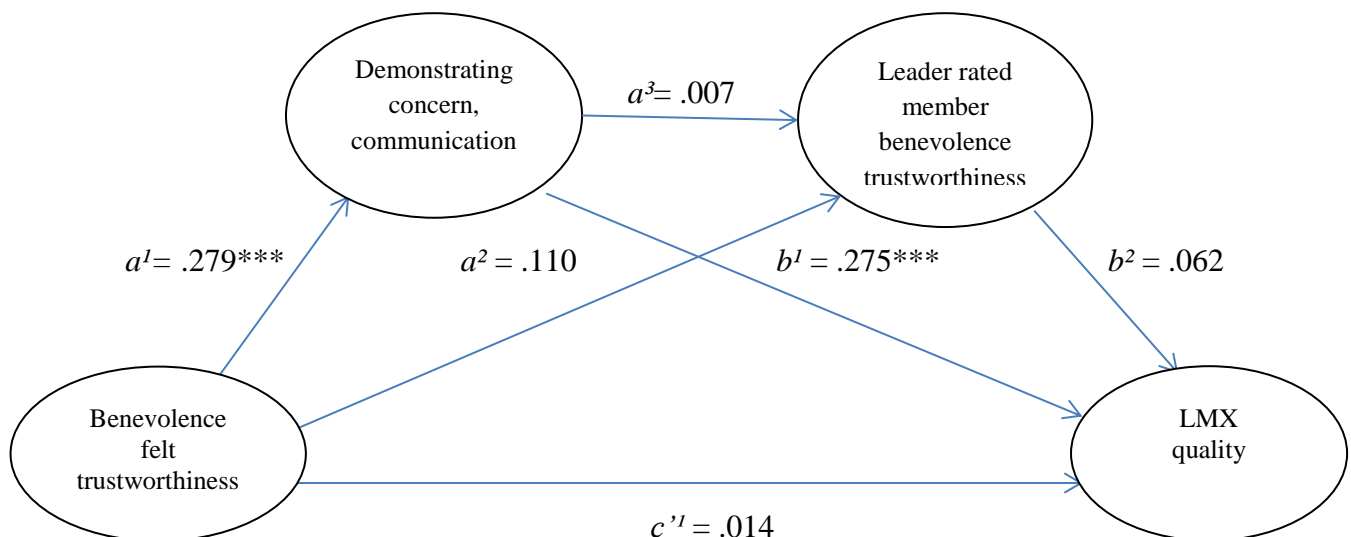
Table 4.09: Regression coefficients, standard errors, and model summary information for the serial multiple mediator model for benevolence as depicted in figure 4.05

		Consequent										
		M^1 (Trustworthy behaviour)				M^2 (Leader perceptions of member integrity trustworthiness)				Y (LMX)		
Antecedent		coeff.	s.e	p		coeff.	s.e	p		coeff.	s.e	p
X (felt trustworthiness)	$a^1 \rightarrow$	0.279	0.055	.00	$a^2 \rightarrow$	0.110	0.060	.06	$c^1 \rightarrow$	0.014	0.051	.78
M^1 (Trustworthy behaviour)					a^3	0.007	0.080	.92	$b^1 \rightarrow$	0.272	0.064	.00
M^2 (member trustworthiness)									$b^2 \rightarrow$	0.062	0.039	.11
Constant	$im^1 \rightarrow$	3.102	0.197	.00	$im^2 \rightarrow$	3.106	0.308	.00	$i^y \rightarrow$	1.143	0.328	.00
		$R^2 = .114$ $F(1, 272) = 25.017, p < .00$				$R^2 = .011$ $F(2, 271) = 2.0709, p < .12$				$R^2 = .267$ $F(3, 270) = 19.623, p < .00$		

4.4.3.4 Benevolence model: Moderated mediation analysis

Using the same moderated mediation method outlined by Preacher et al. (2007), the benevolence-based model was tested. The path between benevolence trustworthy behaviours and benevolence trustworthiness was predicted to be moderated by insincerity attributions. Benevolence trustworthy behaviour was found to be significantly related to LMX quality ($\beta = .54$, $p < .00$), thus supporting condition 1, however, benevolence trustworthy behaviour were not found to significantly interact with insincerity attributions ($\beta = -.04$, $p = n.s$). As support for step 2 was not found no further analysis was conducted. It had been predicted that attributions relating to insincerity would be particularly relevant to benevolence based trustworthiness perceptions, as was the case for the integrity model. The results, however, did not provide support for the stated hypothesis (H_9).

The present findings were not as predicted. Although benevolence trustworthy behaviour did predict LMX quality in the first indirect effect, support was not found for the link between trustworthy behaviour and updated benevolence trustworthiness or the full mediating model. The results would imply that when a member demonstrates concern and communicates openly with the leader they do not perceive them as more trustworthy. Due to the relationship-orientated nature of benevolence trustworthiness, the expression of benevolence trustworthy behaviour was expected to be a key determinant of leader trusting perceptions. Furthermore, attributions of insincerity were hypothesised to influence this trusting process due to the desire of leaders to accurately gauge whether a member has their best intentions at heart. Within the following section a potential explanation for these results will be considered. This point will be expanded on in greater detail within the discussion section of this chapter.

One suggestion for this non-significant finding relates to the issue of time. Previous authors (Burke et al., 2007; Schoorman et al., 2007) have alluded to the potential temporal nature of benevolence-based trusting perceptions. Schoorman et al. (2007) highlighted time, and in particular its influence on benevolence trustworthiness, to be particularly relevant. In their meta-analysis, Collquitt et al. (2007) called for research to examine the differential impact of the trustworthiness dimensions on various outcomes. It was theorised that these affective, deeper forms of trust may be more contingent upon relationship stage and take more time to develop. Based upon this rationale the impact of benevolence trustworthy behaviour upon relationship quality may not be felt at these earlier stages of relationship development (3 months in this instance). This may explain why this study failed to find a significant result. It may be the case that leaders require a stronger history of interactions (e.g., repeated demonstrations of benevolent behaviours) before updating their trustworthiness perceptions accordingly. It is only once the leader is assured of the member's positive intention towards them will these updated perceptions manifest themselves in risk-taking behaviours, which in turn influence subsequent relationship quality. In contrast, integrity considerations are considered to

be less contingent upon time. Behaviours relating to this dimension of trustworthiness may be more readily used to inform trusting perceptions and guide behaviour at earlier stages of relationship development. For example, Schoorman et al. (2007) noted that integrity perceptions develop quickly in the early stages of the relationship, which is consistent with the current findings. The present results may reveal valuable insights into the nature of trustworthiness perceptions when benevolence is under consideration.

4.4.3.5 Ability model: Mediation analysis

Finally, the same analysis was conducted for the ability-based model and the path coefficients are displayed in table 4.10 and figure 4.06. As predicted in hypothesis 2b, the path from felt ability trustworthiness to ability trustworthy behaviour (a^1) was found to be positive and significant ($\beta = .35$, t (274) = 6.5766, $p < .00$). Consistent support has been found across all three models for the hypothesis (H_2) that felt trustworthiness would act as an antecedent to trustworthy behaviour. How much trust a member feels their leader has in them early on in the relationship appears to be a powerful determinant of their engagement in behaviours which demonstrate their trustworthiness further. The second pathway, a^2 (IV -M2) was found to be significant ($\beta = .15$, t (274) = 2.1306, $p < .05$). This finding suggests that felt ability trustworthiness at the start of the relationship influences leader's ratings of that member's trustworthiness in terms of ability at a later point. Such significant relationships were not found for either the integrity or benevolence models and may reflect the greater stability of ability perceptions over time (relative to the other facets of trustworthiness).

Interestingly, path a^3 which is the serial chain from the first to the second mediator was found to be significant ($\beta = .14$, t (274) = 2.0660, $p < .05$). Demonstrating competence as a form of trustworthy behaviour directly influenced leader's ratings of the member's ability trustworthiness. This finding supports hypothesis 3b and confirms that ability trustworthy behaviour does act as an antecedent for ability trustworthiness perceptions. As predicted path b^1 was found to be significant ($\beta = .15$, t (274) = 2.1209, $p < .05$). The engagement in ability trustworthy behaviour (M1) significantly predicts LMX quality at time 3. Finally, pathway b^2 was not found to be significant ($\beta = .0204$, $p = n.s$), therefore hypothesis 4b was not supported. This result would suggest that leader's updated perceptions of member ability trustworthiness at time 2 did not significantly predict LMX quality at time 3 once initial LMX quality has been controlled for. Therefore, although the leaders might update their perceptions of the member as having ability trustworthiness (path a_3) this does not appear to influence member-rated LMX over time.

Returning now to the mediation analysis, the total effect (c^1) was not found to be significant ($c^1 = .0538$, $p = n.s$), however, the total indirect effect was positive and significant at .0581 with 95% bootstrap confidence intervals of .0101 to .1178. The first indirect effect, which is the product of $a^1 =$

.3502 and b^1 = .1537 or .0538 *(X - M1- Y)*, was significant with a 95% bootstrap confidence interval of .0037 to .1165. The second indirect effect caries the relationship form felt trustworthiness to LMX quality, via leader perceptions of member ability trustworthiness, without including ability trustworthy behaviours. This indirect effect, which is defined as the product of a^2 = .1586 and b^2 = .0204 or .0032 and was not found to be significant as the 95% bootstrap confidence intervals of -.0081 to .0267 straddled zero. Finally, the indirect effect which is the product of a^1, a^3 = .1490 and b^2, or .0011 (*IV-M1-M2-DV*) was also found to be non-significant as the bootstrap confidence intervals included zero (-.0026 - .0096). These non-significant indirect effects highlight the need to consider the role of attributions within this model.

Figure 4.06: Model coefficients for each of the indirect effects and direct effect for the ability model.
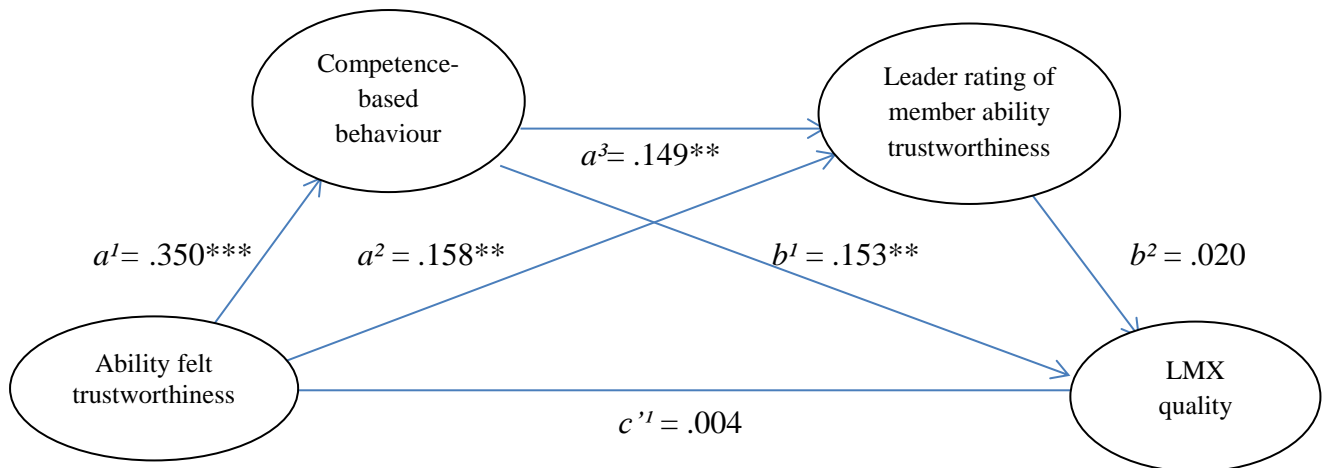
Table 4.10: Regression coefficients, standard errors, and model summary information for the serial multiple mediator model for ability as depicted in figure 4.06

		M¹ (Trustworthy behaviour)				M² (Leader perceptions of member integrity trustworthiness)				Y (LMX)		
Antecedent		coeff.	s.e	p		coeff.	s.e	p		coeff.	s.e	p
X (felt trustworthiness)	a^1 →	0.350	0.053	.00	a^2 →	0.158	0.075	.03	c^1 →	0.004	0.053	.92
M¹(Trustworthy behaviour)					a^3 →	0.149	0.072	.03	b^1 →	0.153	0.072	.03
M² (member trustworthiness)									b^2 →	0.020	0.043	.63
constant	im^1 →	2.788	0.210	.00	im^2 →	2.882	0.332	.00	i^y →	1.525	0.329	.00

$R^2 = .155$	$R^2 = .044$	$R^2 = .215$
$F_{(1, 272)} = 43.251,\ p < .00$	$F_{(2, 271)} = 6.923,\ p < .00$	$F_{(3, 270)} = 16.607,\ p < .00$

4.4.3.6 Ability model: Moderated mediation analysis

Moderated mediation analysis was then conducted upon the ability model to test whether insincerity attributions moderated the ability trustworthy behaviour – ability trustworthiness link. Step 1 was supported as ability trustworthy behaviour was found to be significantly related to LMX quality ($\beta = .19$, $p < .05$). The interaction between ability trustworthy behaviour and insincerity attributions was not found to be significant ($\beta = .07$, $p = n.s$). Based upon this result, condition 2 was not supported and therefore no further analysis was conducted. Hypothesis 10 was rejected as insincerity attributions were not found to significantly moderate the link between ability trustworthy behaviour and ability trustworthiness as expected.

The findings for the ability model, although not as predicted do potentially provide important insights into ability trustworthiness considerations within developing LMX relationships. In the integrity model the path between trustworthy behaviour and trustworthiness was found to only be significant when the behaviours were attributed to be sincere. In the case of the ability model, the earlier mediation analysis found that ability trustworthy behaviour did predict updated ability trustworthiness perceptions, even when not accounting for attributed motives. The findings would suggest that leaders appear more willing to update ability trustworthiness perceptions when observing competence-based behaviour. This path was not found to be significantly moderated by insincerity attributions, in that a consideration of the motives behind the behaviour did not strengthen or weaken this relationship. What is of particular interest is that despite this updating in trustworthiness perceptions, changes in LMX quality were not found for ability trustworthy behaviours, whilst they were found for the integrity model.

Ability trustworthy behaviour and the trustworthiness it inspires is clearly a significant determinant of early LMX quality. However, later demonstrations of competence do not appear to influence subsequent LMX quality in a meaningful way. Such findings are consistent with the LMX literature. Prospective LMX studies have typically found that competence-based considerations are more germane to the start of the relationship due to their salience (Bauer & Green, 1996; Liden et al., 1993; Nahrgang et al., 2009). Liden et al. (1993) found evidence to suggest that although performance was a strong determinant of LMX quality early on, its influence on later development was markedly less and that other, affective variables, became more relevant. Ability trustworthiness seems to represent something quite different to the other two dimensions of trustworthiness, and is possibly less pertinent to the discretionary exchanges at the core of Blau's (1964) theorising. An on-going consideration of integrity and benevolence trustworthiness appears more relevant for the expansion of social exchanges than ability, thus minimising the impact of such perceptions on later relationship development. A member's competence and ability at the start of relationship formation is likely, for the most part, not to change dramatically during the relationship's development. In contrast,

judgements of integrity and benevolence trustworthiness appear more contingent upon the continued observation of trustworthy behaviour. These trustworthiness perceptions are likely to be more being vulnerable to change and to be continually re-evaluated by the leader (Tyler & Lind, 1992) based upon the observation of trustee's behaviour (Butler, 1991; Korsgaard et al., 2002; Whitener et al., 1998), which will in turn have implications for later relationship quality, via social exchange processes.

4.5 Summary of findings

The present findings offer the first test of a new model of LMX development proposed in this thesis. The primary objective of this study was to provide a robust test of trust-building processes within developing LMX relationships. Overall, the results support many of the hypotheses associated with the full conceptual model presented in figure 3.01. Across three models a mediating process of trust-building was tested. Antecedents of trustworthy behaviour and trustworthiness perceptions were also investigated and the moderating role of insincerity attributions explored. Furthermore, these causal associations were investigated at the dimension level and longitudinally whilst controlling for initial levels of LMX relationship quality. In the following section the finer distinctions of the findings will be discussed in relation to the order of the stated hypotheses.

4.6 Discussion of results

Firstly, support was found for hypothesis 1 as evidence of LMX instability was found over time. The correlation ($r = .39$) between LMX quality at time 1 and LMX quality at time 3 (6 months later) suggests that LMX relationships do not necessarily plateau once established in the first few weeks, but rather are subject to change and instability over time. The results are in line with the predictions of this thesis and the propositions of Ferris et al. (2009) relating to the variable nature of LMX relationships. Contrary to the commonly held belief within the literature for LMX relationship stability, the authors proposed that relationships were marked by 'change and expansion' which may cause shifts in the attitudes and behaviours of the two parties as the relationship progresses (Yukl, 2010).

Hypothesis 2 proposed that felt trustworthiness perceptions at time 1 would be positively related to the engagement in trustworthy behaviour at time 2. Consistent support was found for this hypothesis and the findings confirm the role felt trustworthiness perceptions play as an antecedent of trustworthy behaviour. Furthermore, robust positive relationships were found across all three dimension models, therefore hypotheses 2a-2c were supported. The results highlight the relevance of felt integrity, ability and benevolence trustworthiness for determining engagement in trustworthy behaviour. As predicted, the greater the feeling of being trusted coming from the leader, the more likely member's will engage in trustworthy actions. The demonstration of trustworthy behaviour can be considered a form of reciprocation which serves to further expand the social exchange process, through uncertainty reduction and exchange deepening. The implications of these findings are twofold. Firstly, they contribute to the growing literature on felt trust perceptions. Typically, trust research is leader focussed, however, the work of Brower and colleagues (Brower et al., 2009; Lester & Brower, 2003) demonstrates that it is in fact the feeling of being trusted which is more impactful upon subsequent behaviour. This finding was replicated within this research as although trust in the

leader[5] did significantly predict engagement in trustworthy behaviour ($\beta= .18$, $p < .05$), it was the extent to which the individual felt trusted which was a stronger determinant of subsequent trustworthy behaviour ($\beta= .32$, $p < .05$)[6]. A secondary implication of these findings is that it adds significantly to this growing body of research through examining felt trustworthiness at the dimension level and as a determinant of trustworthy behaviour. To my knowledge, this is the first test of ability, integrity and benevolence felt trustworthiness as separate rather than as a composite measure. Furthermore, the novel addition of felt trustworthiness as an antecedent of trustworthy behaviour extends Whitener et al.'s (1998) framework. The findings relating to felt trustworthiness highlight the need for leaders to consider the importance of both gaining trust as well as also reciprocating with trust (Searle et al., 2011). In order to elicit the benefits associated with trustworthy behaviour (e.g., improved relationship quality) leaders need to assure members of their belief in their trustworthiness across each of the dimensions.

A key objective of this thesis was to identify the processes underling trust-building. The integration of the trustworthiness dimensions proposed by Mayer et al. (1995) with Whitener et al.'s (1998) typology of trustworthy behaviour proved to be theoretically sound. The EFA analysis provided support for the underlying three-factor structure of these behavioural dimensions, thus supporting hypothesis 3. Across the three models the facets of trustworthy behaviour were found to differentially influence ability, integrity and benevolence trustworthiness perceptions to a lesser or greater extent. A unique pattern of findings was obtained for each of the dimension models, thus confirming the relevance of examining this construct at the dimension level. Within the following section the results for the mediation and moderation analysis will be discussed. Each model will be briefly reviewed and the implications of the findings considered.

In the case of the integrity model, support was found for the critical role of integrity trust-building as a significant determinant of LMX quality over time. Felt integrity trustworthiness at time 1 was found to influence LMX quality at time 3, via integrity trustworthy behaviour and updated integrity trustworthiness perceptions. However, the trustworthy behaviour-trustworthiness pathway was found to be significant only when attributions of insincerity were low. This finding confirms the critical role that attributions play when trust is under consideration within developing dyadic relationships. Trustors will look for any cues deemed to be diagnostic of the true intentions underlying the trustee's behaviour (Brower et al., 2009). Trustees need to consider that the demonstration of behavioural consistency and behavioural integrity alone may not be sufficient to successfully secure a

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[5] Trust was measured using a two item direct trust measure by Earley (1986), $\alpha =.88$.

[6] In this analysis a composite measure of felt trustworthiness was used.

stronger quality relationship over time; such behaviour also needs to be perceived as genuine and authentic for it to be relationship enhancing.

For the ability model support was not found for the full conceptual model. Although ability-based trustworthy behaviour, as predicted by felt ability trustworthiness, was found to influence ability trustworthiness perceptions, the final path to LMX quality was not significant. Put simply, ability trustworthy behaviour did influence updated trustworthiness perceptions, however these did not in turn significantly influence LMX quality at time 3. As previously discussed, these findings are in line with previous prospective studies on LMX development which have found that the influence of competence-based variables on LMX quality appear to be largely confined to early relationship quality.

Finally, it was the failure to provide support for the mediating role of benevolence-based trustworthiness which may in fact reveal one of the more important insights of this study. Interestingly Frazier et al. (2010), in their study of justice, failed to find a significant relationship between interactional justice and benevolence trustworthiness despite strong theoretical reasoning for the link. The authors suggested that the fact that fairly recently formed dyads were used may have been a contributing factor. A similar rationale is considered when interpreting the findings of this study. It may have also been too early in the relationship's development for benevolence effects on LMX quality to be observed. Further post hoc analysis provided support for this line of thought. When benevolence trustworthy behaviour and leader perceptions of member trustworthiness were tested at time 3, a significant relationship was found, ($\beta = .12$, t (274) = 3.1208, $p < .05$). These results suggest that it is not until this more mature stage of the relationship's development (6 months), and a sufficient history of interactions has accrued that a trustee's level of benevolence can be ascertained. Thus, it seems that perceptions of benevolence need to be built upon a strong personal history of experience in order for this more powerful, affective form of trust to develop. This line of reasoning is consistent with Lewicki and Bunker's (1996) three-phase model of developmental trust. The authors discuss the dynamic nature of trust and infer the potential relevance of different forms of trust, depending on relationship stage. Although conceptualised differently, identification-based trust (IBT), which reflects confidence in the others benevolent intentions towards you, was hypothesised to develop later in the relationship. The definition of IBT provided by Lewicki and Bunker (1996) mirrors aspects of Rousseau et al.'s (1998) definition of 'relational trust' and McAllister's view of affective trust; all of which feature benevolent considerations.

Across a number of theoretical models researchers have alluded to the relevance of time frames in the development of trust, with particular reference to benevolence in some form. In particular, affective trust has been thought to develop later in the life of an interpersonal relationship (Williams, 2001). Empirically, support has been found for the development of different forms of trust

over time. For example, in the context of team trust Webber (2008) found that different components of trust do differentiate themselves over time. The early development of team trust was found to be cognitive in nature, whilst affective-based trust took more time to appear within the development of the team. The findings of the present research lend support to this much theorised, but largely un-tested assertion relating to the slower development of more affective-based trust within interpersonal relationships.

Some theorists have proposed that trust development is affected by relationship length (e.g., Blau, 1964; Lewicki & Bunker, 1996). Although it is tempting to conclude that it is the length of the relationship which determines the development of benevolence trustworthiness, this may constitute an overly simplistic answer. Dirks and Ferrin (2002) in their meta-analysis, found that the average corrected correlation between trust and relationship length was -.01, thus suggesting that trust does not necessarily increase over the course of the relationship. The findings of Dirks and Ferrin's (2002) meta-analysis are not surprising. Although relationship length is occasionally used as a proxy for relationship quality research has generally found that the two are not the same thing (Thomas & Fletcher, 2003). Lewicki and Bunker (1996) contend that deeper levels of trust develop, largely as a function of the parties having a history of interactions. Therefore, it is interaction quality which is critical rather than relationship length. Testing these assumptions, Levin, Whitener and Cross (2006) found that relationship length did not have a direct association with trust, but rather a complex curvilinear one. The authors found that it was the observation of behaviour which influenced trust over time rather than the length of the relationship per se.

The fact that benevolence-based trustworthiness effects were only observed at 6 months requires some further consideration. The results do not necessarily imply that a similar length of time is always needed. This is likely to be contingent upon factors such as interaction frequency, interaction quality and the context of the relationship. The more trusting parties interact, the more opportunity there is to observe each other's behaviour and form trustworthiness perceptions accordingly. In addition, certain situations may place more emphasis on one of the trustworthiness dimensions. For example, within a highly competitive sales context ability trustworthiness may be critical but benevolence-based concerns between a leader and a follower may be less relevant due to the nature of the work. Therefore benevolence trustworthiness perceptions will take more time to develop as trusting parties may not be attending to benevolence-based considerations as closely. The level of interdependence will also be a contributing factor. The more trusting parties have to work closely together and depend upon each other the more important benevolence considerations are likely to become.

Overall, support was found for the critical role of trust-building processes in accounting for changes in LMX quality over time. Specifically, integrity trust-building was found to significantly influence the development of LMX quality. The results would suggest that as the relationship develops, the leader re-evaluates their integrity trusting beliefs based upon the observation of member behavioural integrity and behavioural consistency. The updating of trustworthiness perceptions is proposed to influence risk-taking behaviour which serves to facilitate the on-going social exchange process. The more trust becomes assured; the more risk-taking behaviour (such as delegation and confiding sensitive information) is enacted, which significantly enhances relationship quality. However, it is important to note that this process varied as a function of insincerity attributions. Although the results for the ability and benevolence models were less conclusive they also provide valuable insights into the trust dynamics of LMX relationships. Taken together the present findings support the view that the trustworthiness dimensions are empirically separable as a different pattern of results was found for each of the dimension models. The unique pattern of results found across the three models highlights the necessity for research to test trust in a more fine-grained way and for considering the differential influence of each trustworthiness dimension on the trusting process. Integrity was a significant determinant of LMX development over time, the influence of ability appears constrained to early stages while benevolence appears to require a higher level of interaction quality for the influence on LMX quality to be felt. As previously suggested, this iterative process of trust-building is at the heart of LMX theory (Bauer & Green, 1996). The present findings reinforce the role of trust as an axis on which the social exchange relationship revolves.

A final observation from the findings relates to the conceptual confusion once present within the LMX literature wherein trust and LMX were viewed synonymously. Although such a view is no longer considered commonplace this research provides further empirical support for the conceptual distinction between trust and LMX. Through CFA analysis the results revealed a good level of model fit when a two factor structure was tested wherein trust and LMX were measured as separate constructs, (X^2 (41, $N = 455$) = 100.094, $p < .00$; $X^2/df = 2.44$; comparative fit index (CFI) = .96; non-normed fit index (NNFI) = .95; Root Mean Square Error of Approximation (RMSEA) = .07; Standardised Root Mean Square Residual (SRMR) =. 03). When this hypothesised model was compared to a single-factor solution where trust and LMX were combined, a significantly worse fitting model was produced, (X^2 (27, $N = 455$) = 399.184, $p < .00$; $X^2/df = 14.78$; comparative fit index (CFI) = .84; non-normed fit index (NNFI) = .78; Root Mean Square Error of Approximation (RMSEA) = .17; Standardised Root Mean Square Residual (SRMR) =. 07). As expected, although LMX quality and trust are found to correlate quite highly ($r = .52$) indicating that they are related, these constructs are found to be distinct, providing further support for their discriminant validity. Before proceeding onto the conclusion for this chapter please note that a fuller discussion of the present findings, including a consideration of the theoretical and methodological contributions is

provided in the general discussion found in chapter seven. An overview of this study's strengths and potential limitations are also discussed within this chapter.

4.6.1 *Understanding how and when interpersonal trust develops*

This research has identified the role trust-building plays in determining the development of LMX quality over time. Importantly, the mechanisms and processes involved were identified through the consideration of trustworthy behaviours and subsequent trustworthiness perceptions. Differences in influence across the dimensions of ability, integrity and benevolence were found and lend support to the view that trust develops differently within an interpersonal relationship. A pertinent critique frequently levelled at LMX theory is that it focuses largely upon the dyad and neglects the wider context. Typically, linkages between leadership processes and organisational outcomes are investigated purely within the context of the dyadic LMX relationship (Graen & Uhl-Bien, 1995). Such a criticism could also be extended to the trust literature, which to date, has also largely focussed upon interpersonal trust. Although it is important to understand how trust is built within the context of leader- member relationships, the impact of this trust for broader more distal referents such as the organisation is not yet known. The intention of the second study is to explore trustworthy behaviour within the context of the organisation and investigate its potential role as a determinant of organisational trust. Prior to doing so, the next chapter offers a literature review of organisational trust. Although similarities in interpersonal and organisational trust exist, these two constructs are distinct and research is needed which tests the interplay between employees trust in these two important referents.

CHAPTER FIVE: TRUSTWORTHY BEHAVIOUR AND ORGANISTAIONAL TRUST; STUDY TWO

5.0 Chapter summary

This chapter provides a link between the first and second study. Insights obtained from the first piece of research are used to guide the theoretical propositions made within this chapter. Importantly, the second study broadens the research scope beyond interpersonal trust to organisational trust and investigates the processes involved in this trust referent. Within the following chapter a brief literature review of organisational trust research is provided. This review will include an outline of the dominant definitions and conceptualisations of trust in the organisation. Similarities and differences will then be drawn between interpersonal and organisational trust. Following this, leadership behaviours are identified as an internal determinant of organisational trust and a case is made for the particular relevance of leader's trustworthy behaviour. Within the final section, a potential moderator is highlighted and a conceptual model is developed and hypotheses proposed. The chapter closes with a brief summary of the research questions guiding the following study and an overview of the intended contributions to theory derived from this research.

5.1 Organisational trust

Bradach and Eccles (1989) view trust as a mechanism of organisational control which offers an alternative to formal controls (Spreitzer & Mishra, 1999) and permits all forms of risk taking in social systems (Creed & Miles, 1996). When trust is present, there is less need for monitoring and trust aids transactions, facilitates team work and enhances cooperative behaviour. Not only is trust associated with cooperative behaviour, high trust is also converted by organisations as it is a major contributor to organisational effectiveness (Dirks & Ferrin, 2002), which cannot be easily replicated or copied (Gillespie & Mann, 2004). Research has shown that employees prefer to work in organisations that promote trust (Hage, 1980; Pascale & Athos, 1981). Consequently, trust is a valuable asset which should be fostered and protected.

In the wake of the global economic downturn, coupled with widespread redundancy, many organisations are findings themselves in a state of crisis and uncertainty. Indeed in a recent UK wide survey, Hope-Hailey et al. (2012) discuss the 'fragility of trust in organisations', and describe trust in organisations as being at 'an all-time low'; the implications of which are extensive. A lack of trust is associated with significant dysfunctional outcomes (Gould-Williams, 2003), including increased turnover, reduced effectiveness (Dirks & Ferrin, 2002), counterproductive work behaviour (Bies & Tripp, 1996) and cynicism (Gould-Williams, 2003).

Research has consistently indicated that trust is key to organisational success, enhancing the effectiveness, efficiency and performance of organisations (Dirks & Ferris, 2002). Nevertheless,

advice on how best to support and facilitate trust in the organisation, to date, has been less forthcoming. A number of explanations for this slow uptake within the empirical literature exist. Firstly, issues relating to the accurate conceptualisation of organisational trust are likely to have stifled trust efforts. Secondly, researchers have typically relied upon transferring insights at the interpersonal level to inform our understanding of trust in organisation. Interpersonal trust has been the subject of extensive research enquiry for a number of years and there exists a burgeoning literature on the topic (Searle et al. 2011). Some of the insights gained at this level can be used to inform our understanding of trust in more distal referents. Indeed, until recently organisational trust was treated mainly as an interpersonal phenomenon (Cummings & Bromiley, 1996; Mayer et al., 1995; Vanhala Puumalainen & Blomqvist, 2011). Nevertheless, extending an inherently individual- level phenomenon to the organisational level of analysis is a complex task (Zaheer, McEvily, & Perrone, 1998), and a shift in focus towards organisational trust is becoming more of a necessity. We still know surprisingly little about what determines organisational trust (Searle et al., 2011), making the present research particularly pertinent.

5.1.1 Defining Organisational Trust

A definition of trust at the organisational level includes a belief built upon 'a deliberate intention to render oneself vulnerable to another based upon confident expectations' (Dietz, 2004, *see* Lewicki et al., 1998; Mayer et al., 1995; Rousseau et al., 1998). The core concepts of risk, vulnerability and positive expectations drive trust in the organisation, features which largely describe trust at the interpersonal level. The above definition is one of the most versatile and popular definitions presently available within the literature. Within their model of trust, Mayer et al. (1995) do not specify the dyad and therefore features of the definition can be applied to any two trusting parties. Vulnerability is central to this definition as it creates risk, and sometimes loss, for a trusting party (McAllister, 1995). Both the organisation and the employee within the trusting relationship are subject to a level of risk, however, the distribution of risk is likely to be more disproportionate than it would be between a manager and employee. Although risk and vulnerability is inherent within leader-follower trust, and in favour of the leader, due to their authority and higher status, this is more exaggerated when the organisation is the referent as the risk is broader and more diffuse.   The considerable power differential in favour of the organisation means that the employee is more dependent on, and therefore more vulnerable to, the actions of the organisation. Therefore, whilst the two definitions are similar in foundation, the core features making up the definition differ for the two referents.

Just as in the case of interpersonal trust, trust in an organisation is preceded by an assessment of the organisations trustworthiness. Organisational trustworthiness perceptions relate to an employee's 'positive confident expectations' about the intention and likely future behaviour of their

organisation (Lewicki et al., 1998). Ideally, such expectations are drawn from evidence based on prior interactions (Whitener et al., 1998), although other sources can also inform these beliefs including reputation (Dietz, 2004). The trustworthiness dimensions outlined by Mayer et al. (1995), within the second chapter have previously been adapted for use with the organisation as the referent (Searle et al., 2011), making this model of trust relevant and applicable at a more organisational perspective. As suggested by Schoorman et al. (2007) just as perceptions about an individual's ability, integrity and benevolence trustworthiness will guide the level of trust in the individual, these perceptions will also affect the extent to which an organisation is trusted. Perceived organisational trustworthiness is therefore seen as multidimensional based upon global beliefs about the ability, integrity and benevolence of the organisation (Searle et al., 2011). With reference to the organisation, ability trustworthiness relates to the 'organisations collective competencies and characteristics which enable it to function reliably and effectively to meet its goals and responsibilities.' Integrity trustworthiness beliefs are driven by 'an organisations actions which consistently adhere to moral principles and a code of conduct acceptable to employees such as honesty and fairness'. Finally, benevolence trustworthiness is determined by the extent to which 'an organisation engages in actions which indicate genuine care and concern for the well-being of stakeholders' (Gillespie & Dietz, 2009, p. 128).

These trustworthiness antecedents are seen as unique and separable as dimensions which exist along a continuum (Mayer et al. 1995). Situations may arise wherein trustworthiness beliefs are not high across all three dimensions, but where one or two dimensions exist such that a meaningful amount of trustworthiness is present (Greenwood & Van Buren III, 2010). Such assessments can be compartmentalised and aggregated (Lewicki et al., 1998) in that parties can still accommodate errors or contradictions, but still judge the organisations trustworthiness to be sufficient overall (Dietz, 2004). Organisational trustworthiness and leader trustworthiness at the interpersonal level are considered to be distinguishable, although likely to be highly related (Greenwood & Van Buren III, 2010).

5.1.2 Conceptualising Organisational Trust

As previously alluded to, issues in the conceptualisation of what organisational trust actually is have plagued research efforts. When investigating trust within the workplace, trust is typically conceptualised as a psychological state situated at the interpersonal level, nevertheless, such a social-psychological approach to the study of trust is not the only option. Luhmann (1979, as cited in Gould-Williams, 2003) proposed that trust is essentially a dichotomous concept consisting of distinct interpersonal and systems components. Within the sociological literature trust is considered a quality of social systems which enable the maintenance of social order within that given system (Shamir & Lapidot, 2003). Scholars within this domain typically view trust more as an institutional phenomenon

(Lewicki & Bunker, 1996). Implicit in the notions of systems is the view that trust can be a collective attribute (Greenwood & Van Buren III, 2010). In this sense, organisational trust refers to the trust which exists between individuals and the organisation as an entity in and of itself (Greenwood & Van Buren III, 2010).

It is often not clear what individuals are referring to when they decide to trust their organisation (Searle et al., 2011), thus causing ambiguity. As a result, organisational trust research often differs in its focus, with different authors adopting alternative targets as their referent. Some studies focus on vertical trust investigating trust between the employee and their employer (Vanhala et al., 2011). Other researchers investigate the trust between employees and management at various levels of the organisation (see Child & Rodrigues, 2004). Rousseau et al. (1998) suggest that when the employer or top management are the target referent, trust is likely based on the assessment, evaluation and aggregation of multiple sources of evidence operating at various levels relating to the organisation (Searle et al., 2011). Such a view acknowledges the significance of people who occupy roles within the organisation at the interface at which trust is built and maintained. In this sense, the individuals within various managerial levels act as a proxy for the organisation and are the target of trusting perceptions. Some scholars, such as Carnevale (1995) adopt a more abstract view where the organisation is a collective term for the actors within it. The organisation is considered a moral agent, capable of consciousness and intent with a moral identity (Weaver, 2006), moral character and the capacity to be virtuous (Moore, 2005) with predictability and goodwill (Maguire & Phillips, 2008).

Of the approaches identified, the latter conceptualisation is arguably the most accurate and representative of the organisational trust discussed by early scholars such as Luhmann (1979, as cited in Gould-Williams, 2003). Although the alternative approaches identified above are also valid, research should strive to measure a more abstract level of collective characteristics which are not reducible to features of individuals. To put it simply, there is more beyond the trust forged and determined by the top management team, in that trust exists within the context of the organisation as a system with a life of its own (Greenwood & Van Buren III, 2010). Based upon the above reasoning, this is the conceptualisation of organisational trust operationalized within this thesis.

It is important to note that the necessity to adopt the more systemic approach is likely dependent upon factors such as the size of the organisation. When an organisation is small and all decisions are centralised coming directly from a clearly identifiable individual or small team, the organisation and the salient decision makers may seem equivalent. In contrast, in large complex organisations, the path to the decisions makers is less clear and the organisation can seem an independent entity separate from management and this becomes the employee's referent for trust (Mayer & Davis, 1999) and should be the target of trust measurement. As the research setting for this second study is within a large public organisation, the conceptualisation of the organisation as an

entity in and of itself appears appropriate. Through adopting such a conceptualisation of organisational trust it is important to address an often-cited challenge typically found within the psychological contract literature relating to the issue of defining what is meant by organisation (Guest, 1998). In what Guest (1998) refers to as the 'agency' problem, he contends that researchers run the risk of anthropomorphizing 'the organisation' by turning it into a being rather than dealing with the issue that multiple agents exist within the organisation who the employee might construe as being the recipient of the psychological contract. Despite such critique, authors such as Rousseau and Tijoriwala (1998) have attempted to clarify such issues. Rousseau (1998) contends that the contract exists between the worker and the firm, while the agent merely is a go-between. Individuals will personify commitments made to them by their managers as reflecting the larger firm. In general, this view is more commonly observed and considerable research investigating the employee-organisation relationship (EOR) now exist and extend beyond the psychological contract literature (Zhao, Wayne, Glibkowski & Bravo, 2007). For example, research within the fields of organisational identification (Mael & Ashforth, 1995) and perceived organisational support (Eisenberger, Huntington, Hutchinson & Sowa, 1986; Rhoades & Eisenberger, 2002) also adopt this conceptualisation. Therefore, although questions have been raised in the past about the true identity of 'the organisation', the breadth of research adopting a view of the organisation as a separate entity suggests such concerns may be unnecessary.

5.2 Interpersonal trust and organisational trust

Differences in interpersonal trust and organisational trust in terms of referent have been drawn (Searle et al. 2011), whilst similarities exist in how the two constructs are defined (e.g., the core features of risk and vulnerability). A further point of overlap concerns the consideration of social exchange processes. Typically, social exchange is discussed within the context of interpersonal, leader-follower relationships. However, research within the workplace has shown that employees can form differentiated social exchange relationships with a variety of actors, including the organisation (Frazier et al., 2010). The work of Eisenberger and co-authors (1986) has persuasively illustrated how employees can form social exchange relationships with the organisation as a target referent. Effective social exchange relationships between an employee and their organisation are built upon the expectation that the other party will honour the obligation for returns sometime in the future (Rupp & Cropanzano, 2002).

The majority of trust research is limited to the single level of analysis, considering either dyadic trust relationships within organisations (interpersonal trust) or trust between organisations (inter-organisational trust) (Schoorman et al., 2007). Research however has shown that the trust present within organisations can be a combination of both systemic and interpersonal considerations (Grey & Garsten, 2001). Several authors have recognised differences in trust for single referents at

various hierarchical levels within an organisation (e.g., Cook & Wall, 1980; Driscoll, 1978). Research demonstrates that trust in these targets is conceptually and empirically distinct. For example, Whitener (1997) proposed that employees can develop trust in at least two different types of referents-specific targets (e.g., the supervisor and the organisation) at the same time. In support of such propositions, Mayer and Gavin (2005) found evidence for varying levels of employee trust in plant managers and top management simultaneously. Dirks and Ferrin's (2002) meta-analysis revealed that not only do employees trust different authority figures at a given time but also that these trusting beliefs predict different outcomes. Following an analysis of a myriad of work attitudes and behaviours, the review revealed that trust in the direct leader had an equal to or stronger effect on a number of outcomes including task performance and job satisfaction when compared to trust in organisational leaders. Trust in organisational leadership was more strongly associated with organisational-focussed outcomes such as organisation commitment. The rationale for such differences is based on the principles of social exchange wherein individuals are likely to reciprocate with desired outcomes primarily aimed at the corresponding referent level (Dirks & Ferrin, 2002).

Colquitt et al. (2007) in their meta-analysis also found differences in both attitudinal and performance-based outcomes for direct leadership and organisational leadership. Although trusting beliefs towards the two referents were based upon similar trustworthiness assessments the influence and outcomes of these two trusting parties were found to differ. Stinglhamber, De Cremer and Mercken (2006) found evidence for supervisors and the organisation representing separate targets of employee trust through a multi-foci approach. Frazier et al. (2010) found that different facets of justice were more or less important for trustworthiness perceptions depending upon the authority referent. Furthermore, when investigating dimensions of organisational justice, Ayree et al. (2002) found that the three dimensions of justice were differentially related to two trust foci (the supervisor and the organisation). These justice perceptions in turn differentially related to various employee work-related outcomes. As predicted, trust in the supervisor mediated the relationship between interactional justice and supervisor- related outcomes of task performance and OCB. In contrast, trust in the organisation acted as a mediator for the organisational justice components and organisationally-relevant outcomes such as job satisfaction and turnover intentions. Based on such findings the authors suggest that a focus purely on interpersonal trust provides only a limited understanding of the trust operating within an organisation.

The above literature underscores the distinctiveness of different trust foci which can manifest as different levels of trust towards different referents at the same time and lead to different outcomes. Despite these valuable insights, the interplay between leader-follower trust and organisational trust is still not well understood. Dirks and Ferrin (2002) in their meta-analytical review speculate that interpersonal trust and trust in the organisation are likely related, and found a moderate correlation ($r = .38$) in their post hoc analysis. Further research is therefore needed which investigates how these

two forms of trust are potentially interrelated and therefore influencing the other (Grey & Garsten, 2001). There have been frequent calls within the literature for research to examine more closely trust across levels of organisational analysis (e.g., Rousseau et al. 1998) with an emphasis on the importance of looking at multiple foci simultaneously (Reichers, 1985) Zaheer et al. (1998) highlighted the need for research to investigate the influence process between two particularly important forms of trust, specifically how trust translates from the interpersonal level to the organisational level and visa-versa. With the changing nature of work and the low levels of trust reported within organisations (Hope-Hailey et al., 2012) it is increasingly impractical to focus solely on interpersonal trust in isolation. Addressing this research gap constitutes a major aim of this second study. Given the benefits of organisational trust, an important research question becomes; how can the trust manifest between a leader and follower influence organisational trust? Using the insights gained from the first study examining the trust dynamics of leader-follower relationships, this research will investigate this link between leader-follower trust and organisational trust.

5.2.1 The leader as an agent for organisational trust

A shift in research attention is slowly being observed with efforts focussed upon the issue of building or restoring organisational trust. In a recent conceptual framework, Gillespie and Dietz (2009) outlined four internal determinants of organisational trustworthiness. Taking an organisational perspective of trust repair the authors identify a number of key changes which organisations can potentially make when looking to target organisational trust. These include the restructuring of policies and practices, strategy and changing the culture and climate. Some of these components have been the subject of empirical study. For example, ensuring fairness of procedure has been found to be a key determinant of trust. Organisational policies and practices can signal to employees how trusted they are by the organisation which will influence their trust in return. Ayree et al. (2002) found procedural justice to be a particularly strong determinant of organisational trust perceptions. A number of studies have shown that employees base their trust in the organisation on determinants such as human resources activities (Gould-Williams, 2003; Whitener, 1997). For example, Searle et al. (2011) found that HR practices influenced trust perceptions at the organisational level. Both collectively and separately, Searle et al. (2011) suggest that HR policies and practices enacted by the organisation send signals regarding the trustworthiness of the organisation.

Gillespie and Dietz (2009) also recognise the role leadership and management practices may play as a vital internal determinant of trust at the organisational level. Senior managers' behaviour is identified as particularly central for influencing trust perceptions by virtue of their authority and accountability. However, the authors also theorise that they are unlikely to be the only leadership referent for trust perceptions of organisational trust. Building on this line of thought Gillespie and Dietz (2009) suggest that employees evaluate a variety of targets including senior management,

immediate managers and the organisation itself when looking to determine organisational trustworthiness perceptions. It is proposed that at the working unit level, the relationship between an employee and their line manager provides valuable information (Gillespie & Dietz, 2009). Therefore, although the actions of senior management are important, managers at all levels may send signals about the trustworthiness of the organisation through their own behaviour as role models and their influence and discretion over systems components (such as rewards and incentives). Such a view is strongly supported by the conclusions drawn by Gerstner and Day (1997) in their LMX meta-analysis in which they depict "the relationship with one's immediate supervisor as a lens through which the entire work experience is viewed" (p. 840).

Both theory and research support such propositions concerning the pivotal role immediate managers may play in determining organisational trust. A study by Shamir and Lapidot (2003) found that although trust is an interpersonal phenomenon, trust in a supervisor also reflects subordinates trust in the system that the supervisor represents. In line with the sociological literature, the authors argue that trust in a superior is a property of the system in which the leader-follower relationship is embedded. Therefore, trust at the leader-follower level can be used to inform trusting perceptions at a more organisational level. Den Hartog, Schippers and Koopman (2002) found that employee's trust in their supervisor was related to their trust in management in general. Furthermore, Searle et al. (2011) found that the behaviour of the immediate manager accounted for 35% of the variance of organisational trust. Finally, Dirks and Ferrin (2002) revealed within their meta-analysis that direct leaders are a particularly important referent for trust. Taking a different perspective, psychological contract theory (Rousseau, 1989, 1998) assumes that employees consider promises from the manager as sanctioned and coming from the organisation. Moreover, managers are believed to play a critical role in shaping the psychological contract on behalf of the organisation thus portraying them as a linking pin (Huy, 2002). Taken together the literature reviewed above lends considerable support to the proposition adopted within this thesis that the immediate manager acts as a representative of the organisation. It is proposed that employees generalise their trust perceptions from this leader-follower level to the wider organisation.

5.2.2 Leveraging interpersonal trust for enhancing organisational trust

Dirks and Skarlicki (2004) recommend that research is needed to investigate how organisations might leverage the potential benefits derived from leader-follower trust. Managers play a pivotal role in building trust towards themselves and the organisation (Deluga, 1994; Whitener, 1997; Greenwood & Van Buren III, 2010). Therefore, research which identifies how trust is built at the leader-follower level is highly relevant due to the potential benefits derived from this at both the interpersonal and organisational level. This constitutes a core objective of this study. It is proposed that leader trustworthy behaviour facilitates employees' trust both at the leader-follower level and the

organisational level. A case has already been made for the relevance of trustworthy behaviour for the development of trust within leader-member relationships in study one. The two frameworks utilised within the first study will also provide the theoretical foundation for study two. The same typology of trustworthy behaviour by Whitener et al. (1998) will be used to investigate leader trust-building behaviour. Furthermore, the model of trust offered by Mayer et al. (1995) will be adopted as it is highly relevant to the context of study two due to its focus upon dyadic trust within an organisational setting. Drawing from the findings of the first study it is proposed that the five different facets of trustworthy behaviour will differentially influence employee perceptions of the three trustworthiness dimensions and this provides the basis for the first set of theoretical hypotheses. It is also proposed that trustworthy behaviour will influence leader-follower trust both directly and indirectly, via trustworthiness perceptions. In contrast to study one, the second study will investigate employee's perceptions of leader trust-building (rather than member trust-building). Such a change in referent will make it possible to examine the trust-building process from this side of the dyad.

Hypothesis 1a: Leader behavioural integrity and consistency will positively influence employee's integrity trustworthiness perceptions.

Hypothesis 1b: Leader sharing and delegating control will positively influence employee's ability trustworthiness perceptions.

Hypothesis 1c: Leader open communication and demonstrating concern will positively influence employee's benevolence trustworthiness perceptions.

In an extension to the above mediating process, it is proposed that leader trustworthy behaviour will also influence employee trust in the organisation, via trustworthiness perceptions and leader-follower trust. The addition of organisational trust as an outcome, the use of the leader referent and the organisational context all help to broaden the scope of this research and build upon the findings of study one. Leader trustworthy behaviour is therefore investigated as both a determinant of employee trust in the leader as well as employee organisational trust. It is proposed that, if employees trust their leader based upon the observation of the leader's trustworthy behaviour, these trusting perceptions inform organisational trust. In contrast, if an employee distrusts the manager, such negative perceptions will taint the employee's perceptions of the broader organisation's trustworthiness.

There are many reasons as to why employees look to their leaders, a primary one being to make sense of organisational life (Pfeffer, 1977, as cited in Barling et al., 2010). Individuals are highly motivated to accurately interpret trusting behaviour due to the risk inherent in misplaced trust, especially within the workplace context (Mayer et al., 1995). As previously discussed, the level of dependency and vulnerability is likely to be higher between employees and their organisation than

between employees and their immediate managers. The former referent is also more distal and the employee is likely to have less information to base trusting perceptions upon, and therefore will look to other sources. The salience of the leader-follower relationship, where the behaviour of the manager can be more readily observed is likely to serve as a good basis for such perceptions. Employees will use all cues available in what could be considered a sense-making process (Neves, 2012). It is important to note that Gillespie and Dietz (2009) and related research provide evidence to show that organisational trustworthiness perceptions are multiply determined (e.g., by HR practices or by organisational culture). However, it is predicted here that a meaningful amount of variance in organisational trusting perceptions can be accounted for by managerial trustworthy behaviour.

Hypothesis 2a: Leader integrity trustworthy behaviour will positively influence trust in the organisation, via its effects upon integrity trustworthiness perceptions and trust in the leader.

Hypothesis 2b: Leader ability trustworthy behaviour will positively influence trust in the organisation, via its effects upon ability trustworthiness perceptions and trust in the leader.

Hypothesis 2c: Leader benevolence trustworthy behaviour will positively influence trust in the organisation, via its effects upon benevolence trustworthiness perceptions and trust in the leader.

Figure 5.01: A conceptual model to show the causal chain of variables from the independent variable to the dependant variable[7]

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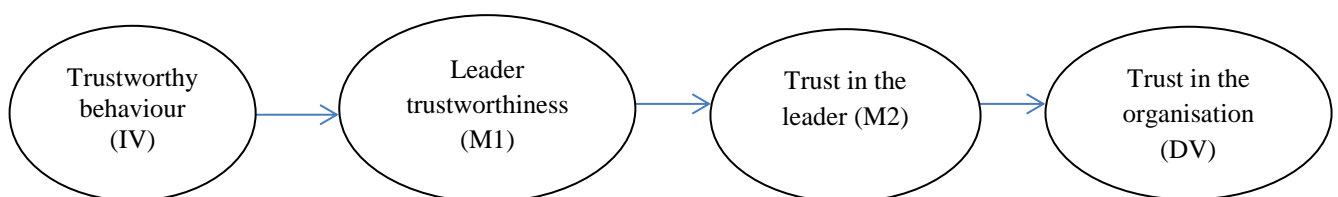
[7] As with study 1, figure 5.01 depicts a full conceptual model of the mediating process. Please see appendices 7, 8 and 9 for the dimension level conceptual models for integrity, ability and benevolence respectively.

5.3 The moderating effect of position

A causal model has been hypothesised leading from leader trustworthy behaviour to organisational trust perceptions, via trustworthiness perceptions and trust in the leader. A further aim of study 2 is to investigate whether features of the organisational context either enhance or impede this trust-building process through the examination of a relevant boundary condition. In particular, this research will investigate the moderating influence of managerial position on the link between leader trustworthy behaviour and organisational trust. Gillespie and Dietz (2009) suggest that due to the relevance of the critical working relationship between immediate managers and employees that managers at all levels are likely to signal the trustworthiness of the organisation. What the authors do not touch upon, however, is whether immediate managers with different positions within the organisation are more or less influential on employees organisational trust perceptions, and for which types of leadership behaviours.

Trust research is often investigated within a particular organisational level and conclusions are drawn based upon such findings (DeChurch et al., 2010). As a result, little is known about whether trusting perceptions differ according to where in the organisation' hierarchy the employees key trust referent is positioned. This gap in our knowledge highlights the relevance of investigating determinants of organisational trust at various levels of authority, rather than assuming equivalence in perceptions across all levels of the organisation (DeChurch et al., 2010). In order to understand the effects of leadership behaviour on trusting perceptions it is important to examine leadership at multiple levels simultaneously (Hunter, Bedell-Avers & Mumford, 2007). It is likely that the more senior the manager, the more their behaviour will be considered by the employees to be representative of the organisation due to their proximity to the top management team and to the decision making process. Although organisational trust in its truest sense reflects trust in an abstract system, Giddens (1990) also emphasises the significance of people in the development of trust, in particular those who occupy roles representing the interface at which trust is built. Therefore, it is expected that the link between leader trustworthy behaviour and organisational trust will be stronger, when the focal manager (whose trust-building behaviour is being observed) is higher up the organisation hierarchy. As such the moderator of managerial position will either strengthen or weaken the link between leader trustworthy behaviour and organisational trust.

The moderating role of position will be tested through different employees rating their manager who occupy positions at two distinct levels of the hierarchy (middle managers and senior managers). Such a design feature is important as it responds to a pertinent concern within the leadership literature. Although a large body of research exists which explores the rich dynamics of leadership, the findings obtained typically apply to leaders at lower levels of the organisational hierarchy. In a recent review of six dominant leadership approaches and their level of analysis,

DeChurch et al. (2010) found that the majority of studies were conducted on the lower echelons of organisations. For example, LMX researchers in particular tend to study the lowest level of management. Although other approaches, such as transformational and behavioural based leadership had more of a mix of levels within their research, these approaches were still focussed largely on the very top and bottom levels of the organisation, much to the exclusion of middle-level management. There is a paucity of research which looks at leadership and trust processes at multiple organisational levels at the same time (DeChurch et al., 2010). Thus, the testing of managerial position as a likely boundary condition of the trust-building process constitutes a major strength of this study, and potentially a source of significant contribution to both the trust and leadership literatures.

Hypothesis 3: Organisational position will moderate the trustworthy behaviour-organisational trust link in that the positive relationship between leader trustworthy behaviour and organisational trust will be stronger for senior managers than middle managers.

Figure 5.02: Conceptual model of moderation
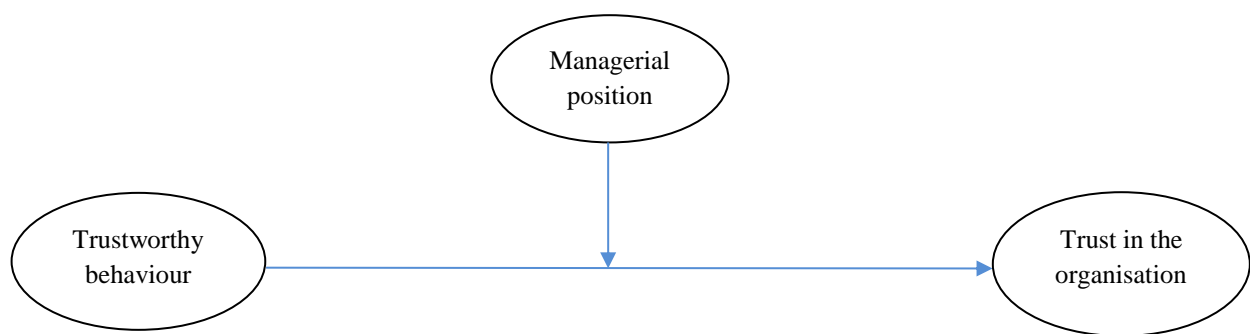
5.4 Trustworthy behaviour at the dimension level

The findings from the first study revealed that, within the context of a developing leader-member relationship, the markers of trustworthy behaviour had a differential influence on the outcome of relationship quality, via the trustworthiness they inspire. The findings of study 1 supported the relevance of exploring trustworthy behaviour and trustworthiness perceptions at the dimension level as a richer view of the trusting process was achieved. Similarly, for determining trust in the organisation, the pattern of influence for the trustworthy behaviours is hypothesised to be markedly different. Specifically, it is proposed that although all three dimensions will be relevant in determining organisational trust, some will be more influential than others. It is predicted that ability-based considerations will be important in determining organisational trust due to the confidence they inspire. However, it is hypothesised that the observation of ability trustworthy behaviour will be particularly influential on employee organisational trust when the senior manager is the target referent. A key behavioural marker of ability is theorised to be the extent to which the manager shares and delegates control. Research has consistently shown that such actions inspire trust (Driscoll, 1978). For example, Podsakoff et al. (1990) found that leaders can gain trust through consulting with followers on important decisions. The extent to which a leader is seen as capable within their role will influence employee's perceptions of the organisation as also having ability trustworthiness. Perceptions of capability at higher levels of the organisation (e.g., senior managers) are more likely to strengthen the trustworthy the trustworthy behaviour-organisational link.

Hypothesis 4a: Managerial position will moderate the ability trustworthy behaviour-organisational trust link, such that when the referent is a senior manager the positive relationship between sharing and delegating control and organisational trust will be strengthened.

It is expected that behaviours which denote integrity trustworthy behaviour will be highly influential in determining trust in both the leader and also the organisation. Integrity is a ubiquitous ideal in leadership which is often considered of paramount importance for leadership effectiveness (Palanski & Yammarino, 2011). Conditions of uncertainty or risk are implicit in the relationship between employees and managers, as they often reserve the power and authority to, at their discretion, significantly influence the employees working experience (Albecht & Travaglione, 2003). Lind (2001) contends that issues relating to fairness are especially critical in authority-based contexts because the risk in exploitation is apparent, with the organisational referent. Due to the considerable power differences between the employee and the organisation and heightened vulnerability on the part of the employee, it is hypothesised that behaviours which demonstrate integrity will be particularly important for organisational trust. Due to the pervasiveness of integrity considerations within leadership contexts for trusting perceptions it is hypothesised that integrity trustworthy behaviour will

strongly influence organisational trust and that this relationship will be particularly strong when the senior manager is the referent.

Hypothesis 4b: Managerial position will moderate the integrity trustworthy behaviour-organisational trust link, such that when the referent is a senior manager the positive relationship between behavioural integrity and consistency and organisational trust will be strengthened.

Research on inter-organisational trust has found support for the importance of integrity and ability-based trustworthiness for successful trusting relationships between organisations, whilst support for benevolence has received less empirical attention. Although this affective-based form of trust may not be an important driver for the development of trust between organisations, it is proposed that benevolence is critical for vertical trust between the employee and the organisation. The logic underlying this assumption is that benevolence reflects other-orientated values, which denote genuine care for the other party. It is proposed that beliefs that the organisation has concern for employees and is seen to have benevolence will be the strongest determinant of organisational trust perceptions. Empirical research supports the proposal that employees may be particularly interested in gauging the organisations benevolence. Communication, which was found in the first study to be a behavioural marker of benevolence trustworthiness, has been shown to strongly influence organisational trust (Sydow, 1998). Searle et al. (2011) found that open communication was a pivotal behaviour for determining organisational trust perceptions. Albrecht and Travaglione (2003) found that an open climate for communication was a key predictor of trust in senior management and subsequent positive attitudes towards the organisation, such as affective commitment. Whilst Carnevale and Wechsler (1992) drew similar conclusions arguing that employees need confidence in the organisation and its agents so that open communication will occur and that they will be given support. Finally, meta-analytical evidence suggests that interactional fairness, which includes open communication between employees and managers positively influences trust in the organisations (Cohen-Carash & Spector, 2001). Taken together, managerial behaviour which denotes benevolence trustworthiness through communication and demonstrating concern is likely to be a key determinant of organisational trust perceptions. Therefore, due to the proposed ubiquity of benevolence considerations for trust within the workplace it is proposed that benevolence will be critical for building organisational trust and that this relationship will not differ as a function of managerial position, therefore no hypothesis is made.

5.5 Summary of aims and contributions for study two

To summarise, research has found that individuals can form trust in two distinct referents within an organisation simultaneously. Furthermore, these different forms of trust are associated not only with different antecedents but also influence outcomes in a distinct way (Dirks & Ferrin, 2002). Despite these insights, the following important questions remain unanswered by the current empirical literature. Firstly, what is the nature of the interplay between leader-follower trust and organisational trust? Can the trust which exists between employees and immediate managers, be a significant determinant of organisational trust? Secondly, what antecedents at the leader-follower level potentially drive these organisational trust perceptions? Thirdly, what are the boundary conditions of the leader-follower trust-organisational trust relationship? Study two looks to investigate how and when trust translates from the leader-follower level to the organisational level. In doing so this research looks to address the above gaps in knowledge and contribute significantly to the growing literature on organisational trust. Three unique contributions are envisioned based upon this research. First, in a direct extension to the first study, study two will examine the facets of trustworthy behaviour as differential antecedents of trustworthiness perceptions, this time with the leader (rather than the member) as the referent. Second, using a multi-foci design, the current study will test the process by which trustworthy behaviour influences organisational trust, as mediated by leader trustworthiness perceptions and trust in the leader. As such this research responds to a call in the literature to examine more closely the influence process between these two forms of trust. Finally, the link between leader trust-building and organisational trust will be tested at two different levels of the organisation to see if differences in trusting perceptions do emerge as a function of position. In doing so this research will provide valuable insights into which forms of trustworthy behaviour are most impactful for building trust at two distinct managerial levels.

CHAPTER SIX: STUDY TWO: AN ORGANISATIONAL CONTEXT

6.0 Chapter Summary

Within this chapter the method and results of the second study are described. This chapter describes the study setting and sample characteristics, followed by a discussion of the study's measures. This is followed by a detailed description of the key results. A summary of the research findings are then given and the implications of these will be discussed. The chapter finishes with a short conclusion which highlights the relevance of these findings for organisational practice.

6.1 Method

6.1.1 Research design

A cross-sectional survey design was adopted in the present study. A multi-foci approach to data collection was used as employees completed a short questionnaire which asked about their trusting perceptions towards both their immediate manager and the organisation. Of the sample, forty per cent of participants had a senior-level manager whilst the remaining sixty per cent reported to a middle-level manager. Such a design feature allows for this research to test whether differences in trusting perceptions emerge as a function of manager's position in the organisational hierarchy..

6.1.2 Access and ethics

Upon being granted ethical approval by the University Research and Ethics Committee, research proposals were sent to a number of organisations within the Midlands. The proposals provided a brief overview of the research and its intended aims. The proposal also outlined the intended benefits to participating organisations as well as information regarding how the research would be conducted. Realistic time frames for the research were given and ethical assurances regarding confidentiality were made. A number of organisations expressed an interest in the research and introductory meetings were set up with a contact person within the organisation to discuss the research further. Although three of the organisations were not able to commit to the research at the time of the intended data collection (due to a staff engagement survey having recently been administered to employees), one organisation was able to proceed with the research. A meeting was held between the researcher and the head of employee engagement at the organisation to discuss in more detail the research objectives, the required level of involvement of the organisation and the intended benefits. Following this initial meeting a copy of the Commitment to Ethical Research Conduct Letter was sent to the contact person at the organisation, along with an example of the cover letter and questionnaire employees would receive so that the type of questions and format of the survey could be approved. These documents were accompanied by a brief overview of what was

agreed during the initial meeting, including a set start date for the data collection to begin. Upon receiving the aforementioned documents, the organisation agreed to participate in the research.

6.1.3 Study setting

The research was conducted within a UK public sector organisation. The organisation provides a wide array of services to the local Midlands ranging from education, transport and IT. The organisation has a traditional hierarchical structure made up of a top management team with an appointed CEO and 6 COO (one for each of the organisation's directorates) and a senior management team, comprising of approximately 250 senior-level managers. The remaining employees all work within the wider workforce which comprises of both middle- and lower-level managers. The organisation is structured around six different directorates which are responsible for a variety of different functions within the organisation.

6.1.4 Study procedure

A short online survey was designed which took approximately 15 minutes to complete. The same questionnaire was given to all participants. Employees within the organisation who reported to either a senior- or middle-level manager were given the opportunity to participate in this research. 240 employees reported to a senior-level manager. Of this sample 81 were returned representing a response rate of 33%. The number of employees with middle-level managers was not reported by the organisation so the response rate for the 120 employees reporting to middle-level managers is not quantifiable. The questionnaire was distributed via an email link (see Appendix 10 for a copy of the questionnaire). The first page of the online questionnaire provided a brief description of the research, how long it would take to complete, assurance of confidentiality, and to whom the results would be reported to and for what purpose. The coversheet, on the online version, required participants to tick a box to confirm that they agreed to participate in the research before proceeding with the questionnaire.

6.1.5 Study Sample

The sample for this study consisted of 201 full-time employees. Of these 201 employees, 81 reported to a senior-level manager whilst the remaining 120 employees reported to a middle-level manager. Each of the six directorates were represented within the sample. Of the sample, 116 were female (62.4%) and the average sample age was 48.13 years (SD = 9.16 years). The ethnicity of the sample was as follows, the majority of employees were white British (73.7%), Asian British (6.8%), Black British (3.2%), mixed (1.6%), Chinese (.5%), the remaining employees either stated other (1.1.%) or did not disclose the information. The average organisational tenure of employees within the

sample was 16.1 years (SD = 10.40 years), while the average dyadic tenure within the sample was 2.95 years (SD= 3.44 years).

6.2 Measures

6.2.1 Choice and adaption of items to suit the sample and setting

In contrast to study 1, the aim of this research was to explore member's perceptions of leader trustworthy behaviour and the impact of these behaviours upon organisational trust. Therefore, members reported the extent to which their leader engaged in such trustworthy actions. When the same constructs were tested across the two studies, the same measures were used, as consistency in measurement tools will aid with the interpretation of findings across the two studies. Due to the organisational context of this research, the terminology used within some of the scales in study 1 was adapted for use within this sample (for example, instead of referring to Managing Director the items referred to manager).

6.2.2 Predictor variables

For the following measures participants were instructed to answer the items which referred to their manager as the individual who they directly reported to. Unless otherwise stated, a Likert scale ranging from 1 *(strongly disagree)* to 5 *(strongly agree)* was used. When scales did not adopt this rating system, an alternative method is identified.

Trustworthy behaviour: The trustworthy behaviour scale constructed within the first study was used in study two, albeit with four additional items. The rationale for including extra items is to provide an even more robust measure of the underlying constructs and to ensure that all aspects of Whitener et al.'s (1998) definition across the different behavioural markers were accounted for. As this scale was completed with the leader as the referent, the fifth dimension of trustworthy behaviour, sharing and delegating control was included. These behaviours were hypothesised to be most relevant to ability-based trustworthiness perceptions. Two items were included which were taken from a scale designed by Yukl, Wall and Lepsinger, (1990) to measure the level of delegation. When combined these two items produced an acceptable level of reliability at α =.74. An additional communication item was added to the two taken from a study by Korsgaard et al. (2002). In the previous study, following exploratory factor analysis (EFA), 1 item was found to cross load on the integrity and the benevolence factor, and was therefore dropped. The second factor was found to reflect benevolence trustworthiness rather than ability trustworthiness as hypothesised. The additional item in this study reflects openness, as outlined in Whitener et al.'s (1998) definition. Based upon the results of the previous EFA and the supporting theoretical rationale, the communication items are predicted to reflect benevolence trustworthiness in this research. This is due to the personal orientation of the

items which reflect an attachment between the trustor and trustee. When combined with the three items from study 1 reflecting demonstrating concern, the overall internal consistency reliability of the scale was α =.93. Finally, an additional item was added to the behavioural consistency measure as it was felt that the two consistency items would benefit from a question relating to reliability, as this is a facet of behaviour discussed within Whitener et al.'s (1998) definition. This addition produced an integrity-based trustworthy behaviour scale made up of five items with an internal consistency reliability of α =.93. The 13 items combined produced an overall trustworthy behaviour scale with an internal consistency reliability of α =.94

Trustworthiness: The same trustworthiness scale used within study 1 was adopted within the present research (Mayer & Davis, 1999; Schoorman et al., 1996). The scale was used in its original form as a measure of leader trustworthiness, in that the member (or subordinate) within the dyad rated the extent to which they perceived the leader to be trustworthy across the dimensions of ability (α = .74), integrity (α = .92) and benevolence (α = .93). The 11 items combined produced an overall trustworthiness scale with an internal consistency reliability of α =.96.

Trust in the Leader: Trust in the leader was measured using a scale developed by Schoorman and Ballinger (2006). At the time of this study this trust measure was considered to be one of the more promising scales currently available (Schoorman et al., 2007). The seven item scale was based upon the original 4 items originally developed by Schoorman, Mayer & Davis (1996a) which was designed to accompany their 1995 conceptual framework of trust. In line with their conceptualisation of trust, the four items were designed to tap into an individual's willingness to make themselves vulnerable to the trustee. This original four item measure has been used in a number of prominent pieces of research (Davis et al., 2000; Mayer & Davis, 1999) and has been found to significantly predict a number of key outcomes such as sales, profits and turnover (Schoorman et al., 2007). Although high reliability was initially achieved when first tested in a study of veterinary doctors (.82, Schoorman et al.,1996a), subsequent studies have not found such high levels of reliability (.62, Davis et al., 2000; .59 and .60 across two waves, Mayer & Davis, 1999) and researchers have expressed concerns about the less than desirable alpha levels of this original measure (e.g., Chiaburu & Baker, 2006; Ferrin, Kim, Cooper, & Dirks, 1999; Jarvenpaa & Leifner, 1999; Kim, Dirks, Cooper & Ferrin, 2006). Despite the strengths of this measure, such as conceptual clarity, brevity, and test-retest reliability, as Nunnally (1978) pointed out, the primary effect of measurement error is that it reduces the likelihood of detecting relationships that actually exist. The seven item scale developed by Schoorman and Ballinger (2006) reflects an attempt by researchers to improve the original scale through the addition of items which were designed to maintain the conceptual definition of trust whilst not creating redundant items. Example items include; 'My manager keeps my interests and needs in mind when making decisions' and 'if I had my way I wouldn't let my manager have influence over decisions that are important to me'.

Although Schoorman and Ballinger (2006) achieved an encouragingly high alpha level at α =.84, the reliability of the scale in this study was acceptable (α = .69).

Direct trust measure: Due to concerns regarding the reliability of 'willingness-to-be-vulnerable' trust based measures, a direct measure of trust was also included. As shown in their meta-analysis, Colquitt et al. (2007) found that the relationship between trust and its antecedents and consequences did not vary significantly across measures based on the positive expectation, willingness-to-be-vulnerable or direct measures that explicitly use the word trust, thus suggesting that all three approaches adequately measure trust. To measure direct trust a scale by Earley (1986) was used as this was recommended by Colquitt et al. (2007) and has previously achieved good levels of reliability. The two item scale required members to answer the following items: 'How much trust do you place in your supervisor' and 'how willing are you to reply on people who supervise you? Responses were ranked on 5 item scale ranging from *do not trust/will not reply on* (1) to *do trust/will rely on* (5). The scale exhibited a higher level of reliability (α = .90) compared to the Schoorman and Ballinger (2006) measure (α = .69) and therefore was used in the following statistical analysis as a sequential mediator between member perceptions of leader trustworthiness and trust in the organisation

6.2.3 Dependent variables

Trust in the organisation: The employees trust in the organisation was measured by a direct item taken from research by Searle et al. (2011). The item was as follows, 'Overall, to what extent do you trust your organisation? Responses to this item were rated on a seven point scale *(ranging from 1 'to a very low degree' to 7 'to a very high degree').* The use of single global items is common within organisational research, such as within the job satisfaction literature. The approach of asking respondents to provide an overall assessment of their trust in the organisation has been found to be a robust method for measuring overall global assessments (Cummins 1995; Bergkvist & Rossiter 2007).. Single-item trust measures have also been used to measure trust in the leader (see Lau & Liden, 2008 for a notable example) as well as measure trustworthiness beliefs (Hakimi et al., 2010).

Control variables: A number of demographic questions were also included within the questionnaire. Participants were asked to indicate their age, sex, ethnic background, organisation tenure and dyadic tenure with their current manager. This study also measured participant's propensity to trust using a 5 item scale (α = .74) designed by Huff and Kelley (2003). Theorists such as Rotter (1971) have argued for the relevance of dispositional trust when making trust judgements in addition to more contextual cues. However, research has found that its relevance is most critical for trusting judgements in the absence of trustworthiness information (Grant & Sumanth, 2009). Although it is presumed that trustworthiness information will be readily available to trustors within this sample, propensity to trust was controlled for. Preliminary analysis indicated that the above demographic information and an

individual's propensity to trust were not related to trust either at the interpersonal or organisational level and were therefore not included in subsequent analyses. Participant's directorate was also controlled for throughout the analyses as this may be a relevant determinant of trust due to the emergence of different trusting climates within each directorate.

6.3 Results

6.3.1 Measurement evaluation

The means, standard deviations and Pearson correlation coefficients of all the scales used within this study are presented in table 6.01. Due to the decision to proceed with the direct trust scale rather than the willingness-to-be-vulnerable version (Schoorman & Ballinger, 2006), the cronbach's alpha of all measures exceeded .70 and the internal consistencies are shown in the table in the diagonal in brackets.

Table 6.01: Means, standard deviations, correlations of variables and Chronbach's alphas

Variables	Mean	s.d	1	2	3	4	5	6	7	8	9	10	11
1. Twbeh	3.66	.833	(.94)										
2.Twbeh(a)	4.01	.905	.74**	(.74)									
3. Twbeh(i)	3.59	.950	.90**	.60**	(.93)								
4.Twbeh(b)	3.52	.960	.90**	.59**	.69**	(.93)							
5. TW	3.51	.866	.84**	.53**	.77**	.77**	(.96)						
6. TW(a)	3.74	1.05	.70**	.42**	.69**	.62**	.87**	(.95)					
7. TW(i)	3.58	.870	.81**	.51**	.77**	.73**	.95**	.75**	(.92)				
8. TW(b)	3.13	1.00	.74**	.50**	.62**	.73**	.87**	.61**	.77**	(.94)			
9. Trust (Leader)	3.51.	1.22	.72**	.45**	.69**	.64**	.81**	.74**	.75**	.70**	(.79)		
10. SOE	2.41	1.02	.22**	.26**	.23**	.14*	.20**	.21**	.14*	.21**	.22**	(.94)	
11.Trust(org)	2.86	1.21	.37**	.23**	.40**	.29**	.39**	.35**	.34**	.38**	.47**	.59**	-

** $p < .01$ * $p < .05$, *Note:* cronbach's alpha on the diagonal in parentheses

Note: Twbeh –Trustworthy behaviour (a) ability, (i) integrity (b) benevolence

TW – Trustworthiness (a) ability, (i) integrity (b) benevolence

6.3.1.1 Exploratory factor analysis (EFA)

Due to the addition of four items to the trustworthy behaviour scale when compared to study 1, exploratory factor analysis was conducted to check the factor structure of the items. Principle component analysis was used along with direct oblimin as the form of oblique rotation due to expected correlations between the factors. Following the first extraction attempt an incorrect factor structure emerged. The third delegation item, '*My manager gives me the opportunity to express my opinions*' loaded as expected on the ability factor (.450), but also on the benevolence factor (.470) indicating cross-loading and possibly conceptual overlap. The item was therefore removed and a second extraction attempt was made. Following this second extraction support for the 3 factor structure of the trustworthy behaviour scale was found. As expected, the communication items were more closely aligned with the benevolence factor. This is consistent with both the findings of study 1 and the theory and research (reviewed in chapter 4) which argued that communication was more indicative of an individual's benevolence than ability. As shown in table 6.02, a strong three-factor solution was found with 77% of the variance explained with all extraction items above .50.

Table 6.02: Pattern matrix showing exploratory factor analysis of the trustworthy behaviour scale

Item	Component		
	Benevolence trustworthiness	**Integrity trustworthiness**	**Ability trustworthiness**
1.My manager behaves consistently over time	-.030	**.885**	.106
2. My manager acts consistently across situations	.011	**.879**	.112
3. My manager's behaviour is highly reliable	-.019	**.931**	-.046
4. My manager keeps to the promises he/she makes to others	.100	**.828**	-.108
5. My manager demonstrates actions which are consistent with his/her beliefs	.033	**.699**	.134
6. My manager feels confident delegating tasks to me	.024	.199	**.816**
7. My manager encourages me to take the initiative to solve problems on my own	.329	.091	**.608**
8. My manager takes the time to explain his/her decisions thoroughly	**.738**	.269	-.253
9. My manager provides reasonable explanations for his/her position on matters	**.834**	.147	-.092
10. My manager seriously considers my views on this matter	**.767**	.076	.116
11. My manager is concerned for my well being	**.885**	-.062	.093
12. My manager treats me in a manner which shows he/she is sensitive and considerate to my needs	**.890**	-.061	.036
13. My manager is interested in how I feel and how I am doing	**.899**	-.067	.119

6.3.1.2 Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) was then conducted on all scales used within this study. Firstly, CFA was conducted on the trustworthy behaviour and trustworthiness scales as these two measures comprise of several dimensions and second-order factors. Good model fit was inferred when CFI and NNFI exceeded .90, the normed chi-square measure (X^2/df) fell between 1.0 and 5.0 (Schumacker & Lomax, 1998) and when SRMR and RMSEA fell near .05 (Kline, 2005). Upon reviewing the fit indices the three-factor model for the trustworthiness scale achieved a good level of model fit, (X^2(41, $N = 190$) = 90.842, $p < .00$; X^2/df = 2.22; comparative fit index (CFI) = .97; non-normed fit index (NNFI) = .97; Root Mean Square Error of Approximation (RMSEA) = .08; Standardised Root Mean Square Residual (SRMR) =. 02). When comparing the three-factor solution to a single-factor model, reflecting a single dimension of trustworthiness, the alternative model produced a worse level of model fit,(X^2 (44, $N = 190$) = 579.266, $p < .00$; X^2/df = 13.17; comparative fit index (CFI) = .75; non-normed fit index (NNFI) = .69; Root Mean Square Error of Approximation (RMSEA) = .25; Standardised Root Mean Square Residual (SRMR) =. 07). These findings are consistent with study 1 and provide strong support for the proposals of Mayer et al. (1995) regarding the distinction of the three trustworthiness dimensions.

Table 6.03*: Confirmatory factor analyses of trustworthiness factors

Model	*df*	X^2	X^2/df	**CFI**	**NNFI**	**RMSEA**	**SRMR**
Three- factor model	41	90.842	2.22	.97	.97	.08	.02
Single- factor model	44	579.266	13.17	.75	.67	.25	.07

The CFA results for the trustworthy behaviour scale also achieved a good level of model fit with a three factor solution, (X^2 (59, $N = 190$) = 167.086, $p < .00$; X^2/df = 2.83; comparative fit index (CFI) = .95; non-normed fit index (NNFI) = .93; Root Mean Square Error of Approximation (RMSEA) = .09; Standardised Root Mean Square Residual (SRMR) =. 05). Judging by the fit indices, when this three-factor model was compared to a single-factor solution of trustworthy behaviour the level of model fit was significantly weaker based on the significant drop in X^2 despite the loss of 6 degrees of freedom. The present analysis supports the conceptualisation of these facets of trustworthy behaviour across the three dimensions of trustworthiness. Furthermore, despite the additional items that were included in study two, these findings mirror those obtained in study 1, and provide confidence in the hypotheses made regarding the underlying structure of the behaviours.

Table 6.04*:* Confirmatory factor analyses of trust-worthy behaviour factors

Model	*df*	*X²*	*X²/df*	CFI	NNFI	RMSEA	SRMR
Three- factor model	59	167.086	2.83	.95	.93	.09	.05
Single- factor model	65	652.487	10.04	.73	.68	.21	.08

6.3.1.3 Discriminant validity

Some of the variables within this study were found to highly correlate, which raises concerns about multicollinearity. Observed high correlations can be interpreted as an indication of variables essentially measuring the same thing. As anticipated, due to the nature of the constructs, the correlation between trustworthy behaviour and trustworthiness was large ($r = .84$). At a dimension level, high correlations were also found across the different behavioural indicators and the trustworthiness dimension they were hypothesised to conceptually tap into (for ability $r = .42$, integrity $r = .77$ and benevolence $r = .73$). Therefore, prior to hypothesis testing, a series of confirmatory factor analyses (CFA) were conducted to examine the empirical distinctiveness of the three key constructs within the conceptual model. The baseline measurement model included the following scales: trustworthy behaviour, trustworthiness and trust in the leader (trustworthy behaviour and trustworthiness were modelled at the dimension level). Goodness-of-fit was determined using the same fit indices used in the earlier CFA analysis. A seven-factor measurement model was tested which allowed the latent first order factors across the dimensions to freely correlate (i.e., the baseline model) with the items which were specified as loading on their respective latent factors and no cross-loading was permitted. A good level of model fit was obtained, ($X²$ (278, $N = 190$) = 616.269, $p < .00$; $X²/df = 2.22$; comparative fit index (CFI) = .93; non-normed fit index (NNFI) = .92; Root Mean Square Error of Approximation (RMSEA) = .08; Standardised Root Mean Square Residual (SRMR) =. 04). This seven-factor model was then compared to a restricted model which forced the trustworthy behaviours and trustworthiness items at a dimension level to load on a single latent variable. This alternative four-factor model was a significantly worse fitting model to the observed data (as compared to the above baseline model) based upon the results of the chi squared difference test. Taken together, the measurement model results support the distinctiveness and discriminant validity of the focal variables within this study.

6.3.2 Data checking

Prior to statistical analysis the skewness and kurtosis of the variables were assessed in order to screen the data for normality (DeCarlo, 1997; Nunnally, 1978). Screening continuous variables for normality is a key step in statistical analysis. Skewness and kurtosis are two components of normality where values of zero indicate that the distribution is normal. Skewness reflects the symmetry of the distribution, while kurtosis has to do with the peakedness of a distribution (Tabachnick & Fidell, 2007). None of the scales showed a consistently high skewness or kurtosis, so no data transformation was considered necessary (see table 6.05 for an overview of the descriptive statistics).

Table 6.05: Kurtosis and skewness values for each of the scales (at the dimension level)

Construct	**Skewness**	**Kurtosis**
Integrity trustworthy behaviour	-.780	.470
Ability trustworthy behaviour	-1.18	1.57
Benevolence trustworthy behaviour	-.831	.723
Integrity trustworthiness	-.444	.019
Ability trustworthiness	-.809	.026
Benevolence trustworthiness	-.155	-.412
Trust in the leader	-.500	-.766
Trust in the organisation	-.125	-1.05
SOE	.288	-.747

6.3.3 Hypothesis testing and statistical analysis

The intention of study two was to investigate leader trustworthy behaviour within an organisational context. This research looked to move beyond the dyadic focus of the previous study and investigate whether such behaviours also influence a followers trust in the organisation, indirectly via its effects upon perceptions of the leader's trustworthiness (mediator 1) and subsequent trust in the leader (mediator 2).

In order to test this proposed model, serial multiple mediation was the most appropriate form of statistical analysis, as it allows for two mediators which are hypothesised to occur in a serial order to be tested within one model. Three specific indirect effects and a direct effect were outlined (see figure 6.01), and the macro devised by Hayes (2012) was used. Using SPSS version 20, the syntax was configured to test the mediational path from trustworthy behaviour to updated trustworthiness perceptions, to trust in the leader to trust in the organisation. In order to conduct a robust test of the causal processes involved in influencing organisational trust, the conceptual model was tested at the dimension level (see appendices 7-9 for conceptual models). Therefore, three different models were specified to reflect the dimensions of ability, integrity and benevolence. The results of the three models will be discussed separately, starting with the integrity model.

Figure 6.01: A conceptual model to show the multiple serial mediator model with three indirect effects and a direct effect specified

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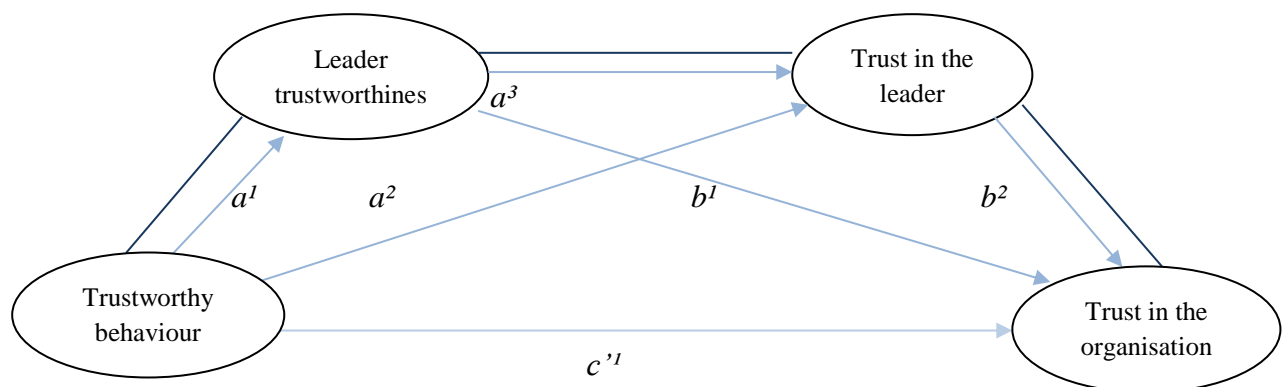
6.3.3.1 Integrity model: Mediation analysis

Table 6.06 displays the results for the integrity model and figure 6.02 visually illustrates the coefficients for each of the pathways. The first pathway a^1, which reflects the link between integrity trustworthy behaviour as the independent variable and leader integrity trustworthiness perceptions (M1) was found to be positive and significant ($\beta = .70$, t (186) = 15.7357, $p < .00$). As proposed within hypothesis 1a, the more a leader demonstrates behavioural consistency and integrity in their actions, the more trustworthy they are perceived to be by the follower along the dimension of integrity. Pathway a^2 which flows from integrity trustworthy behaviour to trust in the leader (M2) was also found to be significant ($\beta = .35$, t (186) = 3.8602, $p < .00$). This relationship between leader integrity trustworthy behaviour and trust in the leader suggests that such trustworthy actions directly influence trust in the leader in a positive direction. A significant and positive relationship was found for path a^3, ($\beta = .75$, t (186) = 7.5713, $p < .00$). This finding lends support for the mediating pathway depicted within figure 5.01 and supports the proposals of Mayer et al. (1995) regarding integrity trustworthiness as an antecedent of trust. Path b^1, which reflects the link between perceptions of leader integrity trustworthiness (M1) and the dependent variable, trust in the organisation, was not found to be significant ($\beta = -.28$ $p = n.s$). This finding suggests that perceptions of leader trustworthiness do not directly influence trust in the organisation, rather this influence is likely to be mediated by trust in the leader. The path (b^2) between trust in the leader (M2) and trust in the organisation was found to be significant ($\beta = .44$, t (186) = 4.3131, $p < .00$), thus supporting the proposal that trust in the organisation is predicted by trust in the leader. The direct effect (c'') is also significant ($\beta = .33$ t (186) = 2.5359, $p < .05$).

The specific indirect effects were then examined using bootstrap confidence intervals. The first carries the effect of integrity trustworthy behaviour on trust in the organisation through leader trustworthiness only, bypassing trust in the leader. This indirect effect which is the product of $a^1 = .7012$ and $b^1 = -.2882$ or -.2021, was not found to be significant as the 95% bootstrap confidence intervals of -.4562 to .0106 included zero. In other words, the observation of trustworthy actions which denote integrity did not significantly influence employee organisational trust as a result of increased trustworthiness perceptions. Such a finding is not surprising given the proposed critical mediating role of trust in the leader, which is not included within this specific indirect effect. The next indirect effect flows from integrity trustworthy behaviour directly to trust in the leader and then to trust in the organisation, bypassing leader trustworthiness. This indirect effect, which is the product of $a^2 = .3556$ and $b^2 = .4412$ or .1569 was found to be significant with a 95% bootstrap confidence interval of .0622 to .3231. Employees who reported observing behavioural consistency and integrity in their leader's actions reported more trust in the leader which was associated with increased organisational trust, independent of leader trustworthiness considerations. The last indirect effect of integrity trustworthy behaviour passes through both trustworthiness (M1) and trust in the leader (M2)

and is estimated as the product of a^1, $a^3 = .7587$ and b^2, or .2347 with a 95% bootstrap confidence interval of .1193 to .3964. This significant specific indirect effect includes both the mediators in serial order and supports the proposition for the critical role of both trustworthiness and trust in the leader for mediating the link between leader integrity trustworthy behaviour and employee trust in the organisation. Finally, the total indirect effect was not found to be significant within this analysis $\beta = .18$ as the 95% confidence intervals straddled zero (-.0272 - .3942).

Figure 6.02: Model coefficients for each of the indirect effects and direct effect for the integrity model
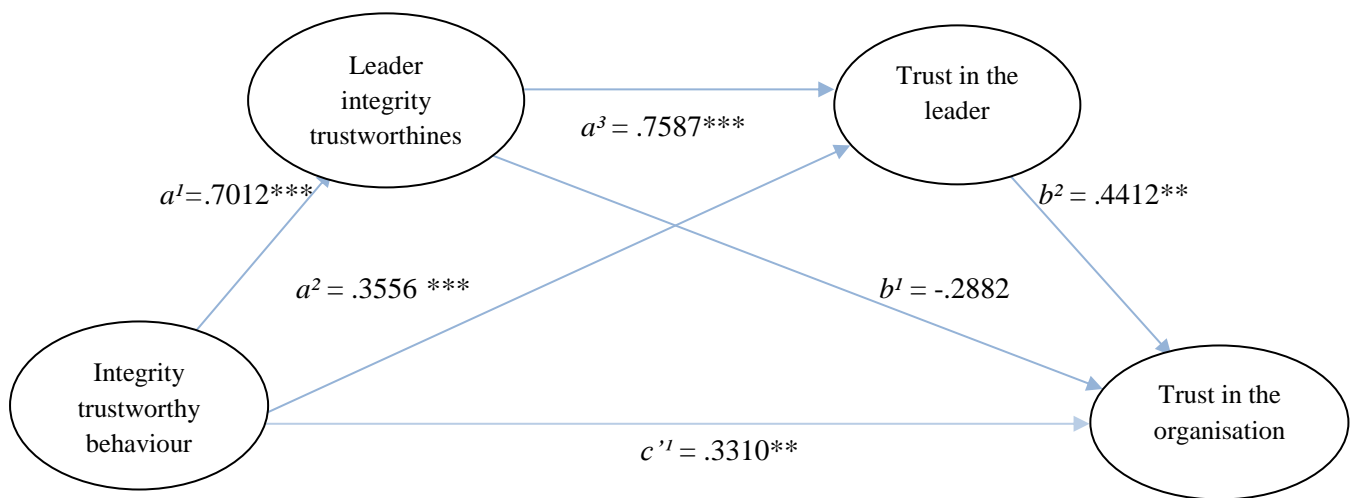
The results for the integrity model were as expected and provided support for hypothesis 2a, where a causal process of mediation was described. Specifically, leader integrity trustworthy behaviour was found to positively influence trust in the organisation and this relationship was significantly mediated by integrity trustworthiness perceptions and trust in the leader. Therefore, evidence for a causal link from the leader's engagement in trustworthy behaviour and the follower's subsequent trust in the organisation was found, thus highlighting that the influence of leader trustworthy behaviour extends beyond the leader-follower relationship. The findings confirm that when followers observe their leader demonstrating behavioural consistency and integrity they are more likely to perceive that leader as having higher integrity trustworthiness. As predicted, trustworthiness perceptions increase a follower's willingness to be vulnerable to the leader, which in turn also positively influences their willingness to be vulnerable to the organisation. The results lend support for the hypothesis that; trust at the leader-follower level can be leveraged to influence organisational trust, an effect which is driven by the behaviour of the immediate manager.

Table 6.06: Regression coefficients, standard errors, and model summary information for the serial multiple mediator integrity model as depicted in figure 6.02

		M¹ (Trustworthiness)				M² (Trust in leader)				Y (Trust in organisation)		
Antecedent		coeff.	s.e	p		coeff.	s.e	p		coeff.	s.e	p
X (Trustworthy behaviour)	$a^1 \rightarrow$	0.701	0.044	.00	$a^2 \rightarrow$	0.355	0.092	.00	$c^1 \rightarrow$	0.520	0.084	.00
M¹ (Trustworthiness)					a^3	0.758	0.100	.00	$b^1 \rightarrow$	-0.288	0.156	.06
M² (Trust in leader)									$b^2 \rightarrow$	0.441	0.102	.00
constant	$i_{m^1} \rightarrow$	1.156	0.187	.00	$i_{m^2} \rightarrow$	-0.209	0.276	.44	$i^y \rightarrow$	0.826	0.376	.02
		$R^2 = .592$				$R^2 = .634$				$R^2 = .327$		
		$F_{(1, 186)} = 36.966 \; p < .00$				$F_{(2, 185)} = 38.447, p < .00$				$F_{(3, 184)} = 9.5109, p < .00$		

Consequent

6.3.3.2 Ability and benevolence model: Mediation analysis

Within table 6.07 an overview of the path coefficients for each of the dimension models is provided. Interestingly, the pattern of significant paths for the ability and benevolence models are similar to those found and discussed for the integrity model. As predicted within hypotheses 1b and 1c the different behavioural markers of ability and benevolence trustworthy behaviour were found to positively influence the relevant trustworthiness dimension, as illustrated in the consistently significant coefficients for path a^1. For each of the models, trustworthy behaviour was found to directly and indirectly influence trust in the leader via trustworthiness perceptions as both paths a^2 and a^3 were found to be significant. These findings lend support for the relevance of each of the markers of trustworthy behaviour for significantly building leader-follower trust. Furthermore, the significant findings for path a^3 support the view that all three trustworthiness dimensions had a unique relationship with trust (Colquitt et al., 2007). Path b^1 was not found to be significant, a finding which was replicated across all three models. This supports the proposal of an indirect effect via trust in the leader. The present findings are consistent with the theoretical propositions of Mayer and colleagues (Mayer et al., 1995) wherein trustworthiness perceptions are cast as a key antecedent to trust in the leader.

Trust in the leader (path b^2) was found to positively influence trust in the organisation in a positive direction for all three models. Interestingly, follower's beliefs in the integrity, benevolence and ability trustworthiness of their leader, although critical for cultivating trust in the leader, do not provide a sufficient basis upon which individuals will form intentions to trust the organisation. In a recent meta-analysis Colquitt et al. (2007) tested the extent to which trust completely mediates the relationship between trustworthiness and related outcomes. The authors found that trustworthiness perceptions also had unique relationships with behavioural outcomes when trust was considered simultaneously. For example, benevolence had incremental effects on counterproductive work behaviour over and above trust (Colquitt et al., 2007). In the present findings such a direct path between trustworthiness and the outcome was not observed. An assessment of trustworthiness was not sufficient in isolation to influence organisational trust and the effect was fully mediated by trust in the leader. When organisational trust is the outcome an 'expectation' of trust, derived from trustworthiness beliefs is not sufficient to influence an employee's willingness to be vulnerable to the actions of the organisation. This path appears to be influenced by whether the employee is firstly willing to make themselves vulnerable to the actions of the leader. Finally, the total effect for each of the models (path c^1) was found to be significant; however, the direct effect (path c'') was only significant for the integrity model.

The pattern of specific indirect effects for the ability and benevolence model largely mirrored the integrity findings. Only the first specific indirect effect, which carries the effect of trustworthy behaviour on trust in the organisation through leader trustworthiness, bypassing trust in the leader was not found to be significant, thus supporting the argument for the importance of trust in the leader for predicting organisational trust. The latter two specific indirect effects, which did include trust in the leader, were significant. Support was found for hypotheses 2b and 2c as both the ability- and benevolence-based models provided support for the effect of trustworthy behaviour on organisational trust, via trustworthiness and trust in the leader perceptions. The results for the ability and integrity mode are displayed in figure 6.03 and 6.04 respectively (see appendix 11 and 12 for model summary information for the ability and benevolence models, respectively).

Table 6.07: Path coefficients for serial multiple mediation analysis for the integrity, ability and benevolence models

Path	Integrity model	Ability model	Benevolence model
a^1	.7012***	.4837***	.7726***
	(.0446)	(.0800)	(.0538)
a^2	.3556***	.2491**	.3748***
	(.0921)	(.0712)	(.0947)
a^3	.7587***	.7618***	.5794***
	(.1002)	(.0608)	(.0898)
b^1	-.2882	.0313	.1265
	(.1569)	(.1117)	(.1262)
b^2	.4412***	.4283***	.4237***
	(.1023)	(.1005)	(.0950)
c^1	.5206***	.3242***	.3805***
	(.0848)	(.0950)	(.0878)
c'^1	.3310**	.0445	-.0657
	(.1305)	(0985)	(.1250)

*p< .05   ** p< .01   *** p< .001 *Note:* standard errors are in parentheses.

Figure 6.03: Model coefficients for each of the indirect effects and direct effect for the ability model
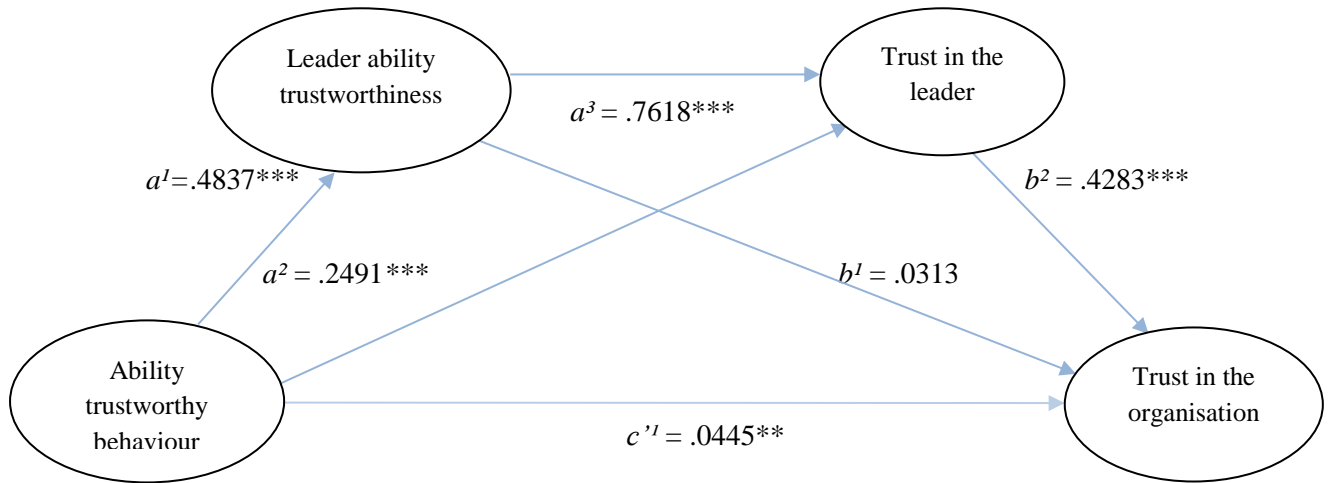
Figure 6.04: Model coefficients for each of the indirect effects and direct effect for the benevolence model
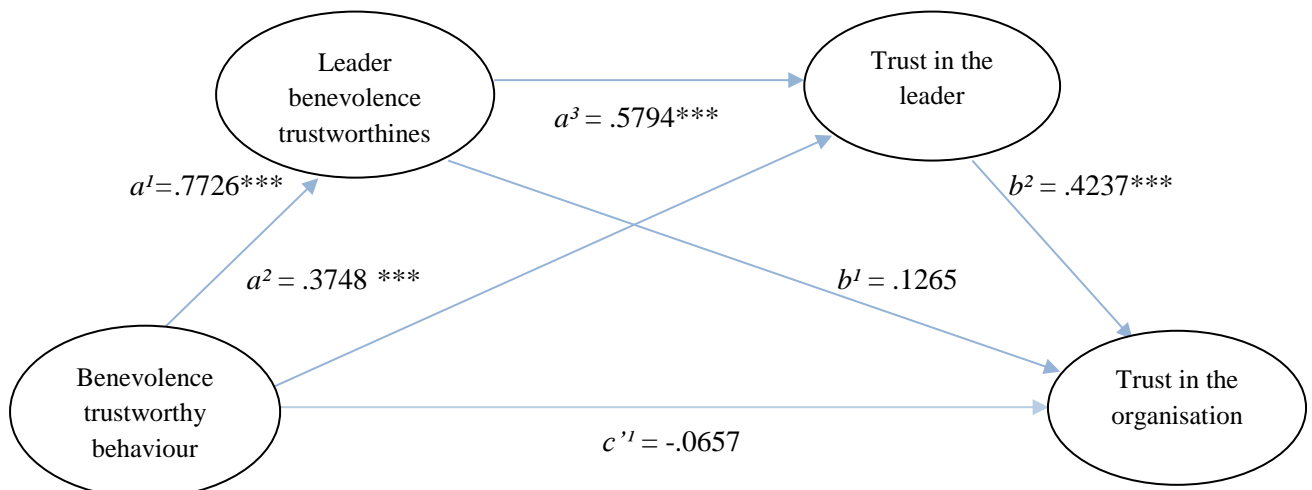
Overall, the results clearly support the hypothesised serial multiple mediator model described within chapter 5 (figure 5.01). Support for the role of leader trustworthy behaviour as a determinant of employee organisational trust, via trustworthiness and trust in the leader across all three models was found. Based upon these findings it would seem that the trustworthy behaviour of the immediate manager not only predicts employees trust in the leader, but also influences organisational trust perceptions. As predicted, the immediate manager does serve as an agent for the organisation. The immediate manager's behaviour and the trust he/she inspires has implications which extend beyond the confines of the leader-follower relationship. These results support the findings of study 1 through highlighting the importance of the trust building process for cultivating leader-follower trust. In contrast to the first study, support was found for the relevance of each of the behavioural markers on their relevant trustworthiness dimension. Behavioural consistency, behavioural integrity, demonstrating concern, communication and sharing and delegating control were all found to act as antecedents to trustworthiness perceptions, which in turn influenced leader-follower trust. It is of interest to note that in review of the direct effect of leader trustworthy behaviour on organisational trust, and the effect sizes for each of the mediating pathways that integrity was the strongest model. This would suggest that although all three dimensions of trustworthiness are relevant, integrity based trustworthy behaviour is a particularly strong determinant of organisational trust due to the trust it inspires. A further point of interest was the significant pathways within the benevolence model, which were not found in the first study. The difference between the pattern of results for benevolence across both studies is perhaps not surprising given the difference in dyadic tenure between the two pieces of research (M =3 months, study 1; M =2.95 years, study 2). It is possible that issues relating to a lack of sufficient behavioural observation to base trusting perceptions upon which were theorised to prevent the hypothesised relationships from appearing in study 1 were less likely to be operating within this study sample.

6.3.4 Trustworthy behaviour at different levels: Moderation analysis

Having found support for the trust-building process model and its influence on organisational trust, another important aim of study two was to determine whether this process was moderated by the manager's position within the organisational hierarchy. Specifically, it was proposed in hypothesis 3 that the positive relationship between leader trustworthy behaviour and organisational trust would be stronger when senior-level managers were the target referent, compared to middle-level managers. Furthermore, it was predicted across hypotheses 4a-4c that some behavioural markers would be more influential of organisational trust, based upon the trustworthiness they inspire as a function of position. In order to test these hypotheses, moderated multiple regressions were the main form of analysis. Prior to analysis all the variables involved in the interaction terms were mean-centered (Aiken & West, 1991). As with the mediation analysis, these propositions were tested at the dimension level. Within this analysis, position was treated as a binary variable with values of 0 and 1 representing senior manager and middle managers, respectively.

6.3.4.1 Integrity trustworthy behaviour: Moderation analysis

For the outcome variable of trust in the organisation a significant main effect for integrity leader trustworthy behaviour was found, ($\beta = .48$, t (186) = 5.4137, $p < .00$). Position was found to significantly predict organisational trust, representing a main effect ($\beta = -.78$, t (186) = -3.8850, $p < .00$). The interaction of integrity trustworthy behaviour and position was also found to be significant ($\beta = -.38$), (t (186) = -1.8945, $p < .05$). In order to explore the nature of the significant interaction effect the conditional indirect effects were reviewed. The results show that the relationship between integrity trustworthy behaviour and trust in the organisation was significant at both levels of the moderator. However, as illustrated in figure 6.05, the effect was stronger for senior managers ($\beta = .72$, t (186) = 3.9961, $p < .01$) than middle managers ($\beta = .33$, t (186) = 3.6361, $p < .01$). This result provides support for hypothesis 4b as the link between integrity trustworthy behaviour and organisational trust perceptions was found to vary as a function of managerial position in the organisational hierarchy. That is, senior managers' integrity-building behaviours had a stronger leveraging effect on organisational trust than middle managers' integrity-building behaviours. Integrity appears to be particularly important for senior managers. These results may be explained by the fact that senior manager are likely to be more closely involved in setting the direction for the organisation and affecting significant changes. As a result, consistency in action and word deed alignment are more likely to be perceived as being symbolic of the trustworthiness of the organisation in general. Clearly, middle managers' level of integrity is also important; it is just that the effect of their integrity on organisational trust is weaker. Together, the results lend support for the importance of integrity perceptions for building organisational trust. Employees with managers at various levels of the organisation appear to be influenced by the observation of leader behavioural consistency and

integrity when considering their willingness to vulnerable to the actions of the organisation. However, senior manager's level of integrity appears to be particularly diagnostic for cultivating both trust in the senior manager and in the organisation more generally.

Figure 6.05: Perceptions of organisational trust as a function of integrity-based trustworthy behaviour for senior and middle managers
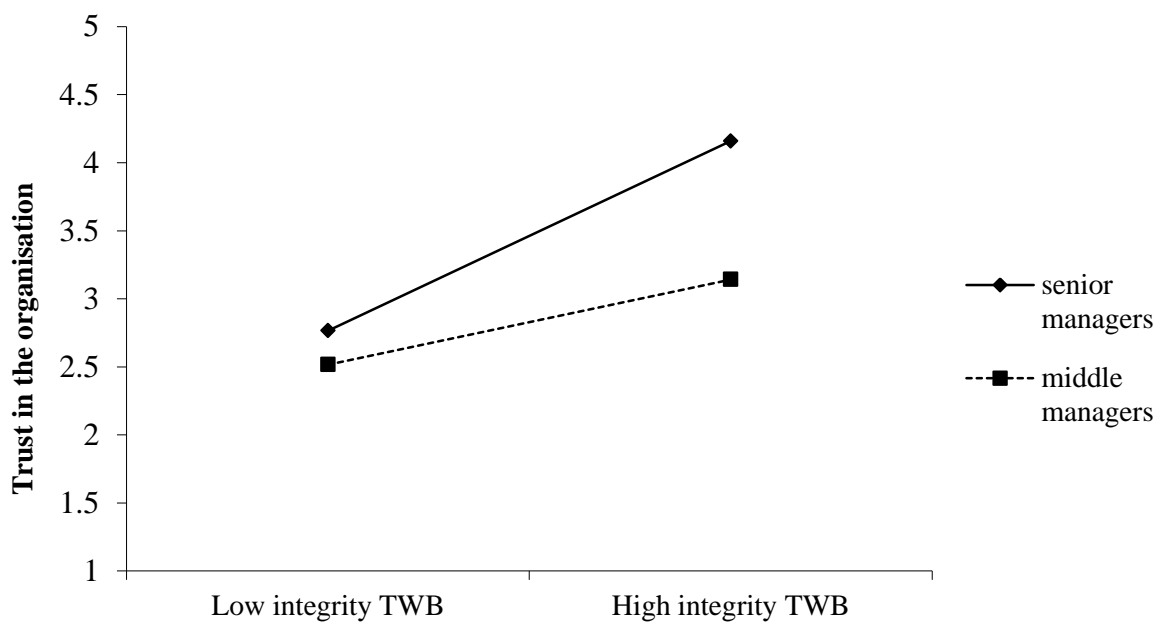
Note: TWB (Trustworthy behaviour)

6.3.4.2 Ability trustworthy behaviour: Moderation analysis

For ability trustworthy behaviours, based on the behavioural dimensions of sharing and delegating control, a different set of results were obtained. A significant main effect for ability leader trustworthy behaviour ($\beta = .31$, t (186) = 3.2986, $p < .01$) and position ($\beta = -.90$, t (190) = -4.4081, $p < .01$) on trust in the organisation was found. The interaction of the two predictors was also found to be significant, ($\beta = -.54$, t (186) = -2.5856, $p < .01$). Interestingly, the conditional indirect effects revealed that the relationship between ability trustworthy behaviour and trust in the organisation was significant for senior managers ($\beta = .64$, t (186) = 3.5108, $p < .01$) but not middle managers ($\beta = .10$, $p = n.s$). The results of this analysis are presented in figure 6.06.

The results were as predicted in hypothesis 4a. Although ability trustworthy perceptions are considered to be highly relevant to the early development of leader-follower trust and have been shown to be critical for inter-organisational trust, they were not predicted to be as influential in determining trust in the organisation when compared to their integrity and benevolence counterparts for both managerial positions. This does not however mean that perceptions of behaviours involving the sharing and delegating of control are not important for organisational trust. The present findings would suggest that ability trustworthy behaviour is relevant for organisational trust perceptions solely when an employee reports to a senior level manager. Such behaviours are less influential upon organisational trust when a middle manager is the referent. Due to the proximity of senior managers to the top decision making process, their competence and ability to share and delegate control in a responsible and appropriate way is understandably relevant to organisational trust. If your manager is senior in the organisation and behaves in a way which denotes ability, this will give the follower more confidence, a defining feature of trust, in the organisation and its ability trustworthiness. If however, your manager is lower in organisational position, their demonstration of ability, although pertinent to leader-follower trust perceptions does not appear to significantly influence trust in the organisation. This is likely due to the managers presumed lower level of discretion in the organisational decision making process.

In addition, contextual factors present within the organisation might also influence the trusting processes within the present findings. For example, the empowerment climate within the organisation is likely to influence the extent to which middle managers sharing and delegating control behaviour is considered to be representative of the both their own ability trustworthiness and that of the organisation. Empowerment is viewed as a significant prerequisite to developing trust in the organisation (Barnes, 1981; Culbert & McDonough, 1986; Navran, 1992). If there is not a strong empowerment climate the sharing and delegating of power and control by a manger with an employee is likely to influence leader-follower trust but may not be considered diagnostic of the ability of the wider organisation. When factoring in such an explanation it is important to consider the context of

the present study. Leadership positions within public sector organisations are proposed by Nyhan (2000) to be characterised by less decision making discretion and subject to more controls when compared to their private sector counterparts, thus making this explanation more plausible.

Figure 6.06: Perceptions of organisational trust as a function of ability based trustworthy behaviour for senior and middle managers

Note: TWB (Trustworthy behaviour)

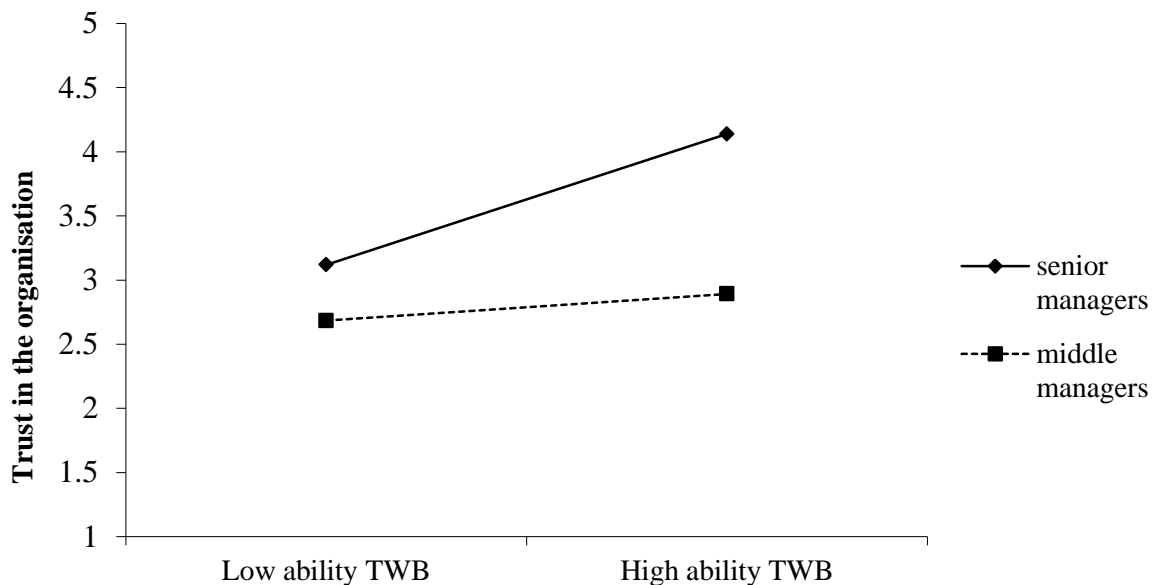### 6.3.4.3 Benevolence trustworthy behaviour: Moderation analysis

Finally, multiple regression analysis was conducted on the benevolence-based model. It had previously been hypothesised that behaviours denoting benevolence trustworthiness would be particularly influential in determining trusting perceptions at the organisational level. This relationship was not hypothesised to vary as a function of position due to the belief that benevolence-based considerations would be relevant for all leadership referents. This is exactly what the results showed, thus supporting hypothesis 4c. Significant main effects for both benevolence trustworthy behaviour ($\beta = .38$, t (186) = 4.2612, $p < .01$) and position ($\beta = -.10$, t (190) = -5.0686, $p < .00$) on organisational trust were found. However, the interaction of the two predictor variables was not found to be significant ($\beta = -.24$, $p = n.s$). Post hoc analysis revealed through simple regression that the relationship between benevolence trustworthy behaviour and organisational trust was significant,

whilst controlling for position (β = .34, t (190) = 4.269, p < .00), thus providing support for the predictions made. This pattern of results suggest that when a manager demonstrates concern and communicates openly with followers this directly influences organisational trust perceptions, regardless of the mangers' position in the organisations hierarchy. This finding reinforces the view that a primary determinant of employee trust in both the immediate manager and organisation revolves around a positive orientation based upon concern, wellbeing and communication. The findings lend considerable support for the proposal that benevolence considerations are critical for trust.

As with ability, it may be the case that features of the climate and culture within the organisation might influence the present findings. Research has shown that an open climate for communication is a key predictor of trust in senior management and subsequent positive attitudes towards the organisation, such as affective commitment (Albrecht &Travaglione, 2003). It may be the case that the behaviours fostered by such a climate at the top of the organisation trickle down and influence the behaviour of both middle level and lower level managers. A strong climate of benevolence at the top of the organisation in terms of open communication and concern for the wellbeing of others may set a tone for the behaviours of those further down the hierarchy. A trickledown effect is likely to be observed, which will not necessarily determine whether the leader demonstrates benevolence trustworthy behaviour but it may facilitate its expression across organisational levels. Within the ethical leadership literature, Brown et al. (2005) proposed that a particular climate can be created wherein certain ethical behaviours are role modelled and these cascade down through the organisation for others to observe. Research has suggested that there may be a particular affective tone which runs through public sector organisations, which may help to explain the present findings (Balfour & Wechsler, 1990). Due to the nature of many of the jobs involved within public organisations (e.g., social services agency) high levels of affective organisational commitment are often found in public sector employment. This may in turn create an affective climate which facilitates the expression of benevolent intentions throughout the organisation and such processes may have been operating in the present sample.

6.4 Summary of findings

Overall, the results of this study were in line with the hypotheses. The primary objective of this research was to provide support for the key role of managerial trustworthy behaviour as a determinant of organisational trust perceptions. Although organisational trust is likely to be multiply determined (Gillespie & Dietz, 2009), a strong theoretical rationale was provided for the relevance of leadership behaviour in leveraging organisational trust. Through serial multiple mediation analysis, strong support was found for the key mediating role of trustworthiness and trust in the leader in explaining the link between trustworthy behaviour and organisational trust. The influence of these two mediators was found to be largely comparable across the three models, although the integrity model produced the strongest effect sizes. Furthermore, considerable support was found for the proposed boundary condition as managerial position within the organisational hierarchy was found to significantly moderate the link between leader trustworthy behaviour and organisational trust for the integrity- and ability-based models, whilst the benevolence model did not vary as a function of position. Within the following section the results of this study will be discussed in a greater detail.

6.5 Discussion of results

Previous research has revealed that employees generalise their attitudes toward supervisors to the organisation as a whole (e.g., Eisenberger et al., 2002), supporting the view of the leader as an agent for the organisation (Gillespie & Dietz, 2009). The current findings lend support to this theoretical argument and confirm the relevance of managerial trustworthy behaviour as a key internal determinant of employees trust in the organisation. The behavioural markers of trustworthy behaviour outlined by Whitener et al. (1998) were found to be important for determining both interpersonal and organisational trust simultaneously. Across all three models (ability, integrity and benevolence) support was found for the relevance of leader trustworthy behaviour for building organisational trust, via trustworthiness perceptions and trust in the leader. The findings also provide support for the view that employees can form trust in two different referents simultaneously (the manager and organisation in this instance). The observed correlation between trust in the leader and trust in the organisation was $r=.47$, which, although moderately high, does not suggest that there is undue overlap between the two constructs. Furthermore, CFA analysis provided support for the two constructs discriminate validity. Trust theorists have previously discussed the interplay between these two trust referents. This research not only shows a link between leader-follower trust and organisational trust but also identifies the behaviours critical to facilitating this process. This constitutes a major contribution of this research.

The present findings have a number of theoretical contributions to the trust literature. Firstly, this study represents a full test of Whitener et al.'s (1998) typology with the leader referent within an organisational context. Considerable support was found for the relevance of all the five behavioural markers for building leader-follower trust, via the dimensions of trustworthiness. In a direct extension to this model, this study has provided evidence for the relevance of these trustworthy behaviours for both leader-follower as well as organisational trust. The link between leader trustworthy behaviour and organisational trust is a particularly important finding as it contributes significantly to the growing literature on organisational trust. Whilst the tendency of researcher's within this area is to focus on more macro level factors as antecedents of organisational trust, the results of this study reinforce the need to also consider more micro level processes. These results confirm that managers do play a pivotal role in building trust towards themselves and the organisation (Deluga, 1994; Whitener, 1997; Greenwood & Van Buren III, 2010).

A further aim of this research was to examine a potential moderator of this trusting process. Within the moderation analysis a different pattern of results emerged for each of the dimension models, providing a unique view of the trusting process in terms of when, and for what kinds of trust can trust in leaders be leveraged to build organisational trust. As predicted (H_3), the link between the different facets of trustworthy behaviour and organisational trust was found to differ depending upon the level of the employees' immediate manager in the organisational hierarchy. Ability trustworthy behaviour was a significant determinant of organisational trust for senior, but not middle, management. Although integrity trustworthy behaviour was a determinant for both managerial levels, the relationship was stronger for senior (than middle) managers. In line with the proposals made within chapter 5, benevolence-based trustworthy behaviour was found to be a particularly important determinant of organisational trust; this effect did not vary as a function of position. The results reinforce the value of examining trustworthy behaviour at the dimension level in order to tease out unique differences across the dimensions of ability, integrity and benevolence. Novel insights into the trusting-building process and how this is manifest across two levels of an organisations hierarchy were achieved through the present research. Such insights provide a significant contribution to the trust and leadership literatures (and these will be discussed in more detail below). If this research had adopted a composite measure of trustworthy behaviour and trustworthiness, the richness of these different trusting relationships would have been lost.

Scholars have previously suggested that leadership processes and their influence may differ depending upon organisational level (DeChurch et al., 2010). These results confirm the relevance of examining trusting perception at various levels of the organisation, rather than assuming that they will be the equivalent across all levels of leadership. The findings support Lulmann's (1979) theory that attitudes of trust differ within organisations depending on structural relationships as the influence of trustworthy behaviour on organisational trust was not comparable across levels. The trustworthy

behaviours which were found to be important for building organisational trust at senior levels of management were different to those used to gauge trust at middle levels of management. Had this research been conducted just within one level, as is often the case (DeChurch et al., 2010), the results would have failed to reflect the differences in effect sizes as a function of position and would not have accurately represented the rich dynamics of trust within organisations. If, for example, middle level managers had been the target referent, such an approach to data collection would have meant that ability trustworthy behaviour would not have been considered an important determinant of organisational trust. This last finding constitutes an important contribution of this study as there is a limited body of research which focuses on the nature and influence of trust in senior management (Albecht & Travaglione, 2003). Finally, it is likely that a different pattern of findings would have been obtained if this research was also been conducted on the lowest echelons of management. This last point highlights a promising direction for future research.

It was predicted that integrity- and benevolence-based considerations would be particularly influential for organisational trust, a proposition which was supported. These proposals were based upon the premise that integrity would be a pervasive ideal for leaders, particularly those nearer the upper echelons of the organisation. Research has consistently found that within the workplace the integrity of those who provide leadership is a critical concern (Simons, 1999). Indeed, within the behavioural integrity literature considerable support can be found for the notion that integrity is essential for effective leadership (Palanski & Yammarino, 2011). Simons (2002) proposed that one of the driving forces behind the strong link between behavioural integrity and trust may be due to the strong sense of certainty it instils. The results of this study would suggest that leader benevolence is crucial, regardless of level of seniority. There is considerable theoretical support for the primacy of benevolence for cultivating trust in the workplace. For example, affective trust has been described as a more powerful base of trust when compared to its cognitive counterpart (McAllister, 1995; Williams, 2001). Affective trust is more enduring and plays a considerable role in the sustainability of interpersonal relationships within the workplace (Webber, 2008). Benevolence is a critical driver of trust in the workplace due to the fact that it reflects a care and concern for others. Accordingly, employees are more likely to allow themselves to be vulnerable to authority referents if they feel that they have benevolent intentions towards them.

The pattern of findings in study two are also similar to prior research that has also examined trustworthiness perceptions for different organisational referents. When examining different justice perceptions with a multi-foci design, Frazier et al. (2010) found that benevolence mattered to organisational members for both the direct leader and more senior leader referents, whilst integrity only influenced trust for the more proximal leader. The authors found that benevolence was the most salient facet of trustworthiness influencing willingness to trust, regardless of referent. Interesting, unlike the current results, Frazier and colleagues found that ability was a not a significant determinant

of trust in either referent. The Frazier et al. (2010) research was conducted in a marching band within a university setting, thus the differences in the pattern of results between my thesis and their results may be explained by the two markedly different leadership contexts. This interpretation is supported by Tan and Lim (2009) who noted that facets of trustworthiness are likely to have differential effects depending upon the referent as well as the context. Furthermore, in the above study ability trustworthiness perceptions were hypothesised to be determined by actual musical ability. The authors however indicate that many of the students will not have had an opportunity to observe either leader referent perform at that point in data collection.

Rotter (1967) and others have highlighted that individuals vary in the extent to which they trust others in general, a trait referred to as propensity to trust. One possible concern with study one of this thesis was that propensity to trust was not controlled for within the analysis. To deal with this concern in study two, the influence of dispositional trust was measured and controlled for. Of importance, the analysis revealed that the propensity to trust had a no effect on the trust-building process. There are two schools of thought relating to the importance of this trait-based construct. Mayer et al. (1995) identify this disposition within their model and suggest that this trait may sometimes influence individuals' trust for a dyadic other within a personal relationship. Others contend that this propensity has little or no effect on trust in specific partners because of the unique experiences which occur within the context of the relationship which overwhelm the effect of the trait (Grant & Sumanth, 2009). The results of my thesis appear to support the latter view. Indeed, more general research on a wide range of the interpersonal judgments has found that perceptions are overwhelmingly a function of the unique properties of the dyad – reliable individual differences are typically either small in scale, or more often non-existent (see Kenny, 1994).

6.5.1 Post hoc analysis

The results imply that trustworthy behaviour is particularly influential for organisational trust when senior managers are the referent. The corollary to this result is that organisations may find it more difficult to leverage organisational trust when middle managers are the one's employees are basing their trustworthiness perceptions upon. One possible explanation for the diagnostic value of senior managers' (as opposed to middle mangers') trust-building efforts is their proximity to the top of the organisation, and hence they are likely to be more influential on organisational strategy, decision making, policies, practices and so forth. Alternatively, it is also possible that within middle management more subtle psychological processes may be operating. Specifically, the extent to which a middle manager is seen to embody the organisation may influence the degree to which the employee infers trusting perceptions from their behaviour and makes inferences about the organisation. Based upon this logic, it could be argued that a middle level manager's behaviour may be more influential if they are considered particularly representative of the organisation.

A recent construct, proposed by Eisenberger and colleagues (2010) which seems compatible with this line of reasoning is that of supervisor organisational embodiment (SOE). Eisenberger et al. (2010) suggested that although managers are considered agents for their organisations, employees still do acknowledge that managers are also individuals in their own right with characteristics which differ in degree of similarity with those of the organisation. The extent to which employees perceive this degree of similarity will influence how well aligned the employee considers the leader to be with the organisation. Eisenberger et al. (2010) found, across two studies that the relationship between LMX and affective organisational commitment increased as a function of SOE. Large variations have previously been reported in the strength of the relationship between LMX and affective organisational commitment (Gerstner & Day, 1997). The authors found that this variation was related to perceptions of SOE in that the stronger the SOE perceptions, the more the member's attributed the supervisor's treatment of them to the organisation. In a similar study looking at abusive supervision, Shoss, Eisenberger, Restubog and Zagenczyk (2013) found that when employees strongly identified their supervisor with the organisation (high SOE), they were more likely to view abusive supervision not merely as aberrant behaviour by a particular individual but as behaviour representing their relationship with the organisation itself, which in turn negatively impacted perceived organisational support (POS) perceptions.

Adopting similar logic here, it is proposed that supervisor's organizational embodiment (SOE) will strengthen the relationship between middle managers' trustworthy behaviour and organisational trust. If the employees trust in the manager is high and the perceived similarity between the manager and the organisation is strong (high SOE), the employee is more likely to trust the organisation. In contrast, if the employee trusts the manager but the perceived similarity between the manager and the organisation is minimal (low SOE), the trust afforded to the manager is not likely to be extended to the organisation and the manager's behaviour will be considered independently from the organisation. In order to test this proposition some post hoc analyses were conducted on the middle management sample ($n = 118$). [8]

The moderating role of SOE perceptions was tested for all three models (integrity, ability and benevolence) and moderated multiple regressions were the form of analysis used. For the first set of analysis, the integrity model was tested. Although significant main effects for integrity trustworthy behaviour ($\beta = .28$, t (114) = 3.2161, $p < .01$) and SOE perceptions ($\beta = .54$, t (114) = 5.2739, $p < .00$) on organisational trust were found, the interaction was not found to be significant ($\beta = .14$, p = *n.s*). A similar pattern of results were obtained for the ability-based model. For the outcome variable of

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[8] A scale developed by Eisenberger et al. (2010) was used to measure the construct *of supervisor organisational embodiment* (SOE). Five items were taken from the original 9 item scale to measure SOE. Item selection was guided by factor loadings with the 5 chosen all loading .61 and above ($\alpha = .94$).

organisational trust two significant main effects for ability trustworthy behaviour ($\beta = .06$, t (114) = .7401, $p < .01$) and SOE perceptions ($\beta = .49$, t (114) = 4.7471, $p < .00$) were found. However, as with the above integrity model the interaction term was not found to be significant ($\beta = -.02$, $p = n.s$).

For the benevolence model on the outcome variable of organisational trust a significant main effect for benevolence trustworthy behaviour ($\beta = .23$, t (114) = 2.9270, $p < .01$) and SOE perceptions was found ($\beta = .55$, t (114) = 5.5072, $p < .00$). The interaction between the two predictor variables was also found to be significant ($\beta = .24$, t (114) = 2.5812, $p < .01$). The conditional indirect effects revealed that the relationship between benevolence trustworthy behaviour and trust in the organisation was only significant at high levels of the moderator (high SOE perceptions), ($\beta = .45$, t (114) = 3.6307, $p < .01$), and not significant for low levels of the moderator ($\beta = .03$, $p = n.s$). The results of this moderation analysis are presented in figure 6.05. The findings suggest that the positive relationship between benevolence trustworthy behaviour and employee perceptions of organisational trust is moderated by employee SOE perceptions. Specifically, the relationship is positive and significant when employees perceive a high level of alignment between their manager and the organisation (as indicated by the significant conditional indirect effect at high levels of the moderator). In contrast, when employees do not perceive that their manager embodies the organisation; their trustworthy actions do not significantly influence their trust in the more distal referent of the organisation.

The pattern of findings from this post hoc analysis provides some interesting insights into the trusting perceptions occurring within middle management. The results suggest that employee perceptions of the manager's organisational embodiment only significantly influenced the link between trustworthy behaviour and organisational trust for benevolence-based considerations and not integrity and ability. When employees only identified their manager with the organisation to a small degree (low SOE), benevolence trustworthy behaviour was not found to significantly influence organisational trust. Only when SOE perceptions were high did benevolence trustworthy behaviour at the individual level translate to the organisational level. The findings suggest that within this managerial level, SOE perceptions play a moderating role in the link between trust in these two referents. The greater the SOE, the more the employee perceives that the supervisor shares the organisations characteristics and the more the follower considers the demonstration of benevolence trustworthy behaviour by the leader as treatment by the organisation.

Figure 6.07: Perceptions of organisational trust as a function of benevolence based trustworthy behaviour for employees reporting high and low levels of perceived SOE
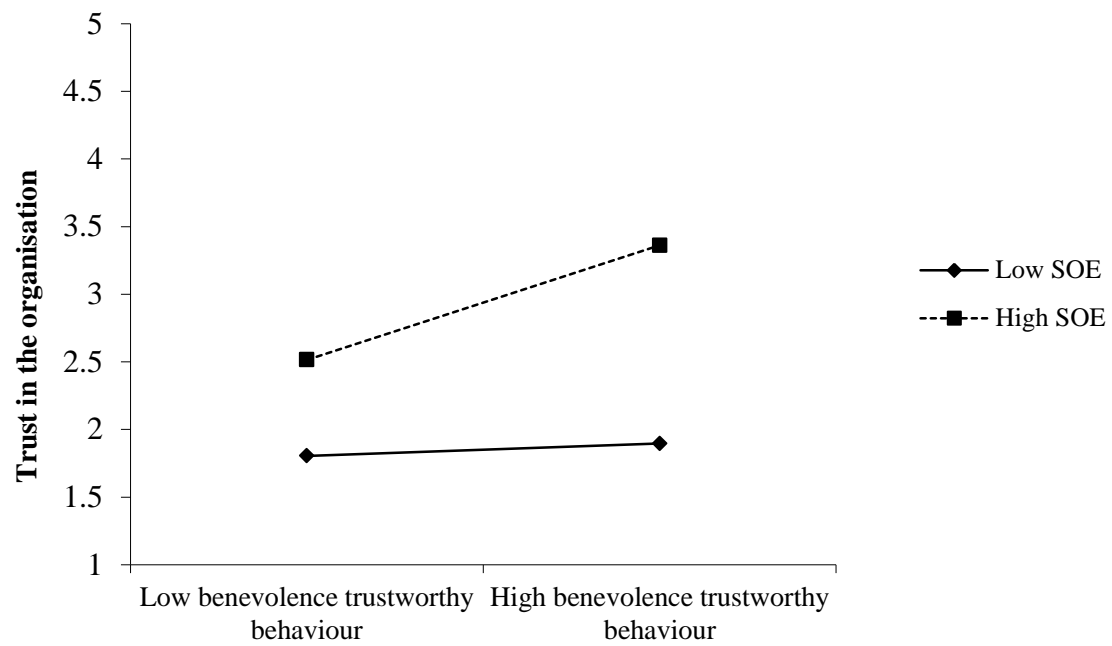
6.6 Conclusion

The results of this study offer several notable findings and contributions to both the interpersonal and organisational trust literature. It must be acknowledged that building trust at an organisational level is determined by a host of different internal mechanisms. The scope of organisational trust means that efforts at the individual level, although relevant will not be the sole determinant of trusting perceptions. As indicated by Gillespie and Dietz (2009) there are likely to be at least three further internal determinant in organisations (i.e., HR practices) in addition to leadership and management practices, which all cumulatively impact trust. Nevertheless, the behaviour of managers provides salient and important clues about trust at a more organisational level and their contribution to trust should not be overlooked. Proactive efforts to maintain and build trust are needed systematically throughout organisations if organisations are to benefit from the positive outcomes associated with this valuable, but elusive, asset. Therefore, all potential avenues of influence need to be considered.

As discussed within chapter five, targeting the behaviour of managers to facilitate organisational trust is one tangible and manageable way organisations can drive trusting perceptions. The findings of this research suggest that such efforts would be beneficial. Furthermore, this research identifies which behaviours are particularly critical, and at which level of the hierarchy are such trustworthy behaviours most impactful. Furthermore, the results pertaining to SOE perceptions offer some promising insights into more nuanced ways in which employees interpret leader trustworthy behaviour which are certainly worthy of further research. Finally, when interpreting the overall findings from this research it is important to briefly consider again the setting of this study. Participants within this study all worked within a public sector organisation. Although organisations across the UK have been found to be experiencing low levels of organisational trust, this is has been particularly felt within the public sector when compared to the private and voluntary sector (Hope-Hailey et al., 2012) and this may have implications for the generalizability of the findings to different organisational contexts. Considering the low levels of trust within public sector organisations this research is particularly pertinent, especially as there exists a dearth of research examining the dynamics of trust in a public sector context (Nyhan, 2000). In conclusion, trust-building efforts need to be enacted in conjunction with other larger scale systematic changes at the macro level. These may include the restructuring of organisational policies or a change in organisational strategy. The content of these were beyond the scope of this research but are discussed in further detail within chapter 7 as a potential avenue for future research. Furthermore, the results of this study will be reflected upon in further depth within chapter 7. This will include a consideration of theoretical and methodological considerations as well as an outline of the study's strengths and limitations.

CHAPTER SEVEN: DISCUSSION AND INTEGRATION OF RESEARCH FINDINGS

7.0 Chapter summary

This chapter provides an overall discussion of the findings of this thesis. First, a summary of the main findings from both studies is provided along with an overview of the methodological strengths of these two studies. This is followed by a discussion pertaining to the theoretical and practical implications of this thesis. A number of possible limitations are also discussed. Within the following section I will highlight some potential avenues for further research as well as identify complementary methodological approaches which will extend, strengthen and broaden the present research findings. The objectives of this research will be briefly summarised again along with the intended contributions to knowledge. The chapter closes with a conclusion of this thesis.

7.1 Summary of empirical findings and study strengths

The main aim of this thesis was to investigate how and when trust develops between leaders and followers. Two studies examined the process of trust-building within the context of a developing LMX relationship, and then as a determinant of organisational trust. Two conceptual models were outlined including both mediating and moderating processes and a number of hypotheses were proposed and tested. The key findings of these studies are summarised below along with a discussion of the methodological strengths associated with these two pieces of research.

The first study adopted a multi-wave, cross-lagged design. The design of this study ensured a robust test of LMX development and trust-building processes over time. The research tracked the progress of the LMX and trust constructs from early relationship formation and for the subsequent 6 months. The longitudinal design was critical for testing a new model of LMX development built on the premise of unexplained variance in the constructs stability. In addition, this design captured the dynamic nature of trust within the developing relationship, and the causal processes involved. Dietz and Den Hartog (2006) note that the incremental, dynamic and continuous nature of trust means that snapshots provided within cross-sectional studies rarely provide the whole picture. Parties' trust in one another goes up and down or takes time to develop, for the large part this is determined by what the other party does (Lewicki & Bunker, 1996). The current research sought to capture this process and delineate the behaviours and mechanisms involved.

Support was found for the majority of hypotheses associated with this first study. Firstly, upon reviewing the correlation between LMX quality at the start of the relationship and LMX quality 6 months on, evidence of LMX instability was found. Through serial multiple mediation analysis, trust-building processes were found to account for a significant portion of the unexplained variance in the LMX construct over time, whilst controlling for early LMX levels. For the most part, support was

found for the key mediating role that trustworthy behaviours and trustworthiness perceptions play in influencing the development of LMX relationships over time. Furthermore, the positive effects of trustworthy behaviour for the LMX relationship were based upon trust-building engaged in by the member, thus providing considerable support for the view that followers are also active agents within the developing LMX relationship.

Three different conceptual models of trust-building were tested within study one across the dimensions of ability, integrity and benevolence. As predicted, a different pattern of results was found for each model. The results of this analysis provide valuable insights into the differential development of trustworthiness perceptions over time and their unique influence on the development on leader-member relationships. Integrity trustworthy behaviours were found to influence LMX quality, via their effect on updated trustworthiness perceptions when attributions of insincerity were low. Put simply, members who engaged in behaviours which demonstrated actions such as consistency in word and deed and promise fulfilment were perceived as having more integrity trustworthiness by their leader, a process which was significantly influenced by the identified boundary condition. This in turn positively influenced relationship quality at a later time point. The findings of the integrity model confirm that trust-building processes do account for unexplained variance in the construct of LMX over time. Research has often found that integrity is a key determinant of employee trust in the leader (Palanski & Yammarin, 2011). The present findings would suggest that such integrity considerations are also critical for leader trust in the follower.

In the case of the ability model the results were contrary to expectations but in line with the majority of the extant literature on LMX development. Ability trustworthy behaviours were found to significantly influence perceptions of the member as being trustworthy; however these updated trustworthiness perceptions were not found to translate into an improved relationship quality over time. In chapter four a number of explanations were provided for the present results. Prospective studies have consistently found that competence-based variables are key antecedents of initial LMX quality (Bauer & Green, 1996; Liden et al, 1993). It was proposed that ability trustworthy behaviour was likely to be highly influential in determining early LMX, but to play a lesser role in the development of LMX over time, via trust-building processes.

Interestingly, support was not found for the benevolence model. At first glance, such findings would imply that when members communicate openly with their leader and demonstrate concern for the leader's wellbeing through their actions, this is not associated with improved relationship quality via enhanced trustworthiness perceptions. Considering the relevance of such benevolent behaviour to exchange deepening and the enhancement of relationship quality this conclusion seems unlikely. As discussed in chapter four, the failure to find support for the benevolence model is more likely due to the fact that in the early stages of a LMX relationship (when the analyses were conducted) a sufficient

history of interactions, diagnostic of benevolence, is unlikely to have transpired. Consistent with this latter interpretation, theories on trust development suggest that benevolence trustworthiness is likely to develop later in the life cycle of a relationship (Lewicki & Bunker, 2006; McAllister, 1995; Rousseau et al., 1998; Webber, 2008). Moreover, further analyses, discussed within chapter four found support for the relevance of benevolence trustworthy on benevolence trustworthiness at time 3, thus providing support for the above propositions. Taken together, the present findings reinforce the view adopted within this thesis that the influence of trust on LMX quality is subject to fluctuation and changes over time, and this will have ramifications for relationship quality and its stability which extend beyond the first few weeks of relationship formation. Overall, a more nuanced view of the trust-building process was achieved through the testing of the conceptual model at the dimension level and valuable insights into the development of interpersonal trusting perceptions over time were achieved.

Within chapter two, when introducing the trust construct, the surface simplicity of trust between two parties was alluded to. Throughout this thesis, insights into the complexities associated with the development of trust between two trusting parties have been provided. The development of trust is fraught with issues. These stem from the need to consider not only the extent to which you trust another but also how your behaviour indicates your trust in them and the implications of this. Within study one, support was found for the relevance of felt trustworthiness as a highly influential determinant of engagement in trustworthy behaviour across all three models. In line with the work of Brower and co-authors (Brower et al., 2009; Lester & Brower, 2003) the feeling of being trusted was a more powerful determinant of member behaviour than trust in the leader. The above findings reiterate the view that trust is not necessarily mutually perceived and this point should not be overlooked (Brower et al., 2000). Attribution processes also serve to add a further layer of complexity to the trusting process. Attributions of insincerity were hypothesised to be of particular relevance when leaders were attributing the motives underlying member trustworthy behaviour. Within study one support for the relevance of this boundary condition on the trustworthy behaviour-trustworthiness link was found for the integrity model. Attributions of insincerity were found to significantly moderate this mediating pathway in that the strength of the relationship was weaker and non-significant when the leader interpreted the motives behind the trustworthy behaviour as insincere. As stated by Kenny (1999) and described in the section above, trust truly is a complex dyadic level phenomenon.

The use of cross-lagged modelling as an analytical strategy contributes to the richness of the results obtained from this prospective study. Such a design made it possible to partition out the influence of LMX quality at the start of the relationship so that the role of the trust-building process could be clearly tested. The overall design of the first study serves to address the temporal effects and development of the constructs of interest and is the most appropriate to research of this developmental

nature; however, to my knowledge it has only been utilised in one other relevant study (Nahrgang et al., 2009). Therefore, the present research contributes to both the trust and LMX literature significantly as longitudinal research constitutes an area underdeveloped within both fields, despite considerable calls to move beyond cross-sectional research designs (e.g., Erdogen & Liden, 2002; Yukl, 2010).

It is important to observe at this point that whilst the present study does contribute to both the trust and LMX literature due to its prospective design, this research is also perpetuating a common critique frequently levelled at LMX theory in particular. This research is purely conducted at the individual level of analysis, investigating the interpersonal processes which develop between leaders and followers. However, it must be acknowledged that the dyads studied in this research are nested within teams. Although understanding the role of the team dynamics was not the focus of the present investigation, future research could examine how the team in which the dyad is embedded influences the development of trust and LMX over time. This multi-level approach to data analysis could be achieved with standard hierarchical linear modelling techniques. In the present study the leader has separate LMX relationships with each individual within the team and the implications of this could be statistically tested. In order to examine this dyadic level data it is helpful to turn to the work of Kenny and colleagues within the interpersonal relations literature (Kenny, 1994; Kenny & Cook, 1999; Kenny, Kashy & Cook, 2006) for insights. Specifically, the One-With-Many model (OWM) would be most appropriate to the data described within this study as the focal person (the leader in this instance) forms relationships with multiple people within the same team.

A further methodological strength of the first study relates to the use of cross-source data. Mayer et al. (1995) theorise that the observation of behaviour leads to an updating of trustworthiness perceptions. Although this can be captured within person, as trust is an individual-level construct, it is particularly informative to show these effects using trustee and trustor reports. The fact that the trustee's report of behaviour significantly predicted the trustor's perceptions of trustworthiness gives particular confidence in the robustness of the results obtained. The design features associated with this study help to minimise the risks associated with common method variance and provide a more complete view of both LMX and trust development over time. Furthermore, they provide greater confidence in mapping the apriori temporal sequence of the proposed process model and the conclusions drawn.

This first study addressed a number of the objectives of this thesis and provided the foundation for the second study. The primary aim of the second study was to investigate how the trust-building process that occurred between leaders and followers extended more broadly to the organisational context in which the relationship existed. Although the insights obtained within the first study are inherently related to interpersonal phenomenon, the dyadic relationship does not exist in isolation.

Instead, such relationships occur in the organisation and therefore processes occurring within this relationship are likely to also influence more distal outcomes such as organisational trust. The second study served to cross-validate the key mediating processes identified within the first study, this time using more established dyads from an organisational sample, as well as investigate the role of trustworthy behaviour as a determinant of organisational trust perceptions. This illustrates how the objectives of this thesis are interrelated as the first study informs the second, whilst also being distinct both in context and in outcomes.

The second study was cross-sectional and adopted a multi-foci design. The same theoretical frameworks by Whitener et al. (1998) and Mayer et al. (1995) were utilised to investigate the same trust-building process. As with the first study, study two explored the trust dynamics present within a dyadic leader-follower relationship, however this study provided evidence for the leader as the instigator of trust-building efforts. Considerable support was found for the hypotheses associated with this study. Employees who perceived that their leader demonstrated trustworthy actions such as sharing and delegating control, behavioural consistency and open communication were considerably more likely to report trust in their leader, a relationship partially mediated by positive trustworthiness perceptions. Furthermore, as expected leader-follower trust perceptions significantly influenced employees' trust in the organisation based upon the observation of trustworthy behaviour. This pattern of results supports the view adopted within this thesis that the leader acts as an agent for the organisation and that their behaviour can be leveraged for cultivating organisational trust. The use of a multi-foci design was a particular strength of this study as it was possible to test trust in two referents simultaneously and identify behaviours linking the two.

Support for a mediating pathway between trustworthy behaviour and organisational trust, via leader trustworthiness perceptions and trust in the leader was found across all three dimension models (ability, integrity and benevolence). In review of the effect sizes within chapter six, the integrity model was found to be a particularly strong determinant of organisational trust. Moderation analysis also revealed that the link between trustworthy behaviour and organisational trust did vary as a function of managerial position in the organisational hierarchy. Specifically, ability trustworthy behaviours were only found to be a significant determinant of organisational trust for senior managers. Although integrity based trustworthy behaviour significantly influenced organisational trust perceptions for all employees within the sample, the relationship was stronger for those with a senior manager. Finally, behaviours which denoted benevolence trustworthiness were found to positively influence organisational trust regardless of managerial position, thus highlighting the relevance of benevolence-based perceptions for both interpersonal and organisational trust.

Although the two studies addressed different research questions, they both fundamentally tested the same mediational process, that being the link between trustworthy behaviour and

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trustworthiness perceptions. To recap, this theorised mediational pathway was strongly supported by both empirical research and theory and is based upon the prevailing assumption that trustors use dyadic behaviour as a core determinant of trust (Whitener et al. 1998). The trustworthy behaviour of both members and leaders was found to drive trustworthiness perceptions significantly, an effect which was replicated across both samples. When tested across the two studies, a high level of consistency was found in the results, thus providing considerable support for the predictions made. The facets of trustworthy behaviour were found to relate differentially to the trustworthiness dimensions in a predictable fashion. Furthermore, the factor structure obtained in the second study replicated the findings of study 1, thus providing considerable support for the theoretical underpinnings of these behaviours for both leader and follower trust-building efforts. Confidence in the findings was bolstered further by the fact that the two studies differed considerably in terms of both context and referent. A further strength of the second study is that it addressed some of the limitations identified within study one, namely the generalizability of the findings to an organisational context and across different levels of leadership.

7.2 Implications for theory

From a theoretical perspective, this thesis contributes significantly to both the trust and LMX literatures. This thesis provides a richer and deeper understanding of the trust-building processes present within leader and follower relationships, and how this trust functions to influence important outcomes. Theoretically, this thesis draws from the trust literature and integrates these insights with our current understanding of relationships within leadership, whilst also answering the question of whether interpersonal trust can be leveraged for trust in the organisation. Three theoretical frameworks underpin this thesis; LMX theory, the Integrative Model of Organisational Trust (Mayer et al., 1995) and a Typology of Managerial Trustworthy Behaviour (Whitener et al., 1998). Guided by the principles of social exchange, theoretical advancements have been made through the amalgamation of these three frameworks into one research programme. The three models were found to provide a solid theoretical basis upon which to re-examine and further our understanding about relationships and trust development. Overall, members' engagement in trustworthy behaviour positively influenced LMX quality over time, and leader trustworthy behaviour predicted employee's willingness to be vulnerable to both the leader and the organisation. As well as theoretical integration, this thesis has contributed to, and, extended each of these frameworks in isolation. Below I extrapolate how this was achieved.

The rationale for adopting the framework of trustworthy behaviour proposed by Whitener et al. (1998) is that it provided a greater level of specificity than other theoretical models in terms of what behaviours are essential for facilitating and building leader-follower trust. Across both studies, support was provided for the validity of this taxonomy. The behavioural markers were found to tap

uniquely into each of the dimensions of trustworthiness (ability, integrity and benevolence), thus supporting the theoretical propositions made within this thesis. The three dimensions of trustworthiness have been linked to trust, both theoretical and empirically, and account for a large proportion of this trusting belief (e.g Colquitt et al., 2007; Davis et al., 2000; Mayer & Davis, 1999; Mayer et al., 1995; Mayer & Gavin, 2005). Therefore, by identifying behaviours which directly influence all three of the trustworthiness perceptions, this thesis significantly extended this theoretical framework in at least two ways. Firstly, although Whitener and co-authors (1998) discuss trustworthiness in relation to their theoretical model, a direct path between the five behaviours and intention to trust is depicted. This thesis not only identified the content of the actual behavioural markers but also mapped and tested the causal process, via trustworthiness dimensions. The addition of the trustworthiness dimensions to the trustworthy behaviour framework provides a strong grounding for subsequent work examining the intricacies of trust-building in interpersonal relationships. A secondary implication of this thesis is that it tested this comprehensive model of trustworthy behaviour for both the leader and member referent. Whitener et al. (1998) placed the responsibility for building trust firmly in the hands of the manager, and assert that "it is management's responsibility to take the first step" (p. 514). However, the findings of the first study would suggest that the member is also a significant and powerful determinant of the trust present within the leader-follower relationship. There appears to be an oscillating rhythm of influence inherent within working dyadic relationships, in which both the leader and follower are able to play an important role.

A core contribution of this thesis therefore, is the clear articulation of the behaviours which are important for building trust. Although for many the expression of behaviours such as demonstrating concern for a dyadic other and behaving with integrity are likely to develop naturally within a leader-follower relationship at work, this research also highlights the potential for engaging in such behaviours in a more instrumental manner. Within the first study it was also shown that individuals have awareness for others trust in them (felt trustworthiness). It is proposed here that individuals may use such information and engage in the relevant trustworthy behaviours accordingly to strategically influence trust and thus relationship quality in a meaningful way. This view of trust-building constitutes an interesting perspective through which to interpret these findings and may tap into a more strategic side of LMX. Previous research, such as the negative feedback-seeking study by Lam et al. (2007) and the influence tactics research by Wayne and Ferris (1990) illustrated that individuals are able to positively influence relationship quality through their actions. LMX theory does not explicitly discuss a more strategic side to LMX relationships but this does not preclude the possibility that such processes might be occurring. Research investigating the delegation-performance pathway is likely to be representing the strategic attempts of the leader to cultivate the relationship at early stages and influence its development. In a similar vein, it is feasible that trust-building may be used by leaders and members alike, in a conscious and strategic manner for the purposes of

relationship development. Indeed, the extent to which trust-building is enacted naturally or instrumentally constitutes an interesting avenue for future research.

It is important at this point to draw distinctions between the process of trust-building and trust repair. Although both fundamentally involve attempts to positively influence trusting perceptions, trust repair is distinct from trust-building and the former falls within a different body of literature. Efforts of trust repair follow from a trust violation wherein trust has been breached. In contrast, trust-building reflects attempts to strengthen current trusting perceptions further but not to restore trust which has been lost. In essence, trust repair is a relationship repair mechanism, whereas trust-building is a relationship enhancement mechanism. Trust violations are considered by some scholars to irrevocably harm trust (Lewicki & Bunker, 1996; Lewicki & Wiethoff, 2000). Others contend that lost trust can be restored but will take a long time and, for the most part is unlikely to ever recover (Slovic, 1993). The trust repair literature looks at the alternative repair mechanisms available, such as the use of apologies or denial (Tomlinson, Dineen & Lewicki, 2004). The behaviours delineated within this thesis have been shown to influence the development of trust within an on-going interpersonal relationship. The demonstration of trustworthy behaviours are proposed to be relevant for building trust, however they are unlikely to be sufficient to rebuild broken trust following a trust violation. Only through the continued demonstration of trustworthiness in conjunction with the appropriate repair mechanism may trustworthy behaviours possibly serve to facilitate the restoration of trust.

Although this thesis does not necessarily contribute to the trust repair literature, the present findings may have theoretical implications more broadly for the relationship maintenance literature. Consistent with this view, Pratt and Dirks (2007) assert that the development, nurturance and enabling of positive work relationships are influenced by trust. While Sheppard and Sherman (1998) suggest that trust is critical for maintaining effective relationships. Although relationship maintenance is a subject of extensive research within the interpersonal relationship literature, working relationships have not received the same attention. Indeed, LMX theory largely neglects the notion of relationship maintenance. Such an omission seems surprising as LMX is focussed on the relationship between two or more people, and it follows that research concerning the formation and development of interpersonal relationships should be used to inform LMX research. Whilst some distinctions between personal and workplace relationships can be made in terms of their nature and functions there are also significant similarities. Certain generic processes and knowledge transcend almost all relationships and insights gained from the wealth of literature into interpersonal relationship should be utilised within LMX theory (Martin et al., 2010).

The above considerations pertaining to the role of trustworthy behaviour as a maintenance strategy may be particularly relevant for more established LMX relationships. An obvious avenue for future research would be to explore the on-going development of LMX relationships which have

reached the more mature stages, as study one was looking at LMX relationships still in the early stages. The focus on the more formative stages (the first 6 months) was important to show that relationships do not stabilise as early as thought. It is proposed that LMX instability is a pervasive feature of relationships, even for mature relationships, as each member of the dyad continues to monitor each other's trustworthiness and willingness to be vulnerable to each other and engage in further social exchange processes. The demonstration of trustworthy behaviour is likely to facilitate this willingness and maintain relationship quality. Those who assume trust is assured and do not proactively monitor and update the trustor's trustworthiness perceptions may find their relationship quality does not maintain at the desired level. Just as romantic relationships require investment, effort and on-going upkeep so too do working relationships.

Dulebohn et al. (2012) stated in their recent meta-analysis on LMX theory that the relationship between trust and LMX is likely to be reciprocally related; however research was needed to unravel this process. To my knowledge, this is first prospective study to have examined the processes of trust-building within one meditational model of LMX development, despite frequent calls for it within the literature (Brower et al., 2000; Scandura & Pellegrini, 2008). The current fragmentation of inquiry across the trust and LMX literature threatens the advancement of knowledge and practice regarding work relationships. This thesis therefore constitutes an important step towards theoretical synthesis as it went beyond the descriptive account of LMX development typically found within the literature (Martin et al., 2010), and re-examined some of the basic assumptions regarding LMX development. The first relates to the idea of LMX stability, and the second being to actually test the role of trust-building within LMX theory rather than assume its relevance and importance (Bauer & Green, 1996).

Through adopting a particular focus on interpersonal trust-building processes, valuable insights into the complex role of trust within LMX development have been achieved. The findings suggest that LMX relationships do not necessarily plateau once established within the first few weeks (Nahrgang et al., 2009). In reality, LMX relationships are vulnerable to change and trust perceptions appear to be a significant determinant of such variability. Therefore, a notable theoretical implication of this thesis is that it contributes to LMX theory's evolution through extending research into what Graen and Uhl-Bien (1995) refer to as 'stage 3' of LMX research: the description of dyadic partnership building. This was achieved through a new model of LMX development which put trust-building at the foreground of LMX development. In a similar vein, Boyd and Taylor (1998) examined how the presence of friendship contributes to effective versus ineffective LMX relationships. A developmental model was proposed which combined both the literature on friendship formation from the field of social psychology and the approach to leadership represented by LMX theory and important insights were gained. Further advancements in LMX theory appear contingent upon such

an integrative approach wherein scholars borrow from related literatures which serve to deepen our understanding of this complex relationship.

Moving beyond theories of trust and LMX, the findings of this thesis also have implications for our understanding of social exchange processes. Social exchange theory (Blau, 1964) provides the theoretical underpinnings of both constructs at the heart of this thesis. Despite its prominence, the content of social exchanges have not been well articulated within the empirical literature. We know that social exchanges involve the cooperation of two exchange partners for mutual benefit and that trust is key to this process due to the vulnerability inherent in such transactions (Colquitt et al., 2012). However, the behaviours which facilitate this process are not well known. It is proposed here that the trust-building processes described within this thesis facilitate social exchange through providing information to dyadic partners about whether to engage in subsequent risk-taking actions (such as confiding sensitive information) which would serve to expand social exchanges. Ability-, integrity- and benevolence-based trustworthy behaviours provide trustors with salient and recent information to base their willingness to be vulnerable decision upon. Due to the risk associated with social exchange within working relationships, individuals will continually monitor the trustworthiness of trusting partners prior to engaging in further risk-taking behaviours. If, a previously trustworthy individual repeatedly demonstrates a lack of integrity through their actions this will cause the trustor to engage in less risk-taking, thus stifling social exchange. In the long run if the individual's trustworthiness continues to not be assured, based upon the observation of trustworthy behaviour, a lack of positive social exchanges will ultimately impact upon LMX quality and a previously high LMX relationship may disintegrate into low quality. Equally, if trustworthiness, which was previously considered weak, is repeatedly assured, social exchange processes will flourish and the LMX relationship may transcend higher in quality (Ferris et al., 2009).

A final notable point of theoretical insight into LMX Theory concerns our understanding of the follower's role within LMX. In many ways, members are underrepresented within LMX literature and minimal attention has been paid to the role members may take within their developing LMX relationship. Therefore the focus on member trust-building behaviour constitutes a significant divergence from the norm within LMX research. In line with recent trends towards followership approaches (Barling et al., 2010), this research offers a novel insight into the trust-building efforts of followers. The current findings identify the member in the dyad as actively involved in shaping their relationship quality through the trust-building process. Increasingly researchers are acknowledging the key role members may potentially play in determining organisational outcomes (Shamir & Lapidiot, 2003) and this research has contributed to this interesting line of enquiry.

The adoption of the member within the first study also had theoretical implications for the trust-building literature. The findings lend support for the view that affective-based trust, in the form of

benevolence trustworthiness, takes longer to develop within an interpersonal relationship. It may be the case, however, that a different pattern of results would have been obtained if the leader's behaviour had been the focus. The rationale for such a suggestion is based upon the nature of risk-taking behaviour within LMX relationships. Due to their status, the leader is typically less vulnerable to, or dependent upon the member within the dyad. As a result, it may be that the leader is more likely to engage in risk-taking behaviours and have more opportunities to demonstrate benevolence trustworthiness through risk-taking action. For example, the leader can engage in mentoring and supportive behaviours, all of which would denote a positive orientation towards the member and care for wellbeing. For that reason, it is theorised that benevolence-based trustworthiness may develop more quickly from the perspective of the member when the leader is the trustee (Schoorman et al., 2007). Kramer (1996) supports this line of reasoning by making the case that the relationship develops differently depending on where one is in the hierarchical relationship.

In order to contribute significantly to both LMX and the trust literatures it was decided that the member should be the focus initially and the context of the first study was well suited for the investigation of member's trustworthy behaviour. Although the second study examined leader trustworthy behaviour the focus of this study was not on LMX development and the design was not longitudinal. Therefore, future research should look to replicate this first study with the leader referent to test for differences in trust development across the two referents. Furthermore, it would be of value to investigate whether the influence of attributions on the trustworthy behaviour –trustworthiness link was more or less pronounced and for which behaviours when the member was considering the motives behind the actions of the leader.

The Integrative Model of Trust (Mayer et al., 1995) has been highly influential in shaping the nature of trust research in recent years and has extended our understanding of this complex and often elusive construct. Typically, within LMX research trust is conceptualised as a unidimensional construct in which neither its development nor antecedents are considered in much detail. Within this thesis the finer distinctions of trust were detailed based upon Mayer et al.'s (1995) framework and support was found for the relevance of examining trustworthiness instead of just trust. The facets of ability, integrity and benevolence trustworthiness were found to differentially influence both LMX quality and organisational trust. Cognitive forms of trust (driven by ability and integrity trustworthiness) were found to develop quickly and provide a foundation for more affective, benevolent forms of trust within the context of an LMX relationship. Support was found for the view that trust evolves over time, in particular benevolence trustworthiness was found to be dependent upon the continued observation of benevolent behaviour in order for this more affective base of trust to influence LMX quality. The development of LMX quality was found to be affected by an idiosyncratic combination of the three factors of trustworthiness (Mayer & Davis, 1999).Through testing the conceptual model at the dimension level this research was able to identify critical

trustworthy behaviours and portion out the unique influence of each trustworthiness dimension on the two outcomes of relationship quality (study 1) and organisational trust (study 2).

Much has been written about interpersonal trust over the years yet the same cannot be said about organisational trust. Theorising at this level is less advanced and models of organisational trust are less established or empirically tested, thus making theoretical insights all the more important. A key contribution of this research is that it provides support for the proposal that interpersonal trust can be leveraged to influence employee trust in the organisation through leader trustworthy behaviour. The moderation analysis also contributed substantially through providing support for the view that the influence of leader trustworthy behaviour on organisational trust differs as a function of managerial position. The trust-building behaviours relevant at one level were distinct to those for employees with managers at different levels of the organisational hierarchy. It is likely that the same conceptual model tested with lower level managers would have also produced a unique pattern of findings.

Theoretically, the findings allude to the challenges associated within building organisational trust. Inherent within the leadership role when attempting to build and maintain trust is the consideration of 'trust dilemmas' (Dirks & Skarlicki, 2004). Trust dilemmas reflect the many trade-offs involved in maintaining trust both in multiple relationships and in the complex organisational environment. Often, due to external pressure, leaders are expected to meet the expectations of one party and therefore build trust whilst simultaneously breaking the trust of another party. Such dilemmas often make it extremely difficult for leaders to effectively engage in trustworthy behaviours (such as behavioural integrity and consistency) targeted at all stakeholders. For example, a manager who has to go back on his previous promise that there will be no redundancies, following direction from those in senior management will be seen to lack integrity by those below. Such actions degrade trust, not only in the manager but also more broadly in the organisation. Although, being transparent about the reasons behind the decision (e.g., economic pressure) the manager may still find it hard to maintain a trusting relationship to the same extent, especially if such an instance occurs more than one. Equally, managers are often put under additional pressure to not reveal the reasons behind decisions and are essentially 'left to fall on their sword'. In this example, managers have to manage the perceptions of diverse stakeholders and in doing so portray themselves as inconsistent (Dirks & Skarlick, 2004). Those managers who occupy positions within the middle of organisations (middle managers) may be particularly vulnerable to such trusting dilemmas. Due to power differences, middle managers are expected to follow the demands of those in senior and top management positions, however, due to higher levels of dependency they are likely to be scrutinised more closely by their followers, thus making them very much the 'man in the middle'. Understanding how best to navigate these trust dilemmas is an interesting direction for future research. Research targeted at the subset of an organisation known as 'middle management' may be particular fruitful.

7.3 Implications for practice

In the complex, interdependent contexts of contemporary organisations it is no longer appropriate to see trust as an exogenous factor, something of benefit if it should happen to be present. Instead trust needs to be viewed as a hard asset of major financial consequence (Creed & Miles, 1996). Therefore, it is becoming increasingly important for organisations to identify ways in which to support and facilitate trust within the workplace. Whitener et al. (1998) sought to answer the question 'what is trustworthy behaviour and what can organisations do to support such behaviour?' Whilst the first part of this question has been the primary focus of this thesis, the latter part is yet to be addressed. Whitener et al.'s (1998) statement alludes to the fact that trust does not necessarily come naturally, instead it needs to be carefully structured and managed (Lewicki & Bunker, 1996). Within the following sections, I extrapolate how this could be achieved.

Oketch (2004) suggested that the successful companies of the future will be those that base their mission and their corporate strategies around creating, measuring and managing trustworthiness. The findings of this thesis strongly support such propositions and provide key insights for organisations regarding the management of trust within the workplace. Of primary importance is the need for organisations to attend to the trusting perceptions of their employees and the quality of relationships manifest between their managers and followers. The results of this thesis suggest that both managers and employees can have considerable impact upon building trust through their actions. Therefore, a key practical implication of this thesis is to promote the need for organisations to acknowledge the critical role of trust and respond accordingly through efforts to facilitate trust-building within the workplace. This could be achieved through formal policies and informal training (Dietz, 2004).

In order to do so, any model for workplace relations looking to promote or develop trust between employees and managers should look to encourage the five categories of behaviour outlined by Whitener et al. (1998), and tested within this thesis. Each of the behavioural dimensions was found to contribute significantly to trusting perceptions at both the leader-follower and organisational level. This thesis not only supports the relevance of these behavioural markers but also aligns them with the different dimensions of trustworthiness. The identification of facilitators of trustworthiness has important implications for managers (Bews & Rossouw, 2002). It is not the case that managers just need to be trustworthy; they also have to demonstrate their trustworthiness. Managers should be encouraged to monitor their trusting relations and identify where trustworthiness perceptions could be strengthened further. In doing so, managers could then engage in particular behaviours through using the present research findings as a guide. For example, if a manager feels that their integrity trustworthiness is not assured by their subordinates they may look to make the consistency in their words and actions more salient or ensure that their behaviour is well aligned with the espoused values of the organisation. Equally an employee may look to demonstrate increased concern for the manager

if they feel their benevolence trustworthiness is not assured. Importantly, however, the results of the first study should caution both managers and employees away from insincere attempts to portray themselves as trustworthy. The findings of study 1 indicate that individuals actively interpret the motives behind trustworthy behaviour and respond accordingly.

It is also important for managers and organisations alike to understand the complex and delicate nature of trust. Researchers on the topic of trust repair have often noted the fragility of trust with some suggesting that once broken, trust can sometimes never be restored (Slovic, 1993). Furthermore, trust is decidedly more difficult to rebuild than it is to break (Dirks & Skarlicki, 2004). Considering the complexities associated with restoring broken trust, it is even more critical for leaders to be made aware of the optimal ways to build and maintain trustworthiness perceptions, to prevent such situations arising. Further practical implications, based upon the current findings include the need for training to emphasise that trust is an on-going process and that one-off interventions will have little positive impact. An additional point of consideration is that neither the manager nor employee should assume that trust is guaranteed or a good relationship will always prevail. Trust early on in the relationship is not necessarily guaranteed at later stages of relationship development. Rather it is built and maintained on the basis of on-going trustworthiness demonstration.

Finally, trust training efforts should highlight that it is not sufficient to gain someone's trust; you also need to reciprocate with trust. Organisations may be tempted to focus their efforts upon gaining employees trust, however, such an approach overlooks the valuable impact that employees perceptions of trust can have on their behaviour. The first study revealed that it was feeling trusted by the leader which was a more powerful determinant of member behaviour. Therefore, leaders need to actively demonstrate their trust in followers. Put simply, organisations should take heed and be aware that trust begets trust.

Given the identified role of members as trust-building agents within study 1, the practical recommendations made above should be directed at both leaders and followers (Dietz, 2004). Furthermore, the investment in trust should occur at all levels of the managerial hierarchy (Creed & Miles, 1996), not just the most visible or proximal to the top. Although such efforts would be ideal they are not always possible in reality. At times, organisations may need to know where to invest most in trust training when looking to foster trust. This may be particularly important when resources are limited which therefore requires organisations to be strategic in their approach. The findings of the second study are therefore particular informative. The results suggest that trust perceptions will differ across the organisation and efforts should be targeted at the point in which the demonstration of trustworthiness is not being observed. Another important implication of the study two relates to the consideration of SOE perceptions. The link between benevolence trustworthy behaviour and organisational trust was found to be moderated by SOE perceptions for middle management.

Therefore, organisations should look to proactively facilitate and support such perceptions. Eisenberger et al. (2010) found that SOE was predicted by leader organisational identification and recommended that organisations may look to strengthen organisational identification through institutionalised organisational socialization tactics that emphasise common in-group identity. Such efforts will help to ensure that the positive benefits of leader trust-building efforts be realised at a more organisational level, rather than just confined to the leader-follower relationship.

As highlighted by Drath (2001) relationships are the new form of leadership, hence understanding how best to build effective relationships at work should be a key focus of organisations. The present findings highlight the relevance of interpersonal competencies for effective leader-follower relationships, something which individuals are likely to differ in. Some individuals may possess a greater understanding of how to manage the exchange process and relational dynamics than others, such as engaging in reciprocity (Uhl-Bien, 2006). An implication of this is that organisations should look to consider providing training which incorporates the importance of relational skills in leadership development. Leaders need to foster benevolent feelings within their employees. The findings of the second study reveal that benevolence is crucial as benevolence-based trustworthy behaviours influenced organisational trust regardless of managerial level. Employees trust is driven by feelings that the leader and organisation have good intentions towards them and care for their wellbeing. Affective-based trust has often been considered the most powerful and enduring of the bases of trust at all levels of the organisation (McAllister, 1995; Williams, 2001). Therefore, training aimed at equipping managers with the skills to develop strong bonds with employees in which these positive orientations towards each other can emerge would be highly beneficial.

In summary, efforts to build trust within organisations should be proactively encouraged within the workplace. However, when discussing implications for practice it is important to also consider the limits of the suggestions made. Research has found that when building trust at the individual level a ceiling effect can occur. For example, Dirks (2000) found in the context of basketball teams, that even leaders who were highly trusted by their players reported disappointment at trust levels not being higher. Such considerations are particularly true when organisations are looking to build trust in the organisation. Finally, it is important to interpret the findings of this thesis with a consideration of context. It is possible that different organisations will require varying levels of trust. Furthermore, different aspects of trustworthiness may be more or less salient. Shapiro et al. (1992) recommend that managers should use elements of an organisations context to "assess the type of relationship you want and the requisite kind of trust necessary to sustain that relationship" (p. 374). The level of trust needed will vary within organisations for effective functioning so leaders need to be able to consider the context and develop the appropriate level and type of trust. For example, the level of interdependence required between managers and employees may have implications for the nature and extent of trust needed. In support of this proposition, Kramer (1999) observed that the importance

of trust in a given relationship is determined by the extent to which to which the trustor is dependent on the trustee.

The managerial implications highlighted in this thesis would be all the more persuasive if research could clearly demonstrate the positive effect of trust training on trust-building within the workplace. Tyler and Degoey (1995) cast doubt on the ability of management to effectively 'manage' levels of trust, particularly in the short term. However, a handful of studies do exist which support the view that trust and leadership can be built through interventions. Mayer and Davis (1999) found that the introduction of a new performance appraisal led to a significant increase in trust for top management. Scandura and Graen (1984) found leadership development training to be an effective tool for facilitating LMX quality within the workplace. In order to lend support for the view that trust training can be an effective organisational tool, future research may consider conducting an intervention study. With the exception of Scandura and Graen (1984) field-based experiments are rare and laboratory-based designs dominate the literature on intervention. This is likely due to the complexities associated with manipulating variables within such complex settings. Such a field design would allow researchers to test whether efforts to increase manager's awareness of the different behavioural dimensions of trustworthy behaviour, and their associated trustworthiness dimensions, actually positively impact employees trusting perceptions. Trust is an appealing concept for organisations and therefore, developmental efforts targeted at facilitating trustworthy behaviour may be an interesting avenue for both scholars and practitioners alike to pursue.

7.4 Limitations

When interpreting the potential impact of the present findings for theory and practice it is also important to consider any limitations. Although these limitations pertain mostly to methodological issues, the nature of these differs across the two studies. Firstly, the limitations relating to the first study will be discussed; this is followed by a discussion of considerations associated with the second study. Strengths will be highlighted wherein the design of one study complemented the weaknesses of another and went some way to minimising the implications of the issues outlined.

The primary concern with the first study relates to the sample used and the generalizability of the findings. Although the value of student samples for testing theoretical models was considered within chapter four, it is still important to reflect again on any concerns associated with this sample composition. The teams were comprised of students, who, by the nature of their degree courses will likely pursue a career in business-related topics. The students were engaged in a task which closely resembled those carried out in real team-based organisations due to its complex, multifaceted and challenging nature. The teams resemble teams typically found within the workplace due to the interdependent nature of the work in which individuals work for an extended time to accomplish a common goal (Webber, 2008). A significant benefit of this research is that the wider organisational context could be controlled for. Contextual organisational factors such as HR systems and environmental instability can serve to facilitate or hinder relationship development. For example, the use of formal controls within organisations (such as monitoring systems) may serve to negatively influence the development of interpersonal trust (Creed & Miles, 1996). Therefore, when looking to examine dyadic relationships within a team setting, it is of value if such features of the system in which the team is embedded can be controlled for. In the case of this study, such factors remained constant within the business game. Furthermore, many of the propositions tested within the second study replicate those of this study, importantly within an organisational context.

It is important to note that there are no theoretical reasons to expect there would be differences between a student sample and an organisational sample. Therefore, generalizability concerns may not be any greater than they would be if this study had been conducted within a specific organisation (Brown & Lord, 1999). Mook (1983) and Calder, Phillips and Tybout (1981) propose that student samples are appropriate when testing a theoretical framework, since a theoretical phenomenon should apply to any group. Moreover, research in leadership has previously shown that when the same hypotheses are tested within both student and field samples, the results replicate over the samples (van Knippenberg & van Knippenberg, 2005). Therefore, although student teams cannot be equated perfectly with teams within an organisational setting, and simulation tasks cannot completely reflect the true reality of a work environment, there is potential to learn from such samples. The data provided within this study does provide sound insights into leader-follower

relationships within a team setting in a competitive context where the development of trust was found to play a role in effective relationships. Nevertheless, future research should be conducted in organisational settings so that a broader basis for the conclusions drawn within this discussion can be made.

A further consideration relates to how the sample used may have influenced the nature of trust development. Within definitions of trust, risk, vulnerability and dependency are core features (Mayer et al., 1995; Rousseau et al., 1998). It could be argued that within the context of the business game, the nature of the leader-member dynamic may not reflect similar dyads within organisational settings as a lack of dependency may exist. The leader in this sample did not have any legitimate power over the member. For example, the leader was unable to provide monetary incentives, promotions or administer punishments, all options typically available to organisational managers. This lack of differences in power and status may have lessened the need for trust between the leader and member. Although possible, there are certain caveats to this view. Firstly, research has demonstrated the development of trust within team settings (Webber, 2008) without appointed leaders and shown the importance of trust between co-workers (Lau & Lam, 2008). Such research findings would suggest that a lack of legitimate authority and power will not necessarily impede the development or importance of trust. Furthermore, vulnerability, which stems from interdependency, is a feature which is highly prominent with the business game setting. Sixty five per cent of the student's final mark on this module is determined by the outcome of group work, therefore team effectiveness is critical. In addition, although the leader does not have legitimate authority in terms of the giving of valued resources they did play a pivotal role in determining the success of the team. The leader was responsible for all the final strategic decisions, for liaising with the tutor, lead lecturer and undergraduate office, organising and leading all meetings and in the final preparation of work. It is likely that their role was sufficiently critical and the level of interdependency high enough to ensure that the context of the research required the development of interpersonal trust.

There were two major shortcomings with the design of the second study. Firstly, the measures were all collected at one time point. Secondly, the data collected was all from the employee and thus single source. The cross-sectional nature of the field study is a limitation as it precludes inferences of causality. Although, theoretical arguments are made for the direction of effects running from trust at the interpersonal level to the more distal organisational referent, the direction of causality cannot be unequivocally established. Whilst based on theory, the current design does not eliminate the possibility of reverse causality. It may be the case that the employees trust the organisation and, as the organisations appoint the managers, the trust afforded to the organisation is also extended to those they place in positions of authority. Butler (1991) suggested that trust in the organisation may inform trust in the leader. Although such reasoning is feasible, the direction of causality assumed in this study is more plausible based on the more proximal nature of the manager as a key reference point. In order

to clarify this point, future prospective research designs should be conducted so that the direction of causality can be firmly established.

A second concern within this research relates to the use of single source data. Such a follower-centric approach to data collection, although common when investigating employee perceptions of leadership processes, may raise concerns relating to common method bias (Podsakoff, MacKenzie & Podsakoff, 2003). Common method variance may have inflated relationships among the variables as they were measured from the same source. Although this is a limitation of the design it is important to note that similar approaches have been taken by authors trying to capture the social cognition of participants and outcomes that capture endorsements of leadership (see Giessner, van Knippenberg, & Sleebos, 2009, for an example). Furthermore, it should be recognised that interaction effects cannot be artefacts of common method variance (Neves, 2012) as common method variance in fact undermine interaction effects, making them more difficult to detect (Busemeyer & Jones, 1983). Finally, although common method variance is a pervasive concern within self-report surveys, studies have demonstrated that its impact has been overstated (Crampton & Wagner, 1994; Spector, 2006). Nevertheless, future research which includes multi-source data should be collected in an effort to deal with such concerns. It is important to consider, however, that even with such additions many of the variables within this research would still be same source. Leadership is a perceptual phenomenon in that followers observe the leaders words and behaviours and make inferences about their motives (Epitopaki & Martin, 2005; Lord, 1985). Accordingly the perceptual and subjective nature of constructs used within this research, such as trust in the leader and organisational trust, are best measured by focal respondents (Searle et al. 2011). These are inherently self-rated constructs as they reflect the individuals own attitudes and perceptions, and thus it was appropriate to measure them using same source (Spector, 2006).

A further issue is the relatively small sample size for the post hoc analysis of SOE perceptions where only the middle level management sample was used. An implication of small samples is that they may reduce the generalizability of the results due to a lack of power. A common concern with low power is the inability to detect true differences; this is particularly significant when looking to explore interactions (Cohen & Cohen, 1983). However, this also points to the strength of this finding in that a significant interaction was obtained, despite the relatively small sample of 118 participants being used.

This programme of research also has some more general limitations which are relevant across both studies and will be briefly reflected upon. A first concern relates to the trustworthy behaviour scale used. Although the items included were largely taken from established scales and based upon sound theoretical rationale, issues relating to the validity of this overall scale may still remain. The high level of reliability found across both studies (study 1, $\alpha = .86$; study 2, $\alpha = .93$) and the strong

factor structure which emerged consistently through EFA analysis goes some way to alleviate these concerns; nevertheless future research should look to validate this scale further.

A critique often levelled at trust development models, such as Mayer et al's (1995), is that they refer to trust informed risk-taking action but invariably do not include such behaviours explicitly within their models (Burke et al., 2007). An implication of this is that outcomes of trust are often not tested empirically. Future research looking to broaden the current findings, might want to consider incorporating leader or member reports of actual risk-taking behaviours directed towards the dyadic other based upon updated trustworthiness perceptions. In doing so it will be possible to more fully capture this developmental process. An additional avenue for future research could be to include the use of objective data. Performance is likely one of the most important outcomes in the field of organisational studies. To underscore the practical importance of trust, future research efforts should also include objective performance as an important dependent variable. Within this thesis performance was not included as the focus of this programme of research was upon bringing more nuances to the trust and leadership connection, rather than providing further support for the robust relationships often found between these two constructs and performance. Strong links have previously been drawn between trust and performance (e.g Dirks & Ferrin, 2002; Colquitt et al., 2007), whilst LMX and performance is an area of considerable research attention (Dulebohn et al., 2012; Gerstner & Day, 1997; Martin et al., 2013). Despite this accumulated knowledge, most of these findings are based upon cross-sectional studies. Therefore, future research looking to extend the present work could explore performance effects over time to tease out the performance implications of these constructs. It is likely that trustworthy behaviour will not only facilitate social exchange and relationship quality but also performance, as a result of updated trustworthiness perceptions.

A final potential limitation of this thesis concerns the item ratio used across the three dimensions of trustworthy behaviour. Whilst behavioural markers of integrity and benevolence trustworthy behaviour were measured with 5 and 6 items respectively, ability trustworthy behaviour was measured with 2 items. This reflects a trend often observed in similar scales. Dietz and Den Hartog (2006) note that measures of trusting 'belief' typically give prominence to integrity-based components. Benevolence-based items are the next most significant element; whist ability-based items are often underrepresented in such measures of trustworthiness. This marginalisation of ability or competence is common, as demonstrated by its occurrence within this thesis. Such an omission is surprising given the prominence of ability trustworthiness within Mayer et al.'s (1995) conceptualisation. An explanation for this may possibly reflect the more multifaceted nature of integrity and benevolence, which require more items to accurately capture these dimensions. Regardless of these considerations, future research efforts should look to ensure that ability-based trustworthy behaviour is given due prominence with a more balanced number of items across the scale.

7.5 Directions for future research

In the previous chapter, two potential avenues for future research were proposed. To recap, the first idea was an additional longitudinal study that adopted the same methodological design as study 1 to explore the role of leader trust-building and attributions within developing LMX relationships. This research could determine the equivalence of the trust-building process, and its influence on LMX development, when instigated by leaders (as compared to members). The second idea was a prospective study on of the role played by trustworthy behaviours as a maintenance strategy in the context of mature LMX relationships. As mentioned previously, the literature has been silent as to how those in established LMX relationships manage to maintain the levels of LMX quality in the face of the inevitable ups and downs that are encountered in such relationships. It is plausible that trust-building plays a vital role in this relationship maintenance process. These two ideas should be the next steps of further research looking to expand and build upon the present findings. Additional interesting ideas for further research are discussed below. These include the consideration of individual differences and contextual variables which may influence the critical trust-building process identified and tested within this thesis.

In the first study, felt trustworthiness perceptions were found to positively influence members' subsequent engagement in trust-building behaviour. This result suggests that initial positive feelings of trustworthiness are likely to shape the desire to engage in further trust-building acts. This was proposed to be in an attempt to further enhance relationship quality and to reciprocate and deepen the trust exchange within the relationship. On the other hand, those who do not feel trusted at the start of the relationship are less likely to engage in future trust-building efforts, and thus their relationship is likely to plateau at low levels of LMX quality. It is plausible, however, that certain boundary conditions may moderate the link between felt trustworthiness and trustworthy behaviour. For example, an individual's implicit beliefs about how relationships develop may be a key individual disposition which influences an individual's likelihood to engage in trustworthy behaviour. Implicit relationship theories involve specific beliefs about the nature and stability of relationships and the conditions that are likely to promote relationship change. There is good evidence to show certain people hold the belief that the quality of relationships are essentially fixed or destined and nothing much can be done to alter the natural course of their development. In contrast others hold the belief that relationships are malleable and can be improved as a function of hard work and effort on the part of the incumbents (Knee, 1996). These implicit theories have been found to have an important influence on relationship behaviour, and have implications for relationship maintenance and development (Knee, 1996). Individuals with growth beliefs were found to engage in long term approaches to relationship development and relationship maintenance strategies as they considered relationships as a work in progress. In contrast, the belief in destiny was associated with strategies

which reflect disengagement and restraint from maintenance attempts. Drawing from this literature, it is proposed that implicit relationship theories may moderate when individuals engage in trust-building efforts, and thus qualify the nature of the relationship between felt trustworthiness perceptions and subsequent trust-building behaviour.

This thesis has taken a predominantly interpersonal, micro approach to examining trusting dynamics. Even when organisational trust was considered, the focus was still on how trust at an interpersonal leader-follower level could be leveraged for the benefit of more macro trusting outcomes. Therefore, a fruitful area for further research could be to explore how macro factors within the organisational context may influence organisational trust via their effect on the interpersonal trust-building process. Features of an organisation which promote organisational trust have already been the focus of some research attention. Organisational variables such as high commitment HR practices (Hodson, 2004; Searle et al., 2011; Whitener, 1997) and justice (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter & Ng, 2001) have been found to be relevant antecedents. Hardin (1996) suggested that in order to harness trust, organisations needed to create structures that make the process of trusting successful. One feature of an organisations structure which may act to constrain or facilitate trust-building is organisational control. The most ubiquitous feature of formal organisations is their control system. Organisational control is defined as a process by which the organisation regulates, or adjusts the behaviour of employees in the direction of the organisations objectives (Cardinal & Sitkin, 2009; Challagalla & Shervani, 1997). Despite persuasive theorising on the link between formal control and trust (Long & Sitkin, 2006), the impact of different macro-level control mechanisms, (e.g., centralisation) on micro-level processes such as (e.g., trustworthy behaviour) have been largely overlooked.

Certain aspects of the organisation control structure, namely centralisation, may be particularly influential on the inclination to engage in trust-building behaviour. Centralisation, as a form of structure, refers to the extent to which decision making is dispersed to individuals at lower levels of the organisation's hierarchy (Mishra, 1996). It is proposed that such mechanisms within the organisations structure may inhibit or support trustworthy behaviour. Low levels of centralisation should allow for greater levels of discretion and autonomy through participative decision making, which have been shown to facilitate trust (Dirks & Ferrin, 2002). Moreover, the behavioural markers of communication and the sharing and delegating of control are likely to be particularly vulnerable to its influence. If organisations engage in decentralised decision making it denotes accepting greater risk, which is the core of trusting behaviour (Mishra, 1996). Indeed, in support of this proposition Whitener et al. (1998) identified organisational structure as a potential antecedent of trustworthy behaviour. Exploring this interplay of trust-building and organisational control constitutes an area of interest for future research which would be well worth pursuing.

The trustworthy behaviours outlined by Whitener et al. (1998) and tested within this thesis were found to fall neatly within the three dominant categories of trustworthiness (ability, integrity and benevolence) outlined by Mayer et al. (1995). Whitener et al. (1998) offer theoretical support for the relevance of the typology of behaviours for facilitating trust. Nevertheless, other behavioural antecedents may also exist which actively influence trust which are not accounted for within this thesis. One notable example is the perception of value congruence. Burke et al. (2007) suggest that the degree to which there is congruence between the leader and follower's values will influence the extent to which the leader is viewed to have integrity. Gillespie and Mann (2004) also highlight shared values as the building blocks on which trust is based, whilst Jung and Avolio (2000) found that common values were positively related to increased trust in leadership. Taking a different perspective, Lapidiot et al. (2007) propose two alternative categories of behaviour, namely personal example and flexibility. The authors suggest that such behaviours are likely to impact follower trust, possibly due to their influence on the integrity and benevolence components of trustworthiness. Future research efforts could therefore include these additional constructs in order to provide an even more comprehensive account of trust-building than currently offered.

Another interesting avenue for future research would be to investigate the role played by emotions in the process of trust and LMX development. Leveraging and extending the work of Mayer et al. (1995), Williams (2001) highlighted the relevance of considering affective states and in particular the critical role emotions may play within the trusting process. It is likely that emotions may play a role in the development of trust and influence the trust-building process. Emotions play a key part in human interactions and dynamics (Humphrey, 2002; Rafaeli & Worline, 2001). Indeed Dasborough & Ashkanasy (2002) describe the leadership process as an intrinsically emotional process, where leaders display emotion, and attempt to evoke emotion in their members. Despite such insights the influence of different types of emotion on LMX development are not yet well understood, making this an interesting area of further study.

7.5.1 Complementary methodological approaches

The intention of this thesis was to provide a more in-depth examination of trust and LMX development through the use of a longitudinal design and a multi-foci approach to data collection. Although such methodological features go some way to capturing the dynamic nature of trust within interpersonal relationships, the adoption of alternative techniques may serve to extend these insights further. Lewicki and Bunker (2006) question whether the typical way trust is measured through likert-style surveys can really capture the inherent complexities of the decision to trust. The authors describe the need for researchers to use alternative methods to ensure that research examining trust development truly captures the complex nature of trust. A number of alternative methods are therefore outlined below, which could be used in combination with the research designs utilised in this thesis.

A methodological approach frequently seen within trust-based research is that of experimentation. The adoption of this methodology has also been observed within the leadership literature, for example, within the social identity approach to leadership (e.g., Hogg, Fielding, Johnson, Masser, Russell & Svensson, 2006). Experimental research could be used to cross-validate the findings obtained, and allow for greater confidence in the causal claims made. Essentially, the only way to draw definite causal conclusions is through utilising experimental methods in which random assignment is used to eliminate alternative explanations (Colquitt & Rodell, 2012).

In addition, the use of more qualitative methods may serve to uncover any latent assumptions concerning the trust-building process which could be elicited through interview-based methodologies (Uhl-Bien, 2006) or diary accounts (Lewick & Bunker, 2006). The use of qualitative methods can shape the researchers understanding through an iterative process of exploration. Interviews may provide a deeper qualitative interpretation (Lee & Lings, 2008), whilst the use of dairy methodology may offer some fine-grained analyses of the way in which the dynamics of trust and leadership develop over time (Bolger, Davis & Rafaeli, 2003). The diary method would be particularly well suited to investigating trust-building as a relationship maintenance strategy. By getting employees to rate on a daily basis their interactions with their manager, and report the experiences of trustworthy behaviours it would be possible to see whether incremental differences in trustworthiness occur over time, and tease out whether trustworthy behaviour was indeed a maintenance strategy. Research within the close relationships literature (e.g., Campbell, Simpson, Boldry & Kashy, 2005; Jensen-Campbell & Graziano, 2000) has previously found that indicators of relationship quality, such as satisfaction with the partner and conflict, do vary on a daily basis. Thus, it is likely that both trust and LMX are amenable to measurement by diary.

The use of critical incident methodology could also be a particularly valuable addition to future research efforts. Critical incident methodology allows for a richer level of detail to be obtained with the advantage that it does not impose the researchers predetermined concepts on the participants. Such an approach has been adopted by a number of authors investigating trust (Lapidiot et al., 2007; Shamir & Lapidiot, 2003). Lapidiot et al. (2007) used this methodology to examine trust-building and trust-erosion incidents from a sample of officer training cadets. A similar research design could be used at various levels of an organisation's hierarchy. Employees could describe incidents wherein their trust in a manager, and more distally the organisation, had been strengthened as a result of observing managerial trustworthy behaviour, and alternatively when it has been degraded.

To summarise, the use of a wider range of methodologies, primarily from the qualitative research domain, would complement quantitative findings and provide triangulation, thus serving to broaden and deepen our knowledge of trust and LMX development.

7.6 Conclusion

Five core objectives, intended to make contributions to theory and research across both the trust and leadership domain were posited at the start of this thesis. Each of these objectives will be briefly discussed in light of the results obtained in this thesis.

The first objective was to provide a robust test of a model of trustworthy behaviour. Across both studies support was found for the relevance of trustworthy behaviour for facilitating the development of interpersonal trust, via updated trustworthiness perceptions along the dimensions of ability, integrity and benevolence. As such, this thesis has contributed significantly to the trust-building literature through clearly articulating both the mechanisms (behaviours) and processes (updated trustworthiness perceptions) through which interpersonal trust can be built. The unique pattern of result found for the three dimension models in study 1 contributes to the trust development literature through identifying the differential influence of trustworthiness perceptions within a leader-follower relationship.

The second objective was to provide support for a new model of LMX development. Initially, an important prerequisite for LMX development was achieved in the first study as evidence of LMX instability was found. Furthermore, support was found for the critical role of trust-building processes in accounting for unexplained variance in LMX stability over time. These findings provide a more prescriptive account of the behaviours and mechanisms involved in LMX development and confirm the critical role trust plays within LMX relationships, thus extending LMX theory.

The third objective was to provide a robust test of trust-building, and to do so for different referents. Support was found for the proposal that both leaders and members are able to positively influence the interpersonal trust manifest within their relationship, through their engagement in trustworthy behaviour. The results contribute considerably to both the LMX and trust-building literature as studies examining follower behaviour are far less common; making the insights achieved within this thesis all the more novel. In the second study, considerable support was found for the proposal that leaders would be able to leverage interpersonal trust for trust in the organisation via the demonstration of trustworthy behaviour. As such, the findings advance the organisational trust literature through identifying an important determinant of employee trust in the organisation.

It was important to not only identify how trust is built between leaders and followers, but to also consider factors which moderate the relationship and this constitutes the fourth objective. Two boundary conditions were tested, in the form of attributions and managerial position and both were found to significantly influence when the engagement in trustworthy behaviour led to trust, thus addressing second generation questions.

The final objective was to meaningfully extend each of the theoretical frameworks utilised within this thesis and achieve theoretical integration. This was achieved in the following ways. First, the taxonomy of trustworthy behaviour proposed by Whitener et al. (1998) was enhanced significantly through the inclusion of the fine-grained distinctions of trust provided by Mayer and colleagues (1995); achieving a more complex conceptualisation of trust within this trust-building process. Second, Mayer et al.'s (1995) model was extended through the identification of trustworthy behaviours as relevant antecedents of trustworthiness perceptions. Third, these two models then provided a theoretical foundation upon which to explore trust-building within LMX theory. Finally, the insights obtained at the interpersonal level were integrated within the wider context of the organisation and this contributes to our understanding of organisational trust determinants and what leaders can do to facilitate it.

In conclusion, this thesis goes some way to elucidating Emerson's quote, cited at the beginning of the thesis. In order to have 'men…show themselves great' leaders and followers need to 'treat each other greatly' by engaging in a host of behaviours which show themselves as trustworthy, but also demonstrate their trust in each other. Trustworthy behaviours consist of key behaviours which demonstrate ability, integrity and benevolence, which if carefully and consistently enacted can enhance the quality of leader-follower relationships, and more broadly organisational trust. Moreover, they are the kinds of behaviours that could be trained and developed in organisations. Trust is a social resource which can be leveraged for competitive advantage in an organisation. Understanding which behaviours can build trust, as well as how and when this trust-building process unfolds for the benefit of leaders, followers and the organisation, constitutes an important advance in our knowledge of both trust and leadership.

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APPENDIX 1 - Conceptual model for integrity (study 1)

Time 1   **Time 2**   **Time 3**
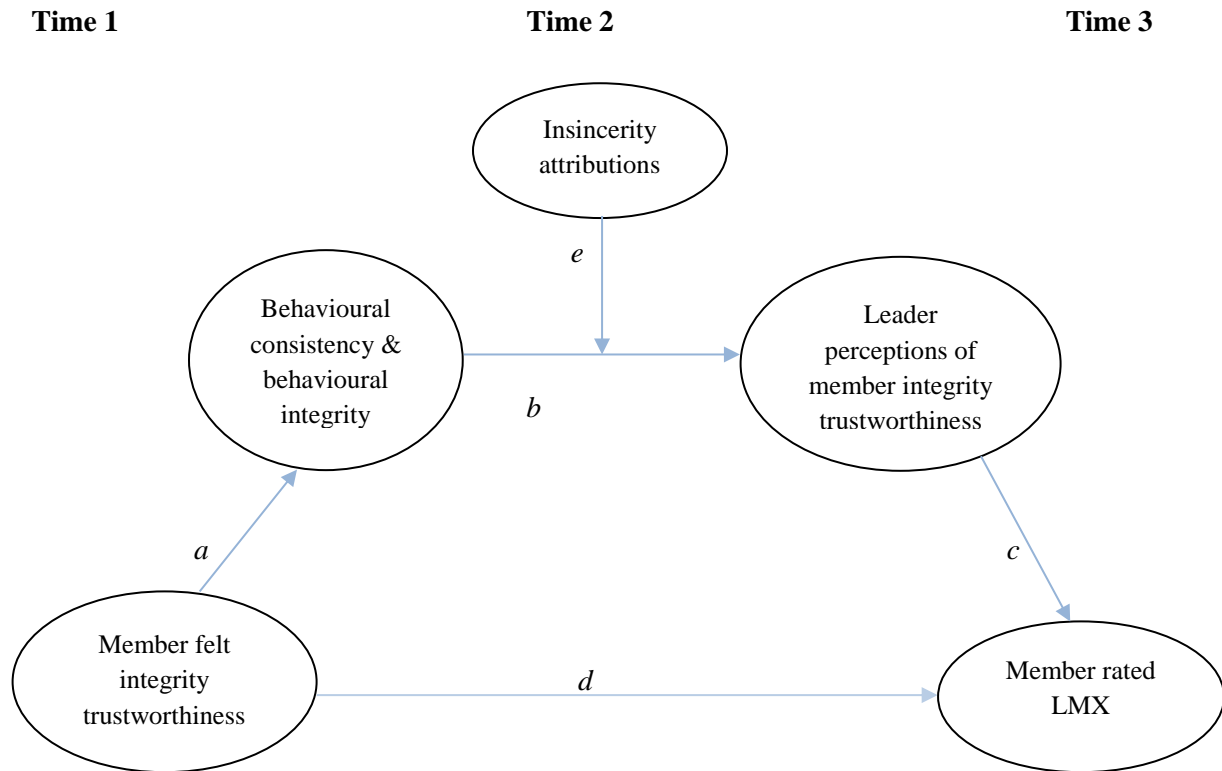
APPENDIX 2 - Conceptual model for ability (study 1)
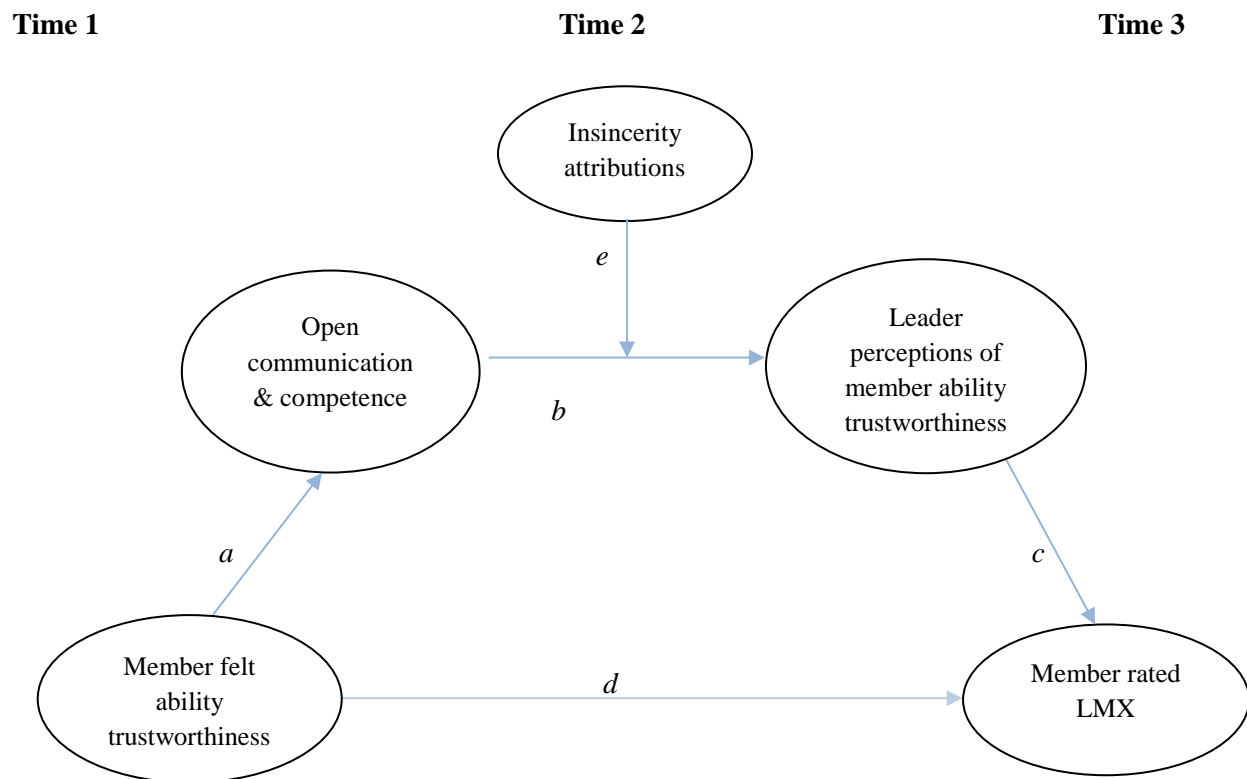
APPENDIX 3 - Conceptual model for benevolence (study 1)

Time 2

Time 3
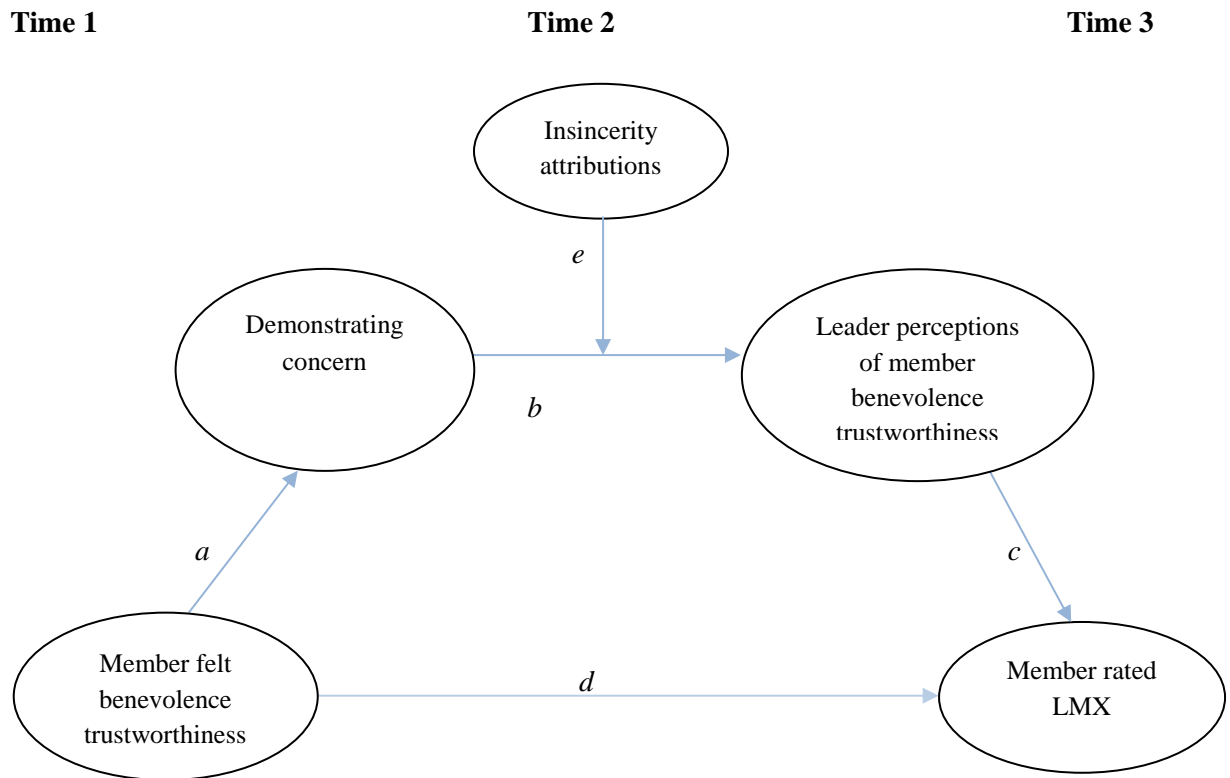
APPENDIX 4 - Data collection timeline (Study 1)

Team member measures

Time point	Measures
Time 1 (week 4 of the academic year)	Felt trustworthiness LMX-7 Trust in the leader

Time 2 (week 15 of the academic year)	Trustworthy behaviour
	  • Behavioural consistency
	  • Behavioural integrity
	  • Competence-based behaviour
	  • Demonstrating concern
	  • Open communication

Time 3 (week 21 of the academic year)	LMX-7

Leader measures

Time point	Measures
Time 2 (week 15 of the academic year)	Insincerity attributions Member trustworthiness Trust in the member

TEAM MEMBER

QUESTIONNAIRE

Please use the following scales to indicate how closely you think each statement describes the relationship between you and your managing director. Please <u>circle</u> the relevant number.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel I know where I stand with my Managing Director ….I know how satisfied my Managing Director is with me.	1	2	3	4	5
I feel that my Managing Director understands my problems and needs.	1	2	3	4	5
My Managing Director recognises my potential.	1	2	3	4	5
Regardless of how much formal authority he/she has built in his/her position, my Managing Director would use his/her power to help to solve problems in my work.	1	2	3	4	5
Regardless of how much formal authority my Managing Director has, he/she would "bail me out," at his/her expense.	1	2	3	4	5
I have enough confidence in my Managing Director that I would defend and justify his/her decision if he/she were not present to do so.	1	2	3	4	5
I would characterise my working relationship with my Managing Director as very good	1	2	3	4	5

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
My Managing Director thinks I have a strong sense of justice.	1	2	3	4	5
My Managing Director never has to wonder whether I will stick to my word	1	2	3	4	5
My Managing Director thinks that I try hard to be fair in my dealings with others	1	2	3	4	5
My Managing Director likes my values	1	2	3	4	5
My Managing Director believes that sound principles seem to guide my behaviour	1	2	3	4	5

	1	2	3	4	5
My Managing Director feels that I am very capable of performing my business game role	1	2	3	4	5
My Managing Director believes that I am known to be successful at things I try to do	1	2	3	4	5
My Managing Director feels very confident about my skills	1	2	3	4	5
My Managing Director thinks that I am very concerned about his/her welfare	1	2	3	4	5
My Managing Director feels that his/her needs and desires are very important to me	1	2	3	4	5
My Managing Director believes that I really look out for what is important to him/her	1	2	3	4	5

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
My Managing Director keeps my interests and needs in mind when making decisions.	1	2	3	4	5
I would be willing to let my Managing Director have complete responsibility for the completion of the business game.	1	2	3	4	5
It is important for me to have a good way to keep an eye on my Managing Director.	1	2	3	4	5
If I had my way I wouldn't let my Managing Director have influence over decisions that are important to me.	1	2	3	4	5
If my Managing Director asked why a problem occurred, I would speak freely even if I were partly to blame	1	2	3	4	5
Increasing my vulnerability to criticism by my Managing Director would be a mistake	1	2	3	4	5

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	Do not trust/ will not rely on	Trust a little/ rely on a little	Trust somewhat/ rely on somewhat	Moderately trust/ moderately rely on	Do trust/ will rely on
How much trust do you place in your Managing Director whilst playing the business game	1	2	3	4	5
How willing are you to rely on your Managing Director whilst playing the business game	1	2	3	4	5

Within your business game role, judge the extent to which you agree or disagree with the following statements *In the business game……*	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I behave consistently over time	1	2	3	4	5
I act consistently across situations	1	2	3	4	5
I demonstrate actions which are consistent with my beliefs	1	2	3	4	5
I keep the promises I make	1	2	3	4	5
I provide explanations for the decisions I make to my managing director	1	2	3	4	5
I take my managing director's views into consideration when making decisions about the business game	1	2	3	4	5
I am very capable in my business game role	1	2	3	4	5
I perform my work on the business game to a high standard	1	2	3	4	5
I treat my managing director in a manner which shows I am sensitive and considerate to his/her needs	1	2	3	4	5
I show concern for my managing director's well being	1	2	3	4	5

With your business game team in mind, to what extent do you agree or disagree with the following statements

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
My Managing Director has a strong sense of justice	1	2	3	4	5
I never have to wonder whether my Managing Director will stick to his/her word	1	2	3	4	5
My Managing Director tries hard to be fair in their dealings with others	1	2	3	4	5
I like my MD's values	1	2	3	4	5
Sound principles seem to guide my Managing Director's behaviour	1	2	3	4	5
My Managing Director is very capable of performing his or her role	1	2	3	4	5
My Managing Director is known to be successful at things he/she tries to do	1	2	3	4	5
I feel very confident about my Managing Director's skills	1	2	3	4	5
My Managing Director is very concerned about my welfare	1	2	3	4	5
My needs and desires are very important to my Managing Director	1	2	3	4	5
My Managing Director really looks out for what is important to me	1	2	3	4	5

TEAM LEADER

QUESTIONNAIRE

Please rate every person in your team. Please put the initial of the person who occupies the role underneath the roles listed below.

Managing Director	Marketing Director	Operation Director	Human Resource Director	Finance
MD	MktD	OD	HRD	FD

Initials:

Rate each team member on this scale:

1 = Strongly disagree	2 = Disagree	3 = Neither agree / disagree	4 = Agree	5 = Strongly Agree

Person to be rated:		MktD	OD	HRD	FD	Other
This team member has a strong sense of justice.						
I never have to wonder whether this team member will stick to his/her word						
This team member tries hard to be fair in my dealings with others						
I like this team members values						
Sound principles seem to guide this team members behaviour						
This team member is very capable of performing its job						
This team member is known to be successful at things he/she tries to do						
I feel very confident about this team members skills						
This team member is very concerned about my welfare						
My needs and desires are very important to this team member						
This team member really looks out for what is important to me						

Rate each team member on this scale:					
1 = Strongly disagree	2 = Disagree	3 = Neither agree / disagree	4 = Agree		5 = Strongly Agree

Person to be rated:	MktD	OD	HRD	FD	Other
This team member keeps my interests and needs in mind when making decisions.					
I would be willing to let this team member have complete responsibility for the completion of this project.					
If this team member asked why a problem occurred, I would speak freely even if I were partly to blame.					
I feel comfortable being creative because this team member understands that sometimes creative solutions do not work.					
It is important for me to have a good way to keep an eye on this team member					
Increasing my vulnerability to criticism by this team member would be a mistake.					
If I had my way I wouldn't let this team member have influence over decisions that are important to me.					

Rate each team member on this scale:					
1. Do not trust/ will not rely on	2. Trust a little/ rely on a little	3. Trust somewhat/ rely on somewhat	4. Moderately trust/ moderately rely on		5. Do trust/ will rely on

Person to be rated:	MktD	OD	HRD	FD	Other
How much trust do you place in this team member whilst playing the business game					
How willing are you to rely on this team member playing the business game					

Rate each team member on this scale:					
1 = Strongly disagree 2 = Disagree 3 = Neither agree / disagree 4 = Agree 5 = Strongly Agree					
Person to be rated:	**MktD**	**OD**	**HRD**	**FD**	**Other**
This team member shows a desire to enhance his or her own image (e.g. to make me believe that he or she is trustworthy)					
This team member shows a desire to build up favours for later exchanges					
This team member shows a desire to capture my attention on him or her					
This team member shows a desire to create a good impression					

Rate each team member on this scale:					
1 = Strongly disagree 2 = Disagree 3 = Neither agree / disagree 4 = Agree 5 = Strongly Agree					
Person to be rated:	**MktD**	**OD**	**HRD**	**FD**	**Other**
Does this member of the team usually know where they stand with you, do they know how satisfied you are with them?					
Do you understand this team member's problems and needs?					
Do you recognise this team members potential					
You would be happy to use my power within the business game to help solve problems in this team member's work?					
You would be happy to bail this team member out at your own expense if there was a problem?					
This team member would defend your decisions in you were not present to do so?					
I would characterise my working relationship with this team member as very good					

Figure 5.02: A conceptual model to show the causal chain of variables from the independent variable to the dependant variable for the integirty dimension
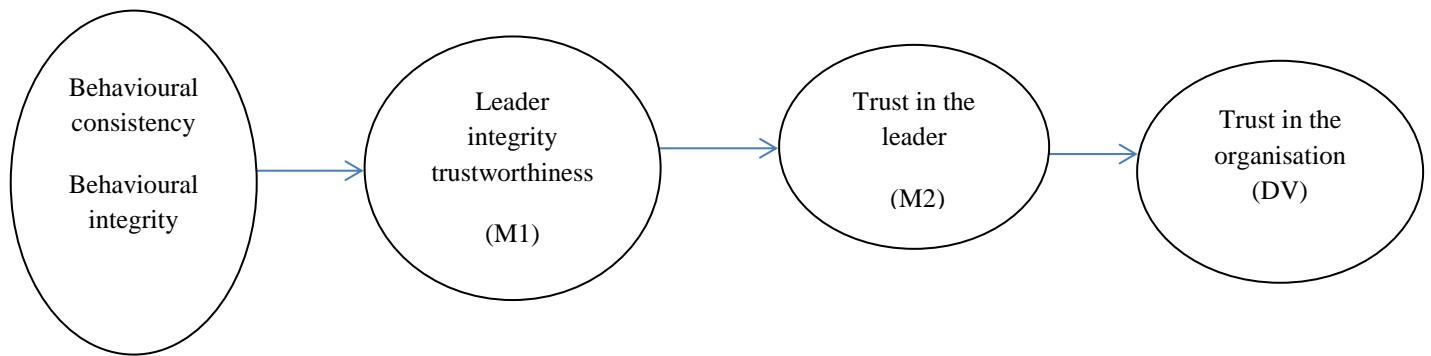
APPENDIX 8 – ability conceptual model (study 2)

Figure 5.03: A conceptual model to show the causal chain of variables from the independent variable to the dependant variable for the ability dimension
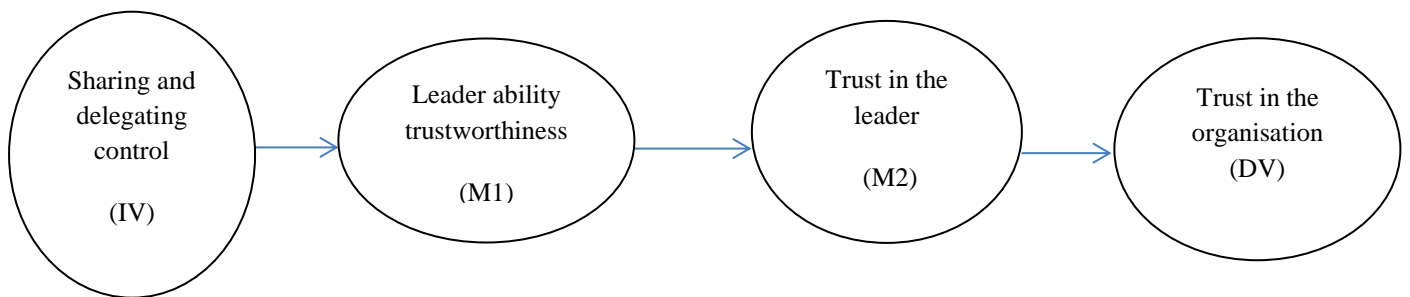
APPENDIX 9 – benevolence conceptual model (study 2)

Figure 5.04: A conceptual model to show the causal chain of variables from the independent variable to the dependant variable for the benevolence dimension
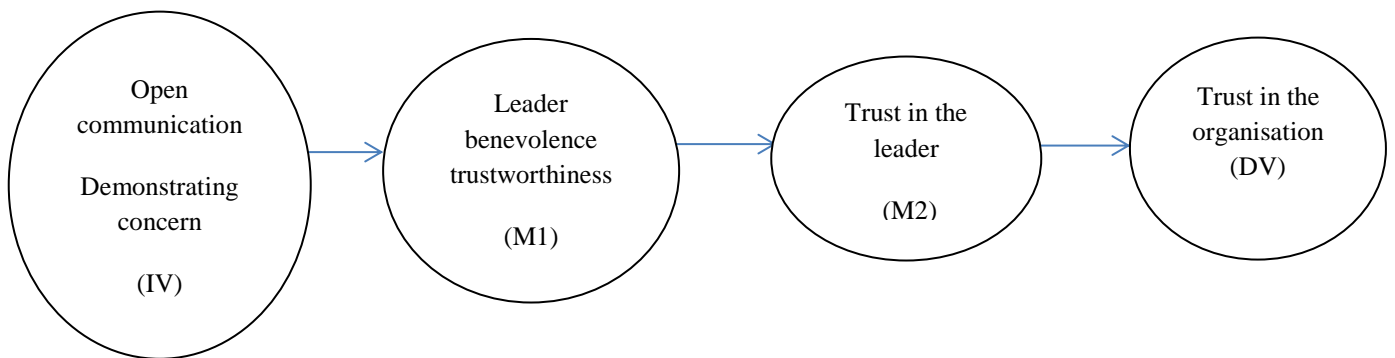
SURVEY

What is this survey?

This is a survey of your views about your work and your relationship with your manager. This is not a test and there are no right or wrong answers. We want to know your personal views on the issues raised in the survey. The survey consists of questions about yourself and your manager and refers to your attitudes and opinions.

Participation in this study is entirely voluntary and you have the right to withdraw at any time.

How long will it take?

The questionnaire will take no longer than 20 minutes to complete.

How do I fill in this survey?

Please read each question carefully and give your immediate response by circling the response which best describes how you feel.

Who will see my answers?

The information you provide is completely confidential. No one, other than the researcher will see your answers. Your answers will provide data for the PhD thesis of the researcher, Alison Legood, and aggregated results may be published in academic journals. However, individuals will not be identifiable. In any reports of the findings of this research the individual responses or identity of the participants will not be identifiable and he reports will simply summarise key trends in the data, thus protecting *you anonymity and confidentiality*.

If you agree to participate in this study, simply complete the survey that follows, and send it back to the research team at Aston University in the pre-paid envelope provided. **Do not give the completed questionnaire to any member of your organisation.** If you require any further information please do not hesitate to contact Alison Legood, a member of the research team, at legooda@aston.ac.uk.

The following statements are about your immediate manager (the individual you report directly to). Please indicate your level of agreement with the following items.

	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly agree	Agree	Strongly agree
My manager behaves consistently over time	1	2	3	4	5	6	7
My manager acts consistently across situations	1	2	3	4	5	6	7
My manager's behaviour is highly reliable	1	2	3	4	5	6	7
My manager keeps to the promises he/she makes to others	1	2	3	4	5	6	7
My manager demonstrates actions which are consistent with his/her beliefs	1	2	3	4	5	6	7
My manager feels confident delegating tasks to me	1	2	3	4	5	6	7
My manager encourages me to take the initiative to solve problems on my own	1	2	3	4	5	6	7
My manager gives me the opportunity to express my opinions	1	2	3	4	5	6	7
My manager takes the time to explain his/her decisions thoroughly	1	2	3	4	5	6	7
My manager provides reasonable explanations for his/her position on matters	1	2	3	4	5	6	7
My manager seriously considers my views on this matter	1	2	3	4	5	6	7
My manager is concerned for my well being	1	2	3	4	5	6	7
My manager treats me in a manner which shows he/she is sensitive and considerate to my needs	1	2	3	4	5	6	7
My manager is interested in how I feel and how I am doing	1	2	3	4	5	6	7

	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly agree	Agree	Strongly agree
My manager has a strong sense of justice	1	2	3	4	5	6	7
I never have to wonder whether my manager will stick to his/her word	1	2	3	4	5	6	7
My manager tries hard to be fair in their dealings with others	1	2	3	4	5	6	7
I like my manager's values	1	2	3	4	5	6	7
If my manager asked why a problem occurred, I would speak freely even if I were partly to blame	1	2	3	4	5	6	7
Increasing my vulnerability to criticism by my manager would be a mistake	1	2	3	4	5	6	7
Sound principles seem to guide my manager's behaviour	1	2	3	4	5	6	7
My manager is very capable of performing his or her role	1	2	3	4	5	6	7
My manager is known to be successful at things he/she tries to do	1	2	3	4	5	6	7
I feel very confident about my manager's skills	1	2	3	4	5	6	7
My manager is very concerned about my welfare	1	2	3	4	5	6	7
My needs and desires are very important to my manager	1	2	3	4	5	6	7
My manager really looks out for what is important to me	1	2	3	4	5	6	7

	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly agree	Agree	Strongly agree
My manager keeps my interests and needs in mind when making decisions.	1	2	3	4	5	6	7
I would be willing to let my manager have complete responsibility for the completion of the tasks.	1	2	3	4	5	6	7
It is important for me to have a good way to keep an eye on my manager.	1	2	3	4	5	6	7
If I had my way I wouldn't let my manager have influence over decisions that are important to me.	1	2	3	4	5	6	7
If my manager asked why a problem occurred, I would speak freely even if I were partly to blame	1	2	3	4	5	6	7
Increasing my vulnerability to criticism by my manager would be a mistake	1	2	3	4	5	6	7

	Do not trust/ will not rely on	Trust a little/ rely on a little	Trust somewhat/ rely on somewhat	Moderately trust/ moderately rely on	Do trust/ will rely on
How much trust do you place in your manager at work	1	2	3	4	5
How willing are you to rely on your manager at work	1	2	3	4	5

	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly agree	Agree	Strongly agree
When my manager encourages me, I believe that this organisation is encouraging me	1	2	3	4	5	6	7
When my manager is pleased with my work, I feel that this organisation is pleased	1	2	3	4	5	6	7
When my manager compliments me, it is the same as this organisation complimenting me	1	2	3	4	5	6	7
When my manager pays attention to my efforts, I believe that this organisation is paying attention to my efforts	1	2	3	4	5	6	7

	To a very low degree						To a very high degree
Overall, to what extent do you trust your organisation	1	2	3	4	5	6	7

SECTION D: DEMOGRAPHICS

Your gender:	Male Female
Your age:	_____
How long have you been working for this organisation?	_____ Years _____ Months
How long have you been working for your current manager/supervisor?	_____ Years _____ Months
Please indicate which directorate you work for.	❐ Adults & Communities ❐ Corporate Resources ❐ Children, Young People & Families ❐ Development ❐ Environment & Culture ❐ Homes & Neighbourhoods ❐ Other………………………………….

What level is your manager?

❐ Top level management

❐ Senior level management

❐ Middle level management

❐ Low level management

❐ Other _____

What is your grade in the organisation?

❐Grade 1-3

❐ Grade 4-5

❐ Grade 6-8

APPENDIX 11 - Serial multiple mediation analysis; ability model (study 2)

Table 6.08: Regression coefficients, standard errors, and model summary information for the serial multiple mediator ability model as depicted in figure 6.03

					Consequent						
	M¹ (Trustworthiness)				**M² (Trust in leader)**				**Y (Trust in organisation)**		
Antecedent	coeff.	s.e	p		coeff.	s.e	p		coeff.	s.e	p
X (Trustworthy behaviour)	a^1 0.483	0.080	.00	a^2	0.249	0.071	.00	c^1	0.324	0.095	.00
M¹ (Trustworthiness)				a^3	0.761	0.060	.00	b^1	0.031	0.111	.77
M² (Trust in leader)								b^2	0.428	0.100	.00
constant	im^1 1.861	0.360	.00	im^2	-0.072	0.313	.81	i^y	0.698	0.419	.09
	$R^2 = .196$				$R^2 = .607$				$R^2 = .302$		
	$F_{(1, 186)} = 6.2196 \; p < .00$				$F_{(2, 185)} = 34.276, p < .00$				$F_{(3, 184)} = 8.4700, p < .00$		

APPENDIX 12 - Serial multiple mediation analysis; benevolence model (study 2)

Table 6.09: Regression coefficients, standard errors, and model summary information for the serial multiple mediator benevolence model as depicted in figure 6.04

					Consequent							
	M¹ (Trustworthiness)				**M² (Trust in leader)**				**Y (Trust in organisation)**			
Antecedent		coeff.	s.e	*p*		coeff.	s.e	*p*		coeff.	s.e	*p*
X (Trustworthy behaviour)	$a^1 \rightarrow$	0.772	0.053	.00	$a^2 \rightarrow$	0.374	0.094	.00	$c^1 \rightarrow$	0.380	0.087	.00
M¹ (Trustworthiness)					$a^3 \rightarrow$	0.574	0.098	.00	$b^1 \rightarrow$	0.126	0.126	.31
M² (Trust in leader)									$b^2 \rightarrow$	0.423	0.095	.00
constant	$im^1 \rightarrow$	0.359	0.224	.11	$im^2 \rightarrow$	0.743	0.270	.00	$i^y \rightarrow$	0.851	0.349	.05
		$R^2 = .551$				$R^2 = .562$				$R^2 = .304$		
		$F_{(1, 186)} = 31.2783 \; p < 00$				$F_{(2, 185)} = 28.487, p < .00$				$F_{(3, 184)} = 8.5793, p < .00$		