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**LEADER-MEMBER EXCHANGE AND ATTITUDES: A THEORETICAL AND  
EMPIRICAL INTEGRATION**

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Doctor of Philosophy

August, 2015

Aston University

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**ASTON UNIVERSITY**

# **Leader-Member Exchange and Attitudes: A Theoretical and Empirical Integration**

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## **THESIS SUMMARY**

The central proposition of this thesis is that there are key benefits to examining leadership perceptions as an attitude towards the leader. In particular, it is argued that doing so can provide an enhanced understanding of leadership perceptions and therefore advance theory in this area. To provide empirical support for this theoretical integration, the current research focused on one of the most popular leadership theories, leader-member exchange (LMX), and demonstrated how the concept of attitude strength could advance understanding of how and when LMX influenced employee job performance. Although the measurement of LMX requires employees to provide a cognitive evaluation of their relationship with their leader, previous research has, to date, not considered this evaluation to be an attitude. This thesis provides a justification for doing so and develops two novel constructs: LMX importance and LMX ambivalence. Both of these variables are argued to represent previously unconsidered facets of the LMX relationship, which, according to attitude theory, provide a more multi-faceted understanding of leadership perceptions than previously envisaged. Such an understanding can provide a more detailed understanding of how such perceptions influence outcomes. Two studies provided an empirical test of the above reasoning. Study 1, a longitudinal field study, demonstrated initial support for many of the hypotheses. LMX ambivalence was shown to lead to poorer task performance and organisational citizenship behaviour, mediated by the experience of negative affect. Evidence was also found for the moderating effect of LMX importance, although felt obligations was not found to mediate this moderated effect. While Study 1 used project groups as its participants, Study 2 provided a first test of the construct in an organisational setting; with three companies providing data. Again, strong support was found for the negative effects of LMX ambivalence on employee outcomes, with evidence also found for the role of perceived organisational support in mitigating these negative effects. Support was also found for the moderated mediation hypothesis related to LMX importance, although this was only found in the largest organisation sample. Some of the main theoretical and methodological implications of viewing leadership perceptions as attitudes to the wider leadership area were discussed. The cross-fertilisation of research from the attitudes literature to understanding leadership perceptions provides new insights into leadership processes and potential avenues for further research.

**Keywords: Leadership, Leader-Member Exchange (LMX), Attitudes, Attitude Strength**

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## CHAPTER 1

### 1.1. Introduction

Leadership offers an effective solution to the problem of how to organize collective effort; consequently, it is central to the understanding of organisational effectiveness (Hogan & Kaiser, 2005). A large and sprawling academic literature related to leadership has accumulated over the last century (see Bass & Bass, 2008; Yukl & van Fleet, 1992). Indeed leadership has become one of the most researched and multidisciplinary areas in all of the social sciences (Goethals, Sorenson, & Burns, 2004; Thomas, Martin & Riggio, 2013). Myriad theories exist attempting to explain how different types of leadership influence employee attitudes and behaviour. Popular theories include transformational leadership (e.g. Bass, 1985; Bass & Avolio, 1990), leader-member exchange (LMX; e.g. Graen & Uhl-Bien, 1995) and servant leadership (e.g. Greenleaf, 1977). With a growing number of theories purporting to explain the leadership process, it is becoming increasingly difficult to reconcile this increasingly complex literature. As highlighted by Dansereau, Seitz, Chiu, Shaughnessy, & Yammarino (2013) “..if each of these diverse traditional theories alone captures the meaning of leadership, then how can there be so many views? How can they all share the name of leadership?” (pg. 798). This disparate body of work can benefit from a focus on commonalities rather than differences. Thus, a central aim of this thesis is to highlight how our understanding of a popular theory of leadership, LMX, can be enhanced by a cross-fertilisation with attitude theory.

Leadership theories typically measure leadership style by asking followers whether or not their leader acts in a way that represents that style of leadership. Thus, it can be argued that the vast majority of leadership research is based on the measurement of followers’ *perceptions* of their leader (e.g. Hansbrough, Lord, & Schyns, 2015). This commonality is important as leadership perceptions typically represent followers’ (and sometimes leaders’)

subjective evaluations and judgements of leadership and therefore, as argued in this thesis, are synonymous with the way attitudes are conceptualised. This is because reporting an attitude also involves the expression of an evaluative judgement about an object (Maio & Haddock, 2009). It can therefore be reasoned that, for example, judgements concerning the quality of leader-member relationships can be considered relationship attitudes while servant leadership reflects followers' attitudes as to the degree to which their leader demonstrates this style. The main aim of this thesis is to examine LMX perceptions within the context of attitude theory, the single most indispensable construct in social psychology (Allport, 1935; Petty, Wegener & Fabrigar, 1997).

Attitudes are ubiquitous in that we hold about every aspect of our lives, from the people we know to the products we buy, and the politicians we vote for (Eaton, Majka, & Visser, 2008). Attitude theory has been hugely influential in other research domains; however the application of attitude theory to the study of leadership, to date, has been extremely limited. In particular, the leadership literature has hitherto failed to consider the complexities and nuances associated with attitudes. This thesis therefore takes a novel approach; proposing ways in which theory and methodology related to attitudes can inform the understanding of leadership perceptions, providing numerous avenues for future research. What might be the benefits of integrating theory and methodology from attitudes research to understanding leadership perceptions? Previous research has clearly highlighted the advantages of applying social psychological and social cognitive theories to the study of leadership (see Thomas, Martin, Epitropaki, Guillaume & Lee, 2013). In fact leadership can be seen as a social psychological tradition with many seminal and influential studies focused on understanding leadership within this tradition (e.g. Bales, 1950; Hollander, 1958; Lewin, Lippitt, & White, 1939; Sheriff, 1966). Fiedler's (1964, 1978) hugely influential contingency theory became prominent in the mainstream literature of both social and organisational psychology (Thomas

et al. 2013). However, the decades after Fiedler's seminal theory witnessed a dearth in social psychological theories of leadership. More recently, theories such as social identity theory (e.g. Hogg, Martin, Epitropaki, Mankad, Svensson & Weeden, 2005), schema theory (e.g. Epitropaki & Martin, 2005), social network theory (e.g. Balkundi, & Kilduff, 2006) and attachment theory (e.g. Davidovitz, Mikulincer, Shaver, Izsak, & Popper 2007) have all been utilised to gain greater insight into the leadership process. However, despite such work emphasising the benefits of cross-fertilization with social psychological theory, the study of leadership has as yet had little integration with theory and research related to attitudes. Given the historical lineage of leadership as a social psychological process, the integration with attitudes seems logical and overdue.

The adoption of an attitudes framework moves research away from a leader-centric approach, which assumes leadership measures accurately reflect leader's behaviours, to a more follower-centric approach that characterises leadership perceptions as a property of both the follower and the leader (Lee, Thomas, Martin and Guillaume, 2015). This is an important benefit of the approach utilised in this thesis because, in general, the leadership literature has been predominantly leader-centric in its focus (with some exceptions; e.g. Avolio, Walumbwa, & Weber, 2009; Howell & Shamir, 2005; Riggio, Chaleff, Lipman-Blumen, 2008; Schyns & Meindl, 2005). This leader-centricity has largely neglected the important role of followers' social cognitive processes in determining the effects of leadership behaviour on followers' cognitions, affect and behaviour (van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). Such an emphasis has also served to reduce the complexity of the leadership process to the individual differences and characteristics of leaders (Haslam, Reicher, & Platow, 2011). Furthermore, as highlighted recently by Hansbrough, et al. (2015), leadership research typically relies on follower ratings of leader behaviour as a key measure of leadership processes. This reliance raises both the issue of the

accuracy of leader ratings and the potential for biases in ratings processes that are associated with individual differences among followers (Bono, Hooper, & Yoon, 2012; Hunter, Bedell-Avers, & Mumford, 2007). Rather than assume that follower ratings are accurate representations of leader behaviour, an attitudinal approach to leadership attempts to understand how follower attitudes guide information processing and behaviour; thus understanding leadership in a different way. As discussed by Lee et al. (2015) the application of attitude research to leadership perceptions gives new and important insights into aspects of its underlying content, structure and functions that hitherto have not been extensively explored.

Given the importance of attitude theory and its focus on trying to understand how and when attitudes predict behaviour, our understanding of leadership perceptions could be greatly enhanced by applying theory and research related to attitudes. Defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, p. 1), attitudes are related to behaviour (e.g. LaPiere, 1934; Ajzen, 2001; Glasman and Albarracin, 2006). Specifically, researchers have developed a complex understanding of when attitudes will predict subsequent behaviour and when they will not. However, this knowledge is underutilised within I/O psychology because, as noted by Schleicher, Watt and Greguras (2004: p. 165), “there is a tendency to adopt (or create) attitude measures in organisational research without a full appreciation of the social cognition literature that directly investigates the underlying structure of attitudes”. This lack of integration is surprising given the innumerable ways in which attitude theory can inform the study of various workplace attitudes (including leadership). However, given the size of the both the attitude and leadership literature and the vast potential for synthesis, this thesis will be limited to the examination of one aspect of attitude theory; the role *attitude strength* can play in illuminating our understanding of when leadership will be more or less impactful.

Specifically, the focus will be on LMX theory and how theory and research related to attitude strength can elucidate both how and when the leader-follower relationship will influence performance outcomes. The theoretical rationale for this examination will be discussed in greater detail in the following sections.

## **1.2.The Study of Attitudes in Organisational Psychology**

The study of attitudes represents one of the most influential theories of social psychology. One of the primary aims of attitude research has been investigating and understanding the relationship between attitudes and subsequent behaviour (e.g. LaPiere, 1934; Ajzen, 2001; Sheeran, 2002; Glasman & Albarracin, 2006). Theory and research have advanced our understanding of when and how attitudes influence behaviour and have been influential in trying to alter people's behaviour (Webb & Sheeran, 2006). Attitude theory has also been hugely influential in other research domains such as health and political sciences. Ideas from attitude research have permeated I/O psychology to such a degree that job attitudes are one of the most central and enduring constructs in individual-level organisational research (Harrison, Newman & Roth, 2006). A recent review by Judge and Kammeyer-Mueller (2012) revealed 33,348 records pertaining to job attitudes, work attitudes, job satisfaction or organisational commitment. Such job attitudes are often investigated as important outcomes in their own right, as well as being linked to behaviours such as performance, organisational citizenship behaviour (OCB) and turnover (e.g. Organ & Ryan 1995; Judge, Thoresen, Bono, & Patton, 2001; Kammeyer-Mueller, Wanberg, Glomb & Ahlburg, 2005).

Increasingly, the job attitude literature is incorporating more of the nuances of attitude theory and research. Recently, for example, the conceptualisation and measurement of job attitudes have acknowledged the central role played by affect in the development of attitudes (Judge & Kammeyer-Mueller, 2012). Accordingly, researchers have recognised the need to measure attitudes in ways that are consistent with the necessarily ephemeral nature of affect

and have begun utilising experience-sampling methodology (ESM), which measures variance over time in events, moods, and behaviours. Such methodology has been used to measure job attitudes once a day over a period of a week or two, or even several times a day (e.g. Ilies & Judge 2002, Miner, Glomb & Hulin, 2005; Weiss, Nicholas & Daus, 1999). This type of design allows multilevel modelling of job attitudes, permitting the investigation of both within-individual (state) and between-individual (trait) effects. Such research highlights, for example, that around one-third to one-half of the variation in job satisfaction is due to within-individual variation. Furthermore, accumulated evidence from social and cognitive psychology suggests that many behaviours are driven by processes operating outside of awareness, and an array of implicit measures to capture such processes have been developed (e.g. Fazio & Olson 2003). The nonconscious activation of implicit attitudes can have powerful effects on behaviour (e.g. Dijksterhuis & Bargh, 2001; Shantz & Latham, 2009); demonstrating the importance of considering them within both social psychology and more generally. As noted by Uhlmann et al. (2012), “implicit measures hold great promise for organisational research because many phenomena of interest operate outside employees’ complete awareness and control” (pg. 554). This logic is just beginning to be applied with I/O psychology, with research demonstrating that implicit and explicit job attitudes reflect relatively independent intra-individual processes (Leavitt, Fong & Greenwald, 2011). Such research also shows job performance and OCB are best predicted by a combination of implicit and explicit job attitudes.

As alluded to above, understanding job attitudes is central to our understanding of organisational behaviour more generally; a point highlighted by Judge and Kammeyer-Mueller (2012, pg 360) who point out that “A sizeable body of research has demonstrated that job attitudes are related to a variety of organisationally relevant behaviours including task performance, citizenship, creative performance, and organisational profitability.”

However, despite the clear utility of job attitude research, it is a topic that also has several limitations. One key issue regards the level of specificity with which attitudes are measured. There is a tendency for researchers to rely on more general job attitudes, particularly pertaining to job satisfaction and organisational commitment. For instance, many studies rely on measurements of general job satisfaction. Indeed, the extensive interest in the notion of job satisfaction has resulted in the emergence of a problematically large and diverse range of measures, especially brief measures produced to satisfy the strong need noted by scholars for short, research practical assessment of job satisfaction (Bowling & Hammond, 2008; McNichols, Stahl, & Manley, 1978; Wanous, Reichers, & Hudy, 1997). A recent meta-analysis of 124 job satisfaction studies, for example, found the majority used “ad hoc measures” never intended for use beyond a particular study or specific population (Whitman, van Rooy, & Viswesvaran, 2010, p. 55).

Focusing on general assessments of job satisfaction is not an issue if one wants to understand broad phenomena such as overall working conditions or job performance. However, an understanding of the specific elements of employees’ attitudes requires more focused measures of job attitudes. Much of the research on facet level satisfaction has used the Job Descriptive Index (JDI; Smith, Kendall & Hulin, 1969) which includes five facets of job satisfaction, including; satisfaction with work, supervision, co-workers, pay and promotions. Nevertheless, even some of these facets represent very general attitudes. Satisfaction with supervision, for example, represents overall satisfaction with the leader. As conveyed in leadership research, supervision is a complex process and an overall measure will not capture attitudes towards different aspects of leadership such as the leader-follower relationship and other important aspects of the supervisory process. In fact, generally speaking, less work has focused on attitudes towards other, more specific, elements of the workplace such as people (e.g. leaders and co-workers). This is a pertinent limitation of the

job attitude literature, owing to the fact that relationships are an essential part of organisational life. Individuals develop working relationships with co-workers, supervisors and even the organisation itself. Such relationships play a vital role in determining the experiences one has within the organisation and predict key outcomes (e.g. Liden, Wayne & Sparrowe, 2000).

A second key issue associated with job attitude research is the extent to which it draws upon more general theory and research associated with attitudes. As highlighted earlier, attitude theory is one of, if not the most, influential topic in social psychology. Decades of research attention have developed the theory and provided a rich understanding of when and how attitudes influence individuals' information processing and subsequent behaviour. However, this knowledge is not well represented within I/O psychology (Schleicher et al. 2004). Despite some examples of job attitude research adopting methods from this literature (e.g. Schleicher et al. 2004; Schleicher, Smith, Casper, Watt, & Greguras, 2015; Johnson, Tolentino, Rodopman & Cho, 2010; Miner et al. 2005; Ziegler, Schlett, Casel, & Diehl, 2012), the overwhelming majority has failed to incorporate the complexities associated with attitude theory and measurement. This failure to fully appreciate the nuances of attitude theory creates a disconnect between theory and methods and may lead to incomplete, biased, or even, misleading conclusions. Thus it is vital that research related to job attitudes pays more attention to attitude theory and research, and continues to appreciate the complexity of understanding attitudes towards the various aspects of the workplace and how and when these will influence behaviour.

### **1.3. Leadership and Attitudes**

The previous section highlighted two limitations of the job attitudes literature, namely its relatively narrow focus and lack of theoretical integration with wider attitude theory and

research. The current research seeks to address both these limitations by examining attitudes towards leadership and applying the concept of attitude strength in order to better understand how and when leadership influences follower behaviour. A significant body of work has highlighted that general attitudes towards supervision (i.e. satisfaction with supervision) is an important and influential aspect of job satisfaction. As mentioned previously, satisfaction with supervision is considered a facet of job satisfaction in the major job satisfaction inventories such as the JDI (Smith et al. 1969) or the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967). Studies utilising such measures have demonstrated that satisfaction with supervision demonstrates a stronger relationship with some employee behaviours, such as OCB and supervisory rated performance, compared with the other job satisfaction dimensions (Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002). However, relatively few studies measure the individual facets of job satisfaction, with the preference being for global measures. For instance, in their meta-analysis of the JDI, Kinicki et al. (2002) reported only two studies that had measured satisfaction with supervision and citizenship behaviours.

As well as a lack of empirical studies investigating the effects of leadership attitudes, such measures can also be considered to be very general in nature. This approach is at odds with current thinking about leadership which examines different styles of leadership and leader behaviours and the effects these have on employees. In fact, leadership is no longer simply described as an individual characteristic or difference but rather is depicted in various models as dyadic, shared, relational, strategic, global, and a complex social dynamic (Avolio 2007; Yukl 2006). Leadership styles such as authentic, transformational, relational, ethical and servant are commonly studied as a way to understand the leadership process (Avolio et al., 2009). Indeed, the various aspects of leadership accounted for in organisation research demonstrates the complexity of leading individuals and groups and further serves to highlight

the limitations of considering followers' *general* attitude toward their leader as a somewhat simplistic approach.

On the face of it then, our understanding of leadership attitudes has lagged behind the wider leadership literature. However, when one considers this body of work in more detail it can be argued that the way such theories are measured is effectively as an *attitude* towards leadership. Typically, researchers are interested in perceptions of leadership, be it from the perspective of the follower or the leader. Routinely, leadership research asks followers to evaluate some aspect of the leadership process, thus providing their perceptions of this process. According to this way of thinking, *leadership perceptions* refer to the way in which followers (and leaders) make subjective judgements about aspects of the leader and leadership process (such as, leader satisfaction, leader effectiveness, leadership style, leader-follower relationship quality etc.). Such perceptions often represent individuals' subjective evaluations and judgements of leadership and therefore have much in common with the way that attitudes are both comprehended and measured. Although this may seem like an obvious observation, it is a novel approach; and the current research highlights how theory and methodology related to attitudes can inform the understanding of leadership perceptions. Moreover, there are numerous ways in which attitude theory can inform the study of leadership perceptions.

The scope of the current research will be limited to two main aims:

- firstly, to describe how a greater focus on the nuances associated with the *conceptualisation and measurement of attitudes* can be utilised within one particular leadership theory; LMX.
- secondly, to examine the role *attitude strength* can play in illuminating our understanding of when LMX will be more or less impactful.

Thus, the current research will focus on how the application of attitude theory can extend our understanding of how and when LMX influences employee outcomes. LMX theory has evolved into one of the more insightful and useful approaches for examining the link between leadership processes and outcomes. Indeed, LMX – the quality of the dyadic relationship between a leader and a subordinate – is currently the second most researched theory of leadership (Martin, Epitropaki, Thomas & Topaka, 2010; Yammarino, Dionne, Chun & Dansereau, 2005). The focus on the relationship that develops between leaders and followers makes LMX particularly germane to the integration with attitude theory. Past research, for example, has demonstrated that attitudes towards interpersonal relationships are important in predicting relationship outcomes (e.g. Byers, 2005; Kachadourian, Fincham, & Davila, 2004; Falconier, Nussbeck, Bodenmann, Schneider, & Bradbury, 2014).

LMX theory, rooted in social exchange theory (SET: Blau, 1964), posits that leaders form relationships of varying quality with different subordinates. According to the theory, the quality of this relationship is the key to understanding how leaders influence and are influenced by their subordinates. As LMX theory has developed, the key propositions have been supported by a vast amount of research, the majority of which has demonstrated positive associations between high quality LMX relationships and outcomes such as employee job satisfaction, commitment, OCB, and task performance (see meta-analyses by Martin, Thomas, Guillaume, Lee, & Epitropaki, 2015, Dulebohn, Bommer, Liden, Brouer & Ferris, 2012; Gerstner & Day, 1997; Ilies, Nahgang & Morgeson, 2007; Rockstuhl, Dulebohn, Ang & Shore, 2012; Scott, Craven & Green, 2011). This burgeoning literature however, has suffered from a lack of articulation about the process involved and, as such, has failed to adequately explain *when* and *how* LMX influences performance (e.g. Martin et al. 2015). Increasingly, scholars have turned to theory and research from social psychology to further elucidate the process of LMX development and the effects of the leader-member relationship.

Applying attachment theory, for example, Richards and Hackett (2012) revealed that insecure forms of leader and follower attachment orientations (i.e. avoidance and anxiety) were negatively related to LMX quality. Other scholars examined the role of social comparisons (LMXSC) as a measure of a follower's perceived comparison of their LMX with others in the workgroup (better vs. worse than others; Vidyarathi, Liden, Anand, Erdogan, & Ghosh, 2010). Applying a similar logic, this thesis posits that integrating LMX theory with theory and research on attitudes can provide greater insights and future research avenues for examining the leader–follower relationship. Such integration is possible because LMX is typically measured as an individual's general evaluation of their relationship with their leader. Followers, for example, evaluate their leader-member relationship by providing their perceptions of the relationship which are then collapsed across measurement dimensions to provide an overall evaluation of LMX on a scale of low to high quality (Martin et al., 2010). Because the reporting of an attitude also involves the expression of an evaluation judgement about an object (Maio & Haddock, 2009), leader-member relationships can be considered relationship attitudes. Viewing the LMX construct in this way can potentially result in substantial advances in LMX theory. Therefore, taking a novel approach, this research will propose ways in which theory related to attitudes can inform the understanding of LMX.

#### **1.4. LMX and Attitude Strength**

Social psychologists recognise that “the underlying attitudes of two individuals with identical scale scores may differ in many other respects that may affect the relation of the attitude score to the behaviour manifested by those individuals” (Fazio & Zanna, 1978, p. 399). There are a number of qualities of the attitude that, independent of the valence (direction) of the attitude, reflect the strength of an attitude and consequently determine the extent to which the attitude influences subsequent behaviour (Fazio, 1986). These qualities

are known as *attitude strength* and have garnered a large body of research, producing an increasingly complex understanding of the factors that predict when attitudes will predict subsequent behaviour and when they won't (see review by Petty & Krosnick, 2014). Attitude strength represents the extent to which an attitude is stable, resistant to change, impacts information processing, and guides behaviour (e.g. Petty, & Krosnick, 2014). Several concepts, such as accessibility, ambivalence and importance relate to the broader concept of attitude strength. In separate lines of research, each of these attitude strength dimensions has been shown to differentiate strong from weak attitudes. For example, the more certain people are of their attitudes, the more these attitudes tend to guide behaviour (e.g. Fazio & Zanna, 1978a), resist persuasion (e.g. Babad, Ariav, Rosen, & Salomon, 1987; Bassili, 1996; Krosnick & Abelson, 1992; Swann, Pelham, & Chidester, 1988; Wu & Shaffer, 1987) and persist over time, even when they are not under direct attack (e.g. Bassili, 1996). Similar sorts of relations have been documented between other strength-related attitudes (Krosnick & Petty, 1995; 2014). However, such factors have had very little influence on research and theory in I/O psychology in general, and none on the investigation of leadership in particular. It can therefore be concluded that despite the tendency to adopt (or create) attitude measures in organisational research, the field has not embraced the myriad applications of such a rich literature. In this thesis, this key gap in the literature will be addressed by examining components of attitude strength and how they influence the LMX-performance relationship.

As described above, the attitude literature suggests that strong attitudes are more likely to predict behaviour than weak attitudes (Krosnick & Petty, 1995). As Schwartz (1978) noted, an attitude assessed at one time is unlikely to predict behaviour at a later time if the attitude does not persist over the intervening time interval. Thus, at least part of the greater impact of strong attitudes on behaviour may be attributable to strong attitudes being more likely to persist over time. However, other mechanisms may also influence the ability of

strong attitudes to influence behaviour. For example, Fazio (1986, 1995) has argued that attitudes influence our behaviour in part by shaping our perceptions of the world. That is, the capacity of an attitude to predict behaviour is partly dependent on the attitude's ability to bias perceptions of the attitude object and the context in which the behaviour is performed.

Whatever the underlying mechanism, a host of research has demonstrated the role played by attitude strength in the attitude-behaviour relationship (see review by Petty & Krosnick, 2014).

As mentioned previously, there are a number of features of an attitude that contribute to its strength. This thesis will draw on two distinct facets of an attitude that are associated with attitude strength: ambivalence and importance. Generally, attitudinal ambivalence has been treated as a measure of attitude strength with lower levels of ambivalence being associated with a stronger attitude. As previously mentioned, its effect on the relationship between measures of attitude and subsequent behaviour has been examined extensively in the attitude literature. The findings of such studies have consistently shown that higher levels of attitudinal ambivalence result in weaker attitude-behaviour relationships (e.g. Conner, Sparks, Povey, James & Armitage (2002); Jonas, Broemer, & Diehl, 2000b). Similarly, attitudes to which people attach more personal importance have been shown to be better predictors of behaviour in a range of contexts (e.g. Budd, 1986; Parker, Perry, & Gillespie, 1974; Rokeach & Kliejunas, 1972). Both importance and ambivalence are facets of attitude strength that have been shown to influence the effect of attitudes on subsequent behaviour. The current research will focus on how these factors will influence the LMX-performance link. The development of specific hypotheses will highlight that these facets of the leader-follower relationship attitude can have unique effects, working through distinct mechanisms, and thus demonstrating the multiplicity of applications arising through the integration between attitude theory and LMX.

## 1.5. A Summary of the Objectives and Intended Contributions to Knowledge

The above sections have briefly introduced the focus of this thesis. To summarise, the main objective centres on the integration of LMX theory with the attitude literature and, in particular, the notion of attitude strength. The contention is that such a cross-fertilisation is not only plausible but can provide a greater understanding of both how and when LMX influences aspects of employee performance. The next chapters will further elucidate the specific theoretical rationale and hypotheses that can be derived from the integration of these two literatures but, to summarise, this thesis has five core objectives:

1. The main overarching objective of this thesis is to provide an empirical test of a theoretical integration between LMX and attitudes. Such assimilation represents an important step in the development of LMX theory by providing a more nuanced view of leader-member relationships. In a broad sense, this thesis highlights the need for LMX to move beyond focusing on the relationship as purely good or bad and begin to appreciate other facets of the relationship that may determine its impact.
2. By incorporating the concept of attitude strength to the study of LMX, the link between this leadership process and performance outcomes can be further elucidated. Specifically, two novel concepts, LMX importance and LMX ambivalence, are introduced. As a consequence, the current research seeks to better understand both when and how LMX influence work outcomes by moving beyond the focus on LMX quality. In considering the concept of importance and ambivalence in leader-follower relationships, this thesis does not contest or question the established theoretical arguments behind LMX theory. Rather, it seeks to increase our comprehension of this pivotal workplace relationship by further exploring its nuances.
3. By integrating facets associated with attitude strength to the study of leadership (LMX), the current research seeks to extend understanding of how these concepts can

be incorporated into I/O psychology more generally. This extension contributes both practical and theoretical direction to researchers interested in incorporating attitude strength outside of the attitude literature and builds on recent work (e.g. Schleicher, et al. 2015) demonstrating the importance of considering attitude strength in this context. It is the contention of this thesis that attitude strength represents an area of attitude theory that can provide greater insight into when and how employee attitudes translate into workplace behaviours such as performance.

4. Finally, by examining ambivalence as an indicator of attitude strength, this thesis aims to contribute to the small, but growing, body of work pertaining to ambivalence in the workplace. Ashforth, Rogers, Pratt and Pradies (2014) distinguished between individual and collective levels of analysis in ambivalence research and the current research aims to extend our knowledge of individual level ambivalence with a particular focus on the leader-follower relationship as a cause of ambivalent cognitions. Little is known about how ambivalence influences performance outcomes and the current research provides a clear framework to explore such effects.
5. By integrating LMX with attitude theory the current research contributes to the recent resurgence in the interest in a social psychological approach to leadership (e.g. Hogg, 2007). While leadership research started within the context of social psychology, interest has waned until recently. By incorporating leadership and social psychological theories it is possible to draw on a number of powerful theories which can help explain how leaders can influence followers and group processes as well as outcomes (e.g. Homan & Greer, 2013; Huang & Lin, 2013). In addition, social psychological approaches highlight that leaders are also influenced by follower cognition and group processes (e.g. Alabastro Rast, Lac, Hogg & Crano, 2013; Blaker

et al. 2013; van Quequebeke & Eckloff, 2013). Attitude theory, in particular, further highlights the role of follower evaluation in the leadership process.

## **1.6. Thesis Overview**

Having outlined the objectives of the thesis and how it intends to extend current theory in chapter one, the central aim of chapter two is to provide a literature review of both the leadership (with a focus on LMX) and attitude domains. LMX theory will be introduced and the main areas of theoretical development identified. Then a discussion of the attitude literature will be provided, highlighting potential areas of overlap. The concept of attitude strength will be reviewed and the dimension of ambivalence and importance will be explored in further detail. The following chapter (Chapter 3) will focus on the integration of these two theoretical frameworks. Specifically within chapter 3 the theoretical hypotheses will be developed with respect to the concepts of LMX ambivalence and LMX importance. Chapter 3 will also provide theoretical support for the relevance of the independent, moderating, mediating and dependent variables which make up the full conceptual models. Chapters 4 and 5 will detail the methodology adopted for Study 1 and Study 2 respectively. These chapters will include an overview of the subjects, procedure, data collection methods, results and a discussion of the findings. A general discussion is provided within chapter 6. 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 of this thesis.

## **CHAPTER 2: LEADERSHIP AND ATTITUDES: LITERATURE REVIEW**

### **2.1. Leadership Definition and Brief Overview of Leadership Research**

Although there is no one agreed definition of leadership, a notable description, that is often cited, states that leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Bass & Bass, 2008; Northouse, 2007; Yukl, 2006). Indeed, a principal theme in virtually all definitions of leadership is that leaders deal in the currency of influence, with successful leaders doing so via motivation and enabling rather than coercion (House & Javidan, 2004; Martin, Epitropaki, Thomas, & Topaka, 2010; Yukl, 2006). Definitions also highlight that leadership occurs in the context of groups, involving a number of people who have some common goal. Such groups will vary in size and may range from a project group to the whole organisation. Thus, leadership is a process whereby a shared goal is achieved by a group of individuals working together with the influence of a leader.

The definition above suggests that leadership is a vital factor in the achievement of group goals. Clearly goal achievement is paramount for organisational success and it is therefore unsurprising that scholarly interest in leadership has been enormous and continues to be so. Thousands of studies have indeed been conducted in recent decades pertaining to leadership phenomena (Bass & Bass, 2009). These have examined the outcomes, as well as antecedents, to leadership qualities. As early as the 1930s, people have been attempting to systematically examine the phenomenon (House & Aditya, 1997). Perhaps the clearest beginning of leadership exploration is the 'Great Man' approach (Carlyle, 1907), which centred on understanding the trait characteristics common to effective leaders. This trait approach was therefore predicated on the assumption that there are some unique features that

distinguish leaders from non-leaders. Borgatta, Couch and Bales (1954) provided some supportive evidence for the Great Man Theory. The authors selected 11 “Great Men” out of 126 who scored high on three attributes: task ability (leadership ratings received on a prior task and IQ score), individual assertiveness (ratings received on a prior task), and social acceptability (sociometric choice on a prior task). These individuals were then each allocated to four task groups. Two new co-participants were involved in each task. The groups led by “Great Men” were compared with groups led by men who were not high on all three of the same dimensions. Groups led by “Great Men” had higher rates for giving suggestions and arriving at agreements, lower tension, and higher positive social and emotional behaviour in comparison with groups not led by “Great Men.”

The “Great Man” approach evolved into more nuanced trait approaches, one of the most popular of which focuses on the personality of leaders using the ‘Big Five’ model to classify effective leaders into different personality types. However, despite a voluminous amount of research into leadership traits, only limited agreement has been reached. Judge, Bono, Ilies and Gerhardt (2002), in their review of the topic, highlighted that traits such as extraversion and conscientiousness predicted leadership emergence and effectiveness. The authors’ meta-analysed 222 correlations from 73 samples and found that extraversion was the most consistent correlate of leadership across study settings and leadership criteria. Overall, the review showed that the five-factor model of personality had a multiple correlation of .48 with leadership, indicating strong support for the leader trait perspective. Similarly, leadership emergence has also been found to be predicted by self-monitoring, intelligence and generalised self-efficacy (Day, Schleicher, Unckless, & Hiller, 2002; Smith & Foti, 1998). Recent years have witnessed a surge of interest in biological determinants of leadership. For example, research using twins has shown that there may be a genetic basis

with regard to the attainment of leadership roles (Arvey, Rotundo, Johnson, Zhang, & McGue, 2006; Arvey, Zhang, Avolio, & Krueger, 2007; Zhang, Ilies, & Arvey, 2009).

Furthermore, aspects of brain functioning may also be likely determinants of leadership behaviours and qualities. Indeed, functional magnetic resonance imaging (fMRI) has been used to investigate the biological determinants of effective leadership. The availability of such technology has led to somewhat of a revival of the trait approach and has rekindled the question of whether leaders are born or made. For example, Hannah, Balthazard, Waldman, Jennings and Thatcher (2013) proposed and found that leader self-complexity predicted adaptive performance. The authors also found that a significant proportion of the variance in leader self-complexity (measured psychometrically) could be accounted for by neurological activity that was located largely in the amygdala, hippocampus, and para-hippocampal regions of the brain. To add further support, their work showed that these neurological measures were far more powerful predictors of leader complexity, as compared to experience-based predictors. Another study employed a similar approach to the aforementioned study; by using neurological imaging as a means of classifying transformational versus non-transformational leaders (Balthazard, Waldman, Thatcher, and Hannah, 2012). The study validated a discriminant function that classified individuals according to their transformational leadership behaviour. To a large extent, these measures centred on pre-frontal and frontal regions of the brain and involved variables relevant to the connectivity between regions.

In summary, the trait approach has developed substantively since the early “Great Man” theory. While the popularity of the approach has waxed and waned throughout the past century, it seems clear from the research that personality does play an important role in leadership and the prediction of leadership emergence and effectiveness. Recent developments in the biological assessment of leadership lends further credence to the notion

that leader behaviour can be, at least partly, predicted from endemic, brain activity. However, such an approach should also come with a caution. As noted by Waldman, Balthazard and Peterson (2011), in their review of the social cognitive neuroscience and leadership, “leadership is inherently a complex process that not only involves aspects or characteristics of leaders, but also aspects of followers and the context in which leadership processes occur.” (pg 1102). Therefore, while a trait approach to leadership is useful, there may be complex interactions between dispositional variables and the social contexts in which leaders work. Senior, Lee and Butler (2011) further highlight that focusing on biological determinants of leader behaviour risks deterministic thinking that may not be appropriate, given the nascent stage of development of research linking brain activity to actual behaviour.

Long before the recent advances in the social cognitive neuroscience, the failure of the trait approach to replicate and identify reliable dispositional variables contributing to leader effectiveness led to the emergence of the behavioural approach to leadership. This paradigm shift took place in the 1950’s and began with a series of studies based on the postulation that effective leaders performed certain identifiable behaviours towards their followers. Two seminal studies were conducted concurrently at the University of Michigan and Ohio State University. The findings from these studies advocated that leadership behaviour could be divided into two distinct categories (Hemphill & Coons, 1957; Stogdill, 1963); consideration (focus on people) and initiation structure (focus on task). People focused behaviour refers to a leader taking a personal interest in their followers, and attempting to nurture positive interpersonal relationships. Conversely, task focused behaviour is associated with leader behaviour that is focused on developing a productive work group through the provision of a defined and structured work task for followers. This leader behaviour paradigm provided the basis for new theory and led to a proliferation of research investigation aspects of leader behaviour and how it influenced followers. Indeed, in their narrative review of the leader

behaviour literature, Fleishman et al. (1991) identified 65 distinct classifications of leader behaviour and subsequent reviews have further highlighted the propagation of leader behaviour typologies and theories (Avolio, Sosik, Jung, Berson, 2003; Pearce et al. 2003). DeRue, Nahrgang, Wellman, and Humphrey (2011) point to the fact that these new leader behaviour theories continue to be developed without clear comparison to or falsification of existing leader behaviour theories. However, the authors suggest that a consistent theme in the literature is that leader behaviours can be ordered into one of four categories: task-oriented behaviours, relational-oriented behaviours, change-oriented behaviours, and passive leadership (DeRue et al. 2011). Meta-analytic evidence suggests that leader behaviours are important predictors of leadership effectiveness (Judge & Piccolo, 2004; Judge, Piccolo, & Ilies, 2004).

The behavioural approach has commonalities with the trait approach, given that the underlying supposition is the existence of distinct characteristics that could identify leaders, in this case, in the form of leaders' behaviour rather than leaders' traits. However, while the research described thus far has established that leadership effectiveness is influenced by both leader traits and behaviours, it is not clear from this research how leader traits and behaviours complement or supplement each other, and how they can be incorporated into a more integrative model of leadership effectiveness. Recently DeRue et al. (2011) attempted to address this lack of theoretical integration by developing an integrative trait-behavioural model of leadership effectiveness. The authors then examined the relative validity of leader traits (gender, intelligence, personality) and behaviours (transformational-transactional, initiating structure-consideration) across 4 leadership effectiveness criteria (leader effectiveness, group performance, follower job satisfaction, satisfaction with leader). The results showed that, when integrated, leader traits and behaviours accounted for at least 31% of the variance in leadership effectiveness criteria (DeRue et al. 2011). The study also

showed that leader behaviours tended to explain more variance in leadership effectiveness than leader traits. The authors also posited the merit of a conceptual model where leader behaviours mediate the relationship between leader traits and effectiveness.

About the same time, the leadership field began to embrace the behavioural approach, with Stogdill (1948) advocating greater integration of situational factors into the trait approach. The call for greater consideration of situational factors was answered by the emergence of the contingency approach to leadership. Fiedler (1964) developed the Least Preferred Coworker (LPC) Contingency Model, which emphasises the relationship between a leadership style and the situation in which leadership occurs. His approach aimed to match the most favourable 34 situations for leaders based on their characteristics. The aim of this model is to determine when certain leaders will become more effective. Similarly, House's (1971) Path-Goal Theory suggests that a leader's behaviour will influence followers' job satisfaction and effort depending on the situational characteristics. Hersey and Blanchard's (1972) Situational Theory also suggested that leaders should adapt their behaviour to match the situation and followers' maturity level. Vroom and Yetton (1973) endeavoured to create a model of seven leader decision-making styles (behaviours) which, depending on the nature of the problem (situation) and the characteristic of the people being led (followers), could identify a decision making style that a leader could apply in order to be more effective. Fiedler and Garcia (1987) examined a situational unfavourableness variable in the form of leaders' and followers' stress. Based on their investigation, they developed cognitive resource theory which speculates that under low stress, cognitive capabilities are positively correlated and experience is negatively correlated with performance. Conversely, when the situation is characterised by high stress, cognitive capabilities are negatively correlated and experience is positively correlated with performance.

Somewhat inadvertently, the aforementioned perspectives within the contingency approach signalled a new direction for leadership research predicated on the cognitive revolution that was infiltrating psychological research more widely. Calder (1977), for instance, postulated that leadership is not directly observable because an observer's perceptions are based in part on attributions. In other words, leadership, from this viewpoint, is a process perceived by others and then labelled 'leadership' (Lord & Maher, 1990). Accordingly, there is always some degree of error or bias when attributing leadership effectiveness by followers based on their implicit notion of leadership; a perspective known as Implicit Leadership Theory (ILT; Lord and Maher, 1991). In support, early research on ILT showed that university students, exposed to the same experimental leadership conditions, interpreted leadership behaviours differently (Rush, Thomas, & Lord, 1977). Phillips and Lord (1981) attributed the findings of these differences to a cognitive categorisation process. The authors argue that because individuals have a pre-existing mental structure when behaviour is observed, they organise the information according to their own categorisation process. Furthermore, perceptions of leadership are based on hierarchically organised categories, each corresponding to a prototype based on an individual's experiences (Lord, Foti, & DeVader, 1984). For example, military, political or religious leaders each represent a distinct prototypical category. For many years, a great deal of the work has focused on how implicit theories and prototypes influence the perceptions of leaders and followers, generally examining how it disadvantaged or biased them in view of others. Much research has also focused on what constitutes prototypicality in leadership and has shown that followers may be more drawn to leaders who are exemplars of groups they belong to or want to join. Early research conceptualised such prototypes as being relatively stable and applicable in many situations. However, increasing research has contested that view, arguing that prototypes are dynamic and can be applied and adapted based on the existing constraints or challenges being

confronted by leaders (Lord, Brown & Harvey; 2001). Research has examined how the match between an employee's implicit leader profile and their actual leader's characteristics influences outcomes, including the quality of LMX employee outcomes such as organisational commitment, job satisfaction and well-being (Epitropaki & Martin, 2005).

## **2.2. Leadership Research: The Current State of the Domain**

The previous section provided a brief summary of some of the key themes within the leadership literature, evaluating the origins and development of the field. In more than one hundred years of leadership research, the domain has been subject to several paradigm shifts and a voluminous body of knowledge has accumulated. Today, leadership research is still as popular as ever and a wide range of theories exist attempting to capture the various aspects that determine effective leadership. Based on their review of the exact literature, Day and Antonakis (2012) highlight six major current theoretical perspectives for studying leadership: individual differences, contingency, transformational and charismatic, relational, follower-centric, and shared. Currently, the two most popular theories for investigating leadership are transformational leadership (TL) and LMX. TL and associated models, categorised under the heading of "Neo-charismatic" approaches, represent the single, most dominant leadership paradigm over the past decade. TL (Bass, 1985) built on the work of Burns (1978), House (1977) and argued that previous models of leadership were largely transactional in nature, focusing on the mutual satisfaction of transactional (i.e. social exchange) obligations. In a departure from these traditional approaches, TL posits that idealised and inspiring leader behaviours induce followers to go beyond their self-interests for that of the greater good. The Bass model has generated much of the research in this area (Antonakis & House, 2002) with meta-analytic studies corroborating the proposed effectiveness of charismatic-

transformational leadership research (DeRue et al. 2011; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996).

Given its position as the most popular theory of leadership, it would make sense for this thesis to examine TL as the focal theory under investigation. After all, the main aim of this thesis is to provide an initial test of the theoretical integration between leadership and attitudes. In other words, when choosing a leadership theory on which to develop a framework to test the propositions highlighted in chapter one, TL would seem an obvious choice. However, the focus of this thesis is not TL but rather the second most studied theory of leadership: LMX. The reasons for this choice are twofold and will be explained in detail below.

The first reason is based on the recent challenge to the TL theory by Van Knippenberg and Sitkin (2013), questioning its validity. The authors provided a detailed analysis of the construct and identified four major issues with theory and research in transformational leadership. They suggest, for example, that TL lacks a clear conceptual definition with different perspectives offering multi-dimensional conceptualisations without providing clarity about how these different dimensions combine to form charismatic–transformational leadership or how dimensions are selected for inclusion or exclusion. They also discuss the theory’s failure to clearly articulate an underlying causal model that explains how each dimension has a distinct influence on mediating processes and outcomes. Indeed, they suggest that TL suffers from an underdeveloped and overly inclusive causal model. Furthermore, Van Knippenberg and Sitkin (2013) suggest that the “causal model implied by empirical research is one in which all dimensions of charismatic –transformational leadership lead to all outcomes of interest, mediated by all mediators identified in research, and moderated by all moderators advanced by research.” (pg 15).

The second reason why this thesis examines LMX as its focal leadership theory is the nature of the construct and its applicability to be integrated with attitude theory. Not only is LMX a popular theory of leadership, it is one that is inherently less leader-centric in its approach. LMX suggests that leadership is a relationship between two people and is not a unidirectional but a reciprocal process. This is more in line with the contention of this thesis; that attitudes towards leadership represent a move away from a leader-centric approach, which assumes leadership measures accurately reflect leaders' behaviours, to a more follower-centric approach that characterises leadership perceptions as a property of both the follower and the leader (Thomas et al. 2013). Thus, given that LMX is less focused on the leader, it is an approach that is well suited to integration with attitude theory. Furthermore, as will be described in a later section, LMX is based largely on theory from social psychology. Social psychological theories are used as the explanatory basis for explaining both the development of leader-follower relationship and their effects on work outcomes. Additionally, theories from social psychology have frequently been evoked in order to provide additional insight into the dyadic relationship. Specifically, theories such as attachment theory and social comparisons have been utilised to help elucidate how LMX relationships develop and influence followers. Thus, given its social psychological nature, LMX is particularly well suited to integration with the social psychological literature related to attitudes. Such integration between social psychology and LMX will be discussed in a later section. First LMX will be introduced in greater detail.

### **2.3. LMX Theory and Gaps in the Literature**

As alluded to previously, the vast majority of research related to leadership focuses on the leader, be it leader traits, cognition or behaviour. An alternative approach focuses on the relationship between leaders and followers. This relationship-based approach to leadership

(e.g. LMX) currently represents one of the most popular approaches to understanding leadership (Thomas et al. 2013). LMX theory examines the relationship between the leader and follower (Cogliser & Schriesheim 2000), the central principle being that leaders develop different exchange relationships with their followers. The quality of such relationships determines the impact on important leader and member outcomes (Gerstner & Day 1997). Thus, effective leadership occurs when leaders and followers are able to develop high-quality relationships that result in mutual influence (Uhl-Bien 2006). This literature has evolved from focusing exclusively on the consequences of the LMX relationship to consider both antecedents and consequences.

LMX theory has evolved into one of the more insightful and useful approaches for examining the link between leadership processes and outcomes. Prominence is given to the idea that leaders adopt different styles when dealing with different members; a practice referred to as LMX differentiation (Liden, Erdogan, Wayne & Sparrowe, 2006). This relationship heterogeneity distinguishes LMX from more traditional leadership theories which tend to assume that leaders develop fairly similar relationships with all of the members that are working beneath them; known as an average leadership style approach (Dansereau, Graen & Haga, 1975). The LMX approach to leadership draws upon SET (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) and argues that (mutual) influence is stronger when it is derived through processes of social exchange as it engenders unspecified obligations between dyadic partners to repay favourable treatment (Henderson, Liden, Glibkowski & Chaudhry, 2009).

As LMX theory has developed, the key propositions have been supported by a vast amount of research, the majority of which has demonstrated positive associations between high quality LMX relationships and outcomes such as employee job satisfaction, commitment, organisational citizenship behaviour (OCB) and task performance (see meta-

analyses by Dulebohn et al., 2012; Gerstner & Day, 1997; Ilies et al. 2007; Martin et al., 2015; Rockstuhl et al., 2012). In fact, Gerstner and Day (1997) on the basis of their meta-analytic review, concluded that the relationship with one's supervisor acts as a lens through which the entire work experience is viewed. In order to accurately conceptualise the developmental trends within the LMX domain, Graen and Uhl-Bien (1995) employed a categorisation system which outlined four stages of LMX theory development, detailing how research has progressed since its inception. These stages are: the discovery of differential dyads, the focus on the LMX relationship and its outcomes, the description of dyadic partnership building and the examining of LMX at the group and network 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, Wayne & Stilwell, 1993; Martin, et al. 2010; Yukl, 2006).

Turning to theory and research from social psychology is one of the means that researchers have used in an attempt to address gaps in the LMX literature and further articulate the underlying process in the development of the relationship and how and when it influences outcomes. Applying attachment theory, for example, Richards and Hackett (2012) revealed that insecure forms of leader and follower attachment orientations (i.e. avoidance and anxiety) were negatively related to LMX quality. Other scholars examined the role of social comparisons (LMXSC) as a measure of a follower's perceived comparison of their LMX with others in the workgroup (better vs. worse than others; Vidyarthi et al. 2010). Furthermore, Thomas et al. (2013) argue that the concept of "relationship" has generally not been well articulated in the LMX literature and is often conceptualised simply in terms of

relationship quality between the leader and the follower or the social exchanges they engage in. In contrast, research in other disciplines can provide a more detailed exposition of the complex nature of relationships and how they form and develop. This thesis proposes that the integration of LMX with some of the theoretical concepts and methodologies developed within the attitudes literature can give new insights into the leader–follower relationship. In line with this view, the current research posits that one major deficit limiting our understanding of the leader-follower relationship results from the way in which the quality of the relationship is assessed.

Although current measures of LMX quality typically consider follower (and sometimes leader) perceptions regarding key exchanges in the relationship, these measures are largely unidimensional, separately assessing positive and negative aspects of the relationship. Such measures are usually averaged to indicate an overall quality of the relationships. In attitude terminology, such a measure can be referred to as the valence of one attitude, indicating a degree of favour or disfavour with the attitude object. While knowledge of the overall LMX quality is clearly useful, attitude theory demonstrates that our attitude towards anything is made of an array of thoughts and feelings, with valence representing just one component. Further information related to this view of attitudes may be found in later sections.

#### **2.4. Integration between LMX and Social Psychology**

As described above, one way in which scholars have attempted to extend and develop LMX theory is through integration with wider theories of social psychology. In fact, this method is not unique to LMX as scholars have frequently applied social psychological and social cognitive theories to the study of leadership more generally (e.g. Balkundi, & Kilduff, 2006, Epitropaki & Martin, 2005; Hogg et al. 2005). As discussed in the previous chapter,

leadership has long been a focus of research for social psychology and the wider social sciences (e.g. Eagly, Karau, & Makhijani, 1995; Fiedler & House, 1994; Graumann & Moscovici, 1986; Hollander, 1985; Stogdill, 1974; Yukl, 1981). Such theoretical integrations have greatly enhanced the understanding of leadership and what constitutes its effectiveness. Such work therefore provides a clear precedent for the aims of this thesis which is attempting to contribute to such understanding through bringing together leadership and attitude theories. Ethical leadership, for instance, is examined through the lens of Social Learning Theory, positing that leaders influence the ethical conduct of followers via role-modelling. Role-modelling is based on the seminal work of Bandura (1986) which suggests that almost anything that can be learned via direct experience can also be learned by vicarious experience, by observing others' behaviour and its consequences.

According to this theory, employees can learn what behaviour is expected, rewarded, and punished via role modelling. Ethical leadership focuses on the modelling of ethical behaviour and suggests that leaders are an important and likely source of such modelling (Brown, Treviño & Harrison, 2005). The social identity model of leadership e.g. (Hogg, 2001, b; Hogg & van Knippenberg, 2003), is another leadership theory that is built on social psychological foundations. Based on the social identity perspective (e.g. Hogg & Abrams, 1988; Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), the key idea is that the cognitive basis of leadership endorsement and thus the ability of a leader to be effective, is transformed as a function of how strongly group members identify with the group as an important aspect of their self-concept.

Social cognitive and social psychological theories have also been central to the development of LMX theory. Indeed, LMX is grounded in SET, one of the most influential conceptual paradigms for understanding workplace behaviour (Cropanzano & Mitchell, 2005). The formulation of SET can be traced back to the 1920s (e.g. Malinowski, 1922;

Mauss, 1925), informing such fields as anthropology (e.g. Firth, 1967; Sahlins, 1972) and is a mainstay of social psychology (e.g. Gouldner, 1960; Homans, 1958; Thibault & Kelley, 1959) and sociology (e.g. Blau, 1964). According to Graen and Uhl Bien's (1995) Leadership-Making model, the development of LMX relationships begins with individuals who are strangers and engage in initial testing behaviours (limited social exchanges). Resulting from these initial exchanges, some relationships advance to the acquaintance stage with higher quality social exchanges. Of these dyads, some are able to advance even further to partnerships. LMX highlights that exchanges are not limited to material transactions but may also involve exchanges of psychological benefits or favours (e.g. loyalty, trust, respect, care, consideration). This social exchange is theorised to make up the LMX process. As well as being underpinned by SET, our understanding of LMX has also been greatly enhanced by the application of other key social psychological theories. A good example of this is the integration of LMX and social comparison theory. Vidyarthi et al. (2009) integrated principles of LMX differentiation with social comparison theory, showing that subjective ratings by individuals of their LMX compared with the LMXs of coworkers (termed LMX social comparison, or LMXSC) explain unique and meaningful variance in outcomes beyond LMX. This integration was intuitive, due to the fact that LMX theory suggests that leaders form differentiated relationships with employees. For instance, leaders develop low quality transactional relationships with some followers while simultaneously establishing high quality exchange relationships with others (Dansereau et al. 1975). In fact, it seems like this type of differentiation is almost an inherent part of LMXs within a work group (Henderson et al. 2009). A large body of literature, based on social comparison theory, demonstrates that one's standing relative to referents influences attitudes, aspirations and behaviours (Wood, 1989). Integrating this seminal theory to the study of

LMX, Vidyarthi et al. (2009) were able to explain how LMX differentiation influences employee outcomes.

Taking a social cognitive approach to the study of the leader–follower relationship has provided further benefits to the understanding of LMX. The extension of attachment theory (e.g. Bowlby, 1973) to the context of leader–follower relationships, though in its infancy, has considerable potential for integration. As discussed previously, Richards and Hackett (2012) recently demonstrated that insecure forms of leader and follower attachment orientations (i.e. avoidance and anxiety) were negatively related to LMX quality. Understanding the structure of attachment models is valuable and has great potential for further research because it has implications for both information processing and important outcomes in close relationships (Thomas et al. 2013). A large amount of research has demonstrated that the nature of attachment working models lead to attachment-related behaviour (e.g. conflict resolution style and communication), which subsequently influences relationship quality (Fletcher, Overall, & Friesen, 2006; Simpson & Rholes, 2012).

Recently, Rosen, Harris, & Kacmar (2011) moved away from using SET to explain the relationship between LMX and job performance, drawing instead on uncertainty management theory to understand the relationship between employee perceptions of the context (e.g. organisation politics and justice) and performance. As a social psychological theory, uncertainty management suggests that individuals seek predictability in their environment (Lind & van den Bos, 2002). When it is missing, they look to the social context to supply information they can use to effectively deal with uncertainty. In their study, Rosen et al. (2011) contended that low quality LMX employees tend to experience more uncertainty and question their job security more than high quality LMX employees as these members do not enjoy the same access to information, support or resources from their supervisor as those with high quality relationships. In this study an uncertainty management framework was used

as opposed to SET. The aforementioned theoretical and empirical investigations clearly highlight the benefit of crossfertilising the study of leadership with wider social psychological theories; and LMX theory is no exception. Many seminal social psychological theories have helped shed light on how leaders can be effective and when they are more or less likely to be influential. However, surprisingly, attitude theory has had very little impact on our understanding of either LMX or leadership more generally. While leadership is sometimes conceived as an attitude, the complexities associated with attitudes have not been considered. This thesis aims to address this lack of theoretical integration. First the literature related to attitudes will be reviewed.

## **2.5. Attitudes and Attitude Strength**

Attitudes are evaluative in that they reflect the degree to which our response to an object is positive and approach-oriented versus negative and avoidance-oriented (Eaton et al. 2008). Indeed, it is generally assumed that people behave in accordance with their attitudes. However research investigating the link between attitude and behaviour has often produced mixed results, with mean correlations between attitudes and actual behaviours ranging from -.20 (Leippe & Elkin, 1987) to .73 (Fazio & Williams, 1986). As a result of this large variability in attitude-behaviour consistency, much research has been focused on attempting to understand the specific conditions that make attitudes more accurate predictors of behaviours. Early research which aimed to address this issue focused on the level of specificity with which attitudes and behaviour were measured. Ajzen & Fishbein (1977) argued that attitudes can predict behaviour, provided that both are assessed at the same level of generality. The authors posited that there needs to be a high degree of compatibility (or correspondence) between them. They argue that much of the earlier

research suffered from either trying to predict specific behaviours from general attitudes, or vice versa, and that this accounts for the generally low correlations.

Another approach has been to develop more detailed and integrated models of behaviour, including additional determinants of behaviour such as social norms and intentions (Olson & Zanna, 1993). Arguably the most widely researched of these models is the Theory of Planned Behaviour (TPB; Ajzen, 1988, 1991). This model doesn't rely solely on attitudes as determinants of behaviour by emphasising that human behaviours are also governed by social pressures and a sense of control. The model also suggests that actual behaviour is ultimately determined by the intentions of individuals; their explicit plans or motivations to commit a specific act. A meta-analysis conducted by Armitage and Conner (2001) demonstrated, based on 185 independent studies, that the TPB model accounted for 27% and 39% of the variance in behaviour and intention, respectively. However, there is also evidence to show the relative importance of attitude, subjective norms and perceived behavioural control in the prediction of intention varies across behaviours and situations. Such findings suggest that sometimes attitudes may be strong predictors of behavioural intentions (and ultimately behaviour) whereas at other times they may not. One way scholars have explained this inconsistency is by recognising that "the underlying attitudes of two individuals with identical scale scores may differ in many other respects that may affect the relation of the attitude score to the behaviour manifested by those individuals" (Fazio & Zanna, 1978a, p. 399). More importantly, attitude research has developed an increasingly complex understanding of the factors that predict when attitudes will predict subsequent behaviour and when they won't.

There are a number of qualities of the attitude that, independent of the valence (direction) of the attitude, reflect the strength of an attitude and consequently determine the extent to which the attitude influences subsequent behaviour (Fazio, 1986). These qualities are known as *attitude strength* and have garnered a large body of research, producing an increasingly

complex understanding of the factors that predict when attitudes will predict subsequent behaviour and when they won't (see review by Petty & Krosnick, 2014). Attitude strength represents the extent to which an attitude is stable, resistant to change, impacts information processing and guides behaviour (e.g. Petty, & Krosnick, 2014). Several concepts, such as accessibility, ambivalence and importance relate to the broader concept of attitude strength. Table 1 provides a brief description of the facets of attitude strength. Such factors have had very little influence on research and theory in Organisational Behaviour in general and none, on the investigation of LMX. It can therefore be concluded that when developing attitude measures in organisational research scholars has not embraced the myriad applications of the rich attitude literature.

**Table 1:** Definitions and Measurement of the Different Facets of Attitude Strength

Attitude Dimension	Definition	Measurement
Extremity	Attitudes are typically conceptualised as lying on a continuum from very positive through neutral to very negative. Attitudes that lie toward either end of this continuum are considered to be extreme (see Abelson, 1995).	Extremity has usually been derived from reports of attitudes on rating scales
Intensity	Attitude intensity reflects the strength of the emotional reaction provoked by the attitude object in an individual.	It has typically been measured using self-reports of the intensity of feelings a person says he or she has about the object (e.g. Cantril, 1946; Stouffer et al. 1950).
Certainty	Attitude certainty reflects the degree of confidence a person attaches to an attitude.	Attitude certainty is typically measured by asking how certain or how confident people are about their attitudes or how sure they are

		that their attitudes are valid, accurate or correct.
Importance	Attitude importance denotes the level of psychological significance a person ascribes to an attitude (Boninger, Krosnick, Berent, & Fabrigar, 1995).	Because this construct is, by definition, a perception of an attitude, it has typically been measured by asking a person to indicate how personally important an object is to him or her or the extent to which he or she personally cares about the object.
Knowledge	Knowledge refers to the amount of information about an attitude object that is stored in memory, ranging in volume from very large to none at all (Wood, 1982; Wood, Rhodes, & Biek, 1995).	Knowledge has been measured in several ways. For example, by asking people to rate their subjective sense of the amount of knowledge they have about an object. Other ways include asking people to list everything they know about an attitude object and directly assessing the quantity of information generated.
Accessibility	Attitude accessibility signifies how easily or quickly an attitude can be retrieved from memory (Fazio, 1995). The speed of retrieval is presumed to indicate the strength of the link in memory between the representation of the object and the evaluation of it.	Accessibility has typically been measured by measuring the length of time it takes a person to report his or her attitude. Sometimes, accessibility is measured by asking people to subjectively rate how quickly their attitudes come to mind when they think of the object.
Direct Experience	Direct experience refers to the degree to which one has participated in behavioural activities related to an object and the amount of direct contact one has had with it.	This construct is often measured using self-reports of such behavioural experiences (Regan & Fazio, 1977; Schuman & Presser, 1981).

Ambivalence	Ambivalence refers to the degree to which a person holds both favourable and unfavourable evaluations of an attitude object. Thus, ambivalence is the degree of evaluative conflict in a person's responses to an object, with maximum ambivalence occurring when favorable and unfavorable responses are both strong (Thompson, Zanna, & Griffin, 1995).	Ambivalence has often been measured by asking people to report the degree to which they subjectively experience feelings of internal conflict. Ambivalence has also been measured by asking people to separately rate the extent of their positive and negative evaluations of an object, which can then be used to calculate ambivalence (Priester & Petty, 1996; Thompson et al. 1995).
Structural Consistency	Structural consistency refers to the extent to which attitude-relevant information has the same evaluative implications (e.g. all positive or all negative) versus contradictory evaluative implications (e.g. both positive and negative; see Chaiken, Pomerantz, & Giner-Sorolla, 1995). Thus it shares many similarities with ambivalence. Three types of structural consistency have been studied: <i>affective-cognitive consistency</i> : the evaluative conflict between one's beliefs about the attitude object and one's emotional reactions to the object; <i>evaluative-cognitive consistency</i> : the evaluative conflict between the global evaluation of the object and beliefs about the object; and <i>evaluative-affective consistency</i> : evaluative conflict between the global evaluation of the object and	Usually, the three elements have been measured separately and then integrated mathematically to yield quantitative assessments of each type of consistency.

	affective responses to the object.	
Latitudes of Rejection and Non-commitment	Operationally defined as the width of an individual's latitude of rejection (Sherif & Hovland, 1961). The more attitudinal positions an individual finds objectionable, the better the individual's attitude is, and therefore the more likely it is that the individual will behave consistently with that attitude.	Typically measured by giving subjects statements ranging across an attitude dimension and asking them to indicate which are acceptable or unacceptable (Sherif, Sherif, & Nebergall, 1965).
Interest in Relevant Information	Interest refers to the extent to which an individual is motivated to gather information about an attitude object.	Typically measured by self-reports of interest in or, attention to, such information (Bradburn & Caplovitz, 1965; Kendall, 1954).
Elaboration	Some attitudes are formed as a consequence of detailed, highly elaborative thought processes. Others are formed through more superficial, cue-driven processes that require relatively little thought (see Petty, Haugtvedt, & Smith, 1995).	The extent of prior elaboration about an attitude object has been gauged by asking people how much they have thought about the object previously.

As alluded to above, research has revealed numerous dimensions that determine the strength of an attitude (Visser, Bizer & Krosnick, 2006). As can be seen in Table 1, some of the features related to attitude strength reflect inherently subjective perceptions of the attitude-holder. For instance, *attitude importance* is a personal judgement of significance, reflecting the degree to which a person cares deeply about the attitude and is motivated to protect it, to express it and to be faithful to it in action. Similarly, *attitude certainty* is another

subjective judgement, related to a subjective sense of the justification for holding a particular attitude. Attitude strength dimensions that rely on subjective judgement are well suited to measurement in surveys (see Krosnick & Abelson, 1992) and thus can be easily incorporated into research designs that are frequently used to examine leadership. However, including measures of attitude strength in surveys is extremely rare given the regularity with which attitudes are measured (Krosnick & Abelson, 1992). Such measures are almost non-existent in I/O psychology, with a few exceptions (Schleicher et al. 2004; Schleicher et al. 2015; Ziegler, et al. 2012).

In separate lines of research, each of these attitude strength dimensions has been shown to differentiate strong from weak attitudes. For example, the more certain people are of their attitudes, the more these attitudes tend to guide behaviour (e.g. Fazio & Zanna, 1978a), resist persuasion (e.g. Babad et al. 1987; Bassili, 1996; Krosnick & Abelson, 1992; Swann et al. 1988; Wu & Shaffer, 1987) and persist over time, even when they are not under direct attack (e.g. Bassili, 1996). Similar sorts of relations have been documented between other strength-related attitudes (Krosnick & Petty, 2014).

Given the similarity among the various attitude strength dimensions, in terms of their correlations with the four defining features of attitude strength, an important question that emerges is whether the dimensions actually reflect a single underlying construct. That is, although the various dimensions are clearly conceptually and operationally distinct from one another, they may all have a small set of common causes. If this were the case, it would suggest that the various dimensions would all be highly correlated with one another. This would pose an obvious problem in the proposed study as it suggests that investigating attitude strength in relation to LMX would provide no real unique effects due to the problem of multicollinearity. In addressing this concern it is first relevant to mention that the components of attitude strength have been defined and operationalised in ways that make them clearly

distinct from one another (Krosnick, Boninger, Chuang, Berent & Camot, 1993). Some are attributes of the attitude itself (e.g. extremity and latitudes of rejection and non-commitment), some describe features of accompanying cognitive structures (e.g. knowledge and affective-cognitive consistency), some constitute subjective states or self-perceptions (e.g. importance and certainty), some involve links in memory (e.g. accessibility) and some involve behaviour summaries (e.g. direct behavioural experience). Thus, they seem on the surface to be likely to have unique origins and to contribute uniquely to an attitude's strength.

The conceptual differences, highlighted above, between the various attitude strength dimensions add face validity to the argument that they are distinct concepts. Stronger evidence for this distinction comes from the numerous studies that have investigated relations among the various dimensions. Such studies have consistently documented only low-to-moderate positive associations (Krosnick et al. 1993). For example, importance has been shown to be only modestly correlated with intensity (Raden, 1983), certainty (Pelham, 1991) and knowledge (Wood, 1982). Certainty is also moderately correlated with intensity (Allport & Hartman, 1925; McCroskey, Prichard, & Arnold, 1967), knowledge (Pelham, 1991), direct experience (Fazio & Zanna, 1978b; Smith & Swinyard, 1983) and latitudes of rejection and non-commitment (Fazio & Zanna, 1978b). Attitude extremity is weakly positively correlated with importance (Brent & Granberg, 1982; Krosnick, 1988a), accessibility (Fazio & Williams, 1986; Judd, Drake, Downing, & Krosnick, 1991) and direct experience (Smith & Swinyard, 1983; Wilson, Hodges, & Pollack, 1991). Interestingly, affective-cognitive consistency appears not to be associated at all with attitude importance (Chaiken & Baldwin, 1981; Norman, 1975), knowledge (Chaiken & Yates, 1985), certainty (Fazio & Zanna, 1978b; Norman, 1975), extremity (Wilson et al. 1991), latitudes of rejection and non-commitment (Fazio & Zanna, 1978b), accessibility (Chaiken & Yates, 1985; Wilson et al. 1991), and direct experience (Fazio & Zanna, 1978b; Wilson et al. 1991). In fact these sorts

of findings are often reported in studies which investigate multiple indexes of attitude strength (see Krosnick et al. 1993 for review).

The research mentioned above suggests that the dimensions of attitude strength are distinct; however, a variety of research designs were used in the various studies. For example, many utilised an experimental design where the various dimensions of attitude strength were directly manipulated (e.g. Fazio & Zanna, 1978b; Wood, 1982). While this evidence should not be dismissed, the findings may not be directly matched in field studies using more simple survey methodology. In experimental research the emphasis is upon central tendencies, not variation. Divergences of means resulting from different experimental conditions are thought to reflect the direct causal effects of the independent variable upon the dependent variable. This technique often allows researchers to tease out greater variance between the variables of interest. Of greater relevance to the proposed research is evidence that the inter-correlations between the attitude strength dimensions are not found to be too large in field studies which rely on survey methods. As highlighted earlier, the scales used in LMX research can be considered to indicate the valence and extremity of respondents' attitudes towards the LMX relationship. Therefore it is important that field studies in the attitude literature show a clear distinction between these dimensions of an attitude and the other strength-related factors. To reiterate, if this is not the case, then the proposed research would be likely to suffer from multicollinearity between LMX (attitude valence) and attitude strength indices (ambivalence and importance).

A number of studies have investigated various attitude strength dimensions and reported the correlations between the variables. Research conducted by Krosnick et al. (1993) was explicitly focused on investigating the inter-correlations between all the dimensions of attitude strength. The authors conducted a series of studies using confirmatory factor analysis. The findings demonstrated that although some of the attitude strength dimensions were

strongly related, most were not and it was concluded that a multifactor model was required to account for the intercorrelations. On the basis of their findings, the authors posited that it seems most sensible to think of all of the dimensions as distinct rather than as multiple manifestations of a smaller set of underlying attributes. A more recent study examined attitudes and attitude strength constructs in the context of the 2004 U.S. presidential election (Farc & Sagarin, 2009). Using survey methods, the authors assessed respondents' attitudes (i.e. valence) and attitude strength towards two political candidates (Bush and Kerry). As with the previous study, the authors reported modest correlations between the various dimensions. Correlations between attitude valence and the various strength indices (certainty, importance, ambivalence, value relevance, knowledge, information dissemination, extremity and information seeking) ranged from .08 to .40. The correlation between attitude valence and attitude importance was moderate (.27) and low between attitude valence and attitude ambivalence (.08).

Based on the research findings mentioned above, it appears that it is possible to measure separate dimensions that make up an attitude in survey research. This suggests that the proposed research will be able to investigate the influence of attitudes towards LMX as well as various components related to the strength of this attitude. The focus of this thesis is the integration of two facets of attitude strength, ambivalence and importance, with LMX theory. The rationale for choosing these two dimensions of attitude strength will be discussed in the next chapter. First, both facets will be introduced below.

## **2.6. Attitude Ambivalence**

When measuring attitudes, researchers typically only allow for the possibility that a respondent's evaluative position falls on a scale ranging from the maximally positive to the maximally negative. In other words, attitudes are generally presumed to be unidimensional in

nature. This view is implicit, for example, in the instructions that typically introduce such scales, whereby participants are requested to put a single response to each item. Such instruction is predicated on the assumption that a given object is evaluated either positively or negatively and not simultaneously as both positive and negative. Some researchers however take a very different view regarding the fundamental structure of attitudes. Attitude ambivalence researchers contend that respondents can simultaneously hold a positive as well as a negative evaluation of a given attitude object (e.g. Breckler, 1994; Hass, Katz, Rizzo, Bailey, & Eisenstadt, 1991; Kaplan, 1972; Thompson et al. 1995; see also Cacioppo & Berntson, 1994). For example, a certain respondent may evaluate smoking positively because she sees it as a something that is sociable but she may also evaluate it negatively because she regards it having negative effects on her health. Kaplan (1972) argues that ambivalent attitudes such as in the example above are more adequately conceptualised as two independent attitude components instead of one singular attitude.

Research demonstrates that ambivalent and non ambivalent attitudes may have quite different psychological and behavioural consequences. For example, Sparks, Hedderley, and Shepherd (1992) argued that ambivalent attitudes are based upon discrepant evaluations and therefore should lead to a decrease in attitude-intention consistency; an argument for which they found empirical support. Conner, Sparks, Povey, James, and Shepherd (1996) demonstrated, in a prospective design, that among subjects high in ambivalence toward various health behaviours, the correlation between the attitude toward these behaviours and the respective behaviours was lower than among subjects high in ambivalence. Indeed, a number of studies report that ambivalent attitudes are less predictive of both intentions and behaviour (e.g. Armitage, & Conner, 2000; Jonas et al. 2000b; Povey, Wellens, & Conner, 2001).

Unlike many of the other attitude strength dimensions, such as importance, ambivalence is not always examined as a moderator of the effect of one's attitude. Many studies have looked at the direct effects of ambivalent attitudes (e.g. Armitage & Conner, 2000; Cornil, Ordabayeva, Kaiser, Weber, & Chandon, 2014; Jonas, Diehl & Brömer, 1997). Furthermore, the concept of ambivalence is one that has permeated beyond the domain of attitudes. As a widely experienced psychological state, it has become an increasingly popular concept, used in hypotheses concerning a variety of social phenomena (Baek, 2010).

Ambivalence has sparked interest within organisational psychology/management research (e.g. Fong 2006; Piderit, 2000; Pratt, 2000; Vadera & Pratt, 2013). Studies have begun to examine ambivalence in the context of organisational change (Piderit, 2000), corporate crime (Vadera & Pratt, 2013), decision making (Oreg & Sverdlik, 2011; Plambeck & Weber, 2009), and organisational commitment (Pratt & Rosa, 2002). Findings, from such studies paint a somewhat inconsistent picture regarding the effects of ambivalence in the workplace.

Sometimes ambivalence leads to detrimental outcomes such as behavioral vacillation and paralysis (e.g. Pratt & Doucet 2000), and lower sales performance (Pratt, 2000), whereas other studies suggest it can lead positive outcomes, such as creativity (Fong, 2006), trust (Pratt & Dirks 2006), and more systematic information processing (Plambeck & Weber 2009). Some scholars have argued that ambivalence may inhibit oversimplifications, enhance mindfulness (Fiol & O'Connor, 2003; Weick et al., 1999), and encourage wider participation in problem solving (Piderit, 2000). Others have warned, that the cognitive complexity associated with ambivalence can get in the way of swift responses to an event (Levinthal & Rerup, 2006; Porac & Rosa, 1996).

In their review, Ashforth et al. (2014) posited that these types of inconsistent effects merited greater exploration of how, when and why people respond to ambivalence in organisations. While this is a logical conclusion, the current research argues that it is equally

important to examine the nature of ambivalence as well as focusing on the response. In other words, the central premise of this thesis is that one can develop ambivalent thoughts and feelings about any organisation object, but that mixed evaluations about certain attitude objects will have differential causes and consequences. In particular, it is suggested that ambivalence in the contexts of an interpersonal relationship will be unique from ambivalence felt towards other organisation entities.

As noted by Ferris et al. (2009) work relationships form the very foundation of organizations and “the contemporary embodiment of how most work gets accomplished” (pg, 1379). Research has consistently highlighted the importance of relationships in determining key employee outcomes (e.g. Dulebohn, Bommer, Liden, Brouer and Ferris, 2012; Gerstner and Day, 1997; Ilies, Nahgang and Morgeson, 2007; Martin, Thomas, Guillaume, Lee, and Epitropaki, 2015). Relationships are a distinctive aspect of organisational life for several reasons. In particular, close personal relationships are defined by *interdependence* between the partners (e.g. Kelley et al., 1983). Thus, unlike many organisational phenomenon, relationships involve mutuality; mutual benefit, mutual influence, mutual expectation, and mutual understanding (Roberts, 2007). For instance, a fundamental motivation to form and maintain close relationships is that of self-expansion because in a close relationship, the other’s resources, skills, networks, abilities, insights, perspectives, identities, and the like become to some extent one’s own (Aron, Aron, Tudor, & Nelson, 1991; Lewandowski & Ackerman, 2006). Thus, workplace relationships can be instrumental to achieving one’s goals. The interdependence and mutuality that are indicative of relationships creates a unique context for the development of ambivalence.

Of particular relevance to the study of LMX is the not insignificant literature suggesting that ambivalence within interpersonal relationships is both prevalent and detrimental to individuals (e.g. Uchino, Holt-Lunstad, Uno, & Flinders, 2001; Uchino, Smith,

& Berg, 2014). One of the earliest accounts of relational ambivalence can be seen in Freud's reflections on the coexistence of seemingly contradictory intimate sentiments, such as love and hate and affection and hostility (Freud, 1918). Such accounts are consistent with more recent findings showing that individuals in abusive relationships may simultaneously hold strong feelings of love, as well as hate, for each other (Petty & Cacioppo, 1996). Such findings lead to the question of whether such ambivalent relationships are also found in leader-follower relationships and, if so, what effect they have on employee outcomes. This thesis will attempt to provide an answer.

## **2.7. Attitude Importance**

Attitude ambivalence, as described above, is concerned with the underlying structure of one's attitude towards a given entity. Attitude importance refers to the extent to which a person is concerned with and cares about a particular attitude that he or she holds (Krosnick, 1989; Krosnick, 1990; Krosnick et al. 1993). In other words, it can be defined as the 'subjective sense of psychological significance' a person attaches to his or her attitude (Boninger, Krosnick, & Berent, (1995b, pg 62). Krosnick and Abelson (1992) make the point that a number of attitude strength dimensions lend themselves to be included in surveys because they are a) the easiest to measure in this format b) they are the easiest to comprehend conceptually and c) they are the most extensively validated as measures of attitude strength. Attitude importance was one of the five dimensions highlighted by the authors as being most suited for inclusion in survey research. Research which has employed this type of research design and included attitude importance, demonstrated the role that attitude importance plays in moderating the impact of an attitude on information processing and behaviour (e.g Celuch, Black & Warthan, 2009; Holbrook, Berent, Krosnick, Visser, & Boninger, 2005; Zuwerink &

Devine, 1996; Verbeke & Viaene, 1999). For example, a study by Visser, Krosnick and Simmons (2003) demonstrated that attitude importance moderated the link between political attitudes and actual voting behaviour.

Why do people care deeply about some attitudes and attach no distinct significance to others? Seminal research conducted by Krech and Crutchfield (1948) provides perhaps the earliest explanation of what determines when attitudes become important. The authors posited that importance is determined by the extent to which attitudes are “functionally related to the more central characteristics of the individual’s personality structure ... and when they are based upon needs for identification with other people and groups’ (pg. 164). These two suppositions were supported many years later by empirical research (Boninger, Krosnick, & Berent, 1995a) with the addition of a third antecedent. According to Boninger et al. (1995a), the three determinants of attitude importance are (i) the degree to which the attitude object impacts on one’s material self-interest, (ii) identification with reference groups or individuals who consider the attitude important and (iii) the relevance of the attitude or attitude object for one’s personal values. As will be discussed in later sections, these antecedents are especially relevant to the study of LMX. Most importantly, considering attitude importance in the context of leader-follower relationships can serve to better determine which leadership attitudes most accurately predict employee behaviours.

Both importance and ambivalence, as facets of attitude strength, can be used to help elucidate when and how LMX influences employee behaviour. Specific hypotheses will be developed in the next chapter. Before that, the end of this chapter will focus on how leadership and attitudes have been incorporated to date.

## **2.8. Leadership and Attitudes**

In the introduction to this thesis it was highlighted that the proposed integration between LMX and attitude theory was a novel approach to the investigation of the leader-follower relationship. While this is indeed the case, leadership, more generally, has been viewed from an attitude perspective in the I/O psychology literature. For example, research has considered the notion of satisfaction with supervision, a facet of the JDI (Smith et al. 1969) representing followers' overall satisfaction with their leader. While this perception is very clearly considered to be an attitude (part of one of the most commonly used measures of job satisfaction), it represents a very general attitude towards leadership. Furthermore, the majority of research which has used the JDI focuses on using aggregated scores combining the five facets to provide an overall score of job satisfaction. Studies that have provided separate indices of satisfaction in their findings demonstrate that satisfaction with supervision often exhibits a larger relationship with some employee behaviours, such as OCB and supervisory rated performance, compared to the other job satisfaction dimensions (see meta-analysis by Kinicki et al. 2002). More recent studies that examine satisfaction with supervision consider it as an outcome variable (e.g. Fernando, & Hulse-Killacky, 2005; Noelker, Ejaz, Menne & Jones, 2006; Lee, 2008; Mardanov, Sterrett, & Baker, 2007; Noelker, Ejaz, & Menne, 2009).

Focusing on this very general measure of leadership attitude provides limited explanatory value when trying to understand how leadership influences outcomes as it is not clear what aspect of the leadership is having an effect. While there is a literature examining evaluations of the leader (such as supervision satisfaction), this has primarily relied on global evaluations rather than exploring the nuances associated with various aspects of an attitude. Such an approach is at odds with current thinking about leadership which examines different styles of leadership and leader behaviours and the effects these have on employees. Leadership styles such as authentic, transformational, relational, ethical and servant are

commonly studied as a way to understand the leadership process (Avolio et al. 2009). Indeed, the various aspects of leadership accounted for in organisation research demonstrate the complexities involved in leading individuals and groups and serve to highlight the limitations of considering followers' general attitude toward their leader as a somewhat simplistic approach.

Focusing on particular styles of leadership goes beyond a more general approach to measuring overall leadership satisfaction because such typologies are able to provide theoretical frameworks capable of elucidating how particular styles of leadership have an influence. For instance, as discussed in the previous chapter, LMX theory has a unique focus on the leader-follower relationship and explains effects through a SET framework (e.g. Graen & Uhl-Bien, 1995). SET provides a clear framework that explains how the relationship influences outcomes through the reciprocation of favourable treatment. Indeed, a voluminous body of research has demonstrated that the higher the quality of the LMX relationship, the more employees feel an obligation to reciprocate by providing excellent performance and positive attitudes (Hu & Liden, 2013). Ethical leadership, similarly, has a clear framework explaining how ethical leaders influence followers. Grounded in social learning theory (Bandura, 1977, 1986), ethical leadership posits that ethical leaders "teach" ethical conduct to employees through their own behaviour. Ethical leaders are relevant role models because they occupy powerful and visible positions in organisational hierarchies that allow them to capture their followers' attention (Brown et al. 2005).

As highlighted above, contemporary leadership research is focused on developing an understanding of the process through which leaders influence, and are influenced by, their followers. Measuring satisfaction with supervision does not provide much insight into how this translates into outcomes. However, as intimated in previous sections, the central tenet of

this thesis is that the majority of leadership measures can be considered to be attitudinal. More often than not, scholars are interested in perceptions of leadership; these typically consist of followers' evaluations of their leader. Thus, leadership perceptions refer to the way in which followers (and leaders) make subjective judgements about aspects of the leader and leadership process (such as leader satisfaction, leader effectiveness, leadership style, leader-follower relationship quality, etc.). In this way, leadership perceptions represent an attitude towards some aspect of leadership. Given this assertion, what are the benefits of viewing leadership perceptions as attitudes? As already highlighted, attitude theory is based on a vast and longstanding literature that, amongst other things, can tell us a lot about when and how attitudes predict behaviour. The aim of this thesis is to apply this knowledge to the understanding of LMX and how this relationship influences key outcomes.

The following chapter will explore the integration between LMX and attitude strength in further detail and will elucidate how attitude importance and attitude ambivalence can be utilised in order to further our understanding of the LMX construct.

## **CHAPTER 3: THEORETICAL INTEGRATION BETWEEN ATTITUDES, ATTITUDE STRENGTH AND LMX**

### **3.0. Chapter Overview**

The previous chapter provided a review of literature related to LMX and attitude strength. Thus far this thesis has intimated that combining theory and research related to attitude strength with LMX can enhance our understanding of the leader-follower relationship and its influence on performance outcomes. This chapter will explicitly explain how these two, seemingly disparate, literatures can be synthesized and specific hypotheses will be developed. Before these hypotheses are expounded, this chapter will first provide a discussion related to how and why LMX can be cross-fertilised with attitudes. Following this, the concepts of attitude ambivalence and importance will be introduced with relation to LMX.

### **3.1. LMX and Performance Outcomes**

The literature examining LMX is both large and increasing. There is now considerable agreement that high LMX can lead to a wide range of positive outcomes for the

follower, the leader and the organisation (e.g. Dulebohn et al. 2012; Gerstner & Day, 1997; Ilies et al. 2007). As has been highlighted in previous sections, the focus on this thesis is the relationship between LMX and follower job performance. Performance is a central factor for organisational effectiveness and therefore it is not surprising that it is one of the most common constructs examined in organisational psychology. For example, Sonnentag and Frese (2002) report that for 20 years prior to their publication, performance had featured in over half of all meta-analyses reported in 12 major work and organisational psychology journals. However, while performance has been the focus of substantial research attention, until the early 1990s there had been a lack of precision about the structure and content of the concept (Campbell, 1990). The last 20 years, however, have witnessed growing consensus over what performance should encapsulate. Central to definitions of performance is that they comprise behaviours that contribute towards organisational goals. Given this, the specific behaviours that contribute to performance can vary considerably between jobs. With this complexity in mind, Campbell, McCloy, Oppler, and Sager (1993) define performance in a straightforward way by suggesting it is "...what the organisation hires one to do, and do well" (p. 40). Similar simplicity is striven for in Rotundo and Sackett's (2002) definition of performance as "...those actions and behaviours that are under control of the individual and contribute to the goals of the organisation" (p. 66).

While the content of performance is often simplified in order to be applied to a broad range of contexts, definitions of performance increasingly stress that it is a multi-dimensional concept (e.g. Kaplan, Bradley, Luchman, & Haynes, 2009; Rotundo & Sackett, 2002; Viswesvaran & Ones, 2002). Indeed, numerous methods of conceptualising the components of performance (e.g. Campbell, 1990, Murphy, 1989) have been proposed but most of these can be captured within Rotundo and Sackett's (2002) three component model of performance: task, citizenship and counterproductive performance (CPB). According to this

conceptualisation, task (or in-role) performance refers to “... a group of behaviours involved in the completion of tasks... includes behaviours that contribute to the production of a good or the provision of a service” (p. 67). This facet of performance includes behaviour related to the quantity and quality of work output and the accomplishment of work duties and responsibilities associated with the job. Rotundo and Sackett (2002) define citizenship (or extra-role) performance as a “... group of activities that are not necessarily task-related but that contribute to the organisation in a positive way” (p. 67). Examples of activities that can be considered to belong to this category are altruistic behaviour, helping and supporting peers, making good suggestions, spreading goodwill and defending and supporting organisational objectives. Conversely, the authors describe CPB as “... a group of behaviours that detract from the goals of the organisation... [and] as voluntary behaviour that harms the well-being of the organisation” (p.69). There is an array of behaviours which fall into this category including, property, production and political deviance, personal aggression, theft and drug misuse. It also covers negative behaviours that harm others in the . CPB has some similarities to OCB but focuses on negative rather than positive employee behaviours.

Rotundo and Sackett (2002) found that the three aforementioned components were highly predictive of overall work performance. Given that performance is considered to be multi-faceted, it is important that, when considering the effects of LMX, the various components are measured as outcomes. Much research has focused on task or citizenship performance, with fewer studies examining the effects on CPB. This is exemplified in a recent meta-analysis investigating the LMX-performance link which included 146 studies that had investigated the LMX-task performance link, 97 that had focused on the LMX-citizenship performance link and only 19 investigating the LMX-CPB link (Martin et al. 2015). Drawing upon the multi-dimensional model of performance (Rotundo & Sackett,

2002), this thesis will look at the relationship between LMX, task performance, OCB and CPB.

### **3.2. LMX and Attitude Strength**

The previous chapter discussed the theoretical link between leadership perceptions and attitudes. In order to justify the conceptualisation of LMX as an attitude towards the relationship with one's leader, it is first vital to fully understand how LMX is usually conceptualised and measured. The measurement of LMX involves asking participants to rate their evaluation of the LMX relationship. Followers, for example, evaluate their leader-member relationship by providing their perceptions of the relationship which are then collapsed across measurement dimensions to provide an overall evaluation of LMX on a scale of low to high quality (Martin, et al. 2010). However, when it comes to the measurement of LMX, a degree of controversy exists surrounding the various measures and the dimensionality of the construct. The LMX scale has been the subject of continual redefinition over the years and scales have varied and, in some cases, have been altogether different from the original formulation (Keller & Dansereau, 1995). Furthermore, questions about the dimensional nature of LMX have also been raised and have had important implications for its measurement. Perhaps the fiercest debate regarding measure exists between the two most common measures; the LMX-7 and LMX-MDM instruments.

The most common measurement of LMX is the LMX-7 (Graen & Uhl-Bien, 1995) instrument (see Table 2) which, as the name suggests, consists of seven items and has been shown to be an appropriate and reliable measure of the construct (Graen & Uhl-Bien, 1995). This is most frequently used by LMX researchers, as demonstrated in a recent meta-analysis (Martin, et al. 2015), which showed that of the 146 studies investigating the LMX-task performance link, 86 used the LMX-7 measure. The LMX-MDM (Liden & Maslyn, 1998) is

a scale designed to measure LMX in a multidimensional way, with twelve items tapping into four dimensions of LMX quality, labelled: *contribution* (e.g. performing work beyond what is specified in the job description), *affect* (e.g. friendship and liking), *loyalty* (e.g. loyalty and mutual obligation) and *professional respect* (e.g. respect for professional capabilities).

Despite the conceptual differences between these two scales, results suggest that they are highly correlated (e.g. Bernerth, Armenakis, feild, Giles & Walker, 2007; Greguras & Ford, 2006). There also appears to be a tendency for researchers to use a composite score on the LMX-MDM scale rather than breaking it down into its four components. Finally meta-analytic results clearly show that both LMX-7 and LMX-MDM produce almost identical correlations with key outcomes such as task performance and extra-role performance (Martin, et al. 2015). This is perhaps unsurprising when considering Graen and Uhl-Bien's (1995) conclusion, after reviewing the LMX literature, that "the LMX construct has multiple dimensions, but these dimensions are so highly correlated that they can be tapped into with the single measure of LMX" (p. 237).

**Table 2:** Member Version of LMX 7 (Graen & Uhl-Bien, 1995)

- 
1. Do you know where you stand with your leader, do you usually know how satisfied your leader is with what you do?
  2. How well does your leader understand your job problems and needs?
  3. How well does your leader recognize your potential?
  4. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your leader would use his/her power to help you solve problems in your work?
  5. Again, regardless of the amount of formal authority your leader has, what are the chances that he/she would "bail you out," at his/her expense?
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6. I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so?

7. How would you characterize your working relationship with your leader?

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Given the aforementioned similarities between the LMX-7 and LMX-MDM the current research will focus on the most used measure; LMX-7. Looking at Table 2, above, it is easy to argue that this scale corresponds to an attitude towards the leader-follower relationship. The questions ask respondents to make evaluative judgements about the relationship, which is akin to attitude measurement (Maio & Haddock, 2009). Indeed recently, Bosco, Aguinis, Singh, Field and Pierce (2014) intimated that LMX represented a job attitude related to people. However, it is important to provide a very clear rationale for this assertion. As noted by Judge and Kammeyer-Mueller (2012), many variables measured in I/O psychology have similarities to attitudes because they involve cognitive judgements and may lead to behavioural responses. However, the authors posit that such constructs should not be considered attitudes if they do not include an explicit appraisal or evaluation of the object in question. Looking closely at the LMX-7 items (Table 2), it is clear that the scale includes an explicit appraisal of the relationship. For instance, item 1 asks followers whether they know where they stand with their leader. This is asking respondents to appraise their leader and provide a relevant evaluation. In fact, it is very similar to an item that is part of the satisfaction with supervision subscale of the JDI (Balzer et al. 1997) which asks whether the supervisor tells the follower where he/she stands.

Attitudes refer to an overall evaluation of an object (Eagly & Chaiken, 1993). But what are these evaluation based on? Why do people develop strong thoughts and feelings about places, politicians, sports teams, films and, of interest to this thesis, leaders? Research shows such favourability arises because of individuals' beliefs, feelings and past experiences regarding such objects. It has been suggested that evaluative responses can be classified into

affective, cognitive or behavioural components of attitude or a combination thereof (e.g. Allport, 1935; Harding, Kutner, Proshansky, & Chein, 1954; Katz & Stotland, 1959; Rosenberg & Hovland, 1960; Zanna & Rempel, 1984, 1988). Olson and Zanna (1993) summarise the tripartite model of attitudes by stating that most attitude researchers agree that “...evaluation constitutes a central, perhaps predominant, aspect of attitudes” and “... affective cognitive and behavioural antecedents of attitudes can be distinguished” (p. 119). As highlighted by Maio and Haddock (2009), an attitude can be defined as an overall evaluation of an object that is based on cognitive (thoughts and beliefs), affective (emotional reaction) and behavioural information (how one behaves in response to an attitude object).

In particular, attitude scholars have often focused on the distinction between the affective and cognitive components of attitudes (e.g. Eagly & Chaiken, 1993, 1995; Rosenberg, 1960; Rosenberg & Hovland, 1960; Triandis, 1971). The affective element of an attitude relates to one’s general level of positive or negative feeling towards the target, whereas the cognitive component refers to an individual’s beliefs or thoughts towards the attitude target. These two components are often interdependent and reciprocally related (Eagly, Mladinic, & Otto, 1994; Weiss, 2002; Weiss et al. 1999) and research demonstrates that affective and cognitive attitudes may have different effects on behaviour (e.g. Lawton, Conner, & McEachan, 2009). The distinction between affective and cognitive attitudes has also been made in relation to job satisfaction (Fisher, 2000; Schleicher et al. 2004; Weiss, 2002).

It has been posited that job satisfaction measures may differ in the extent to which they tap more of an affective satisfaction or a cognitive satisfaction. Affective satisfaction can be described as satisfaction that is based on a positive emotional evaluation of the job (or job related facets). In other words, affective satisfaction focuses on whether the job arouses a good mood and positive feelings (e.g. Moorman, 1993). On the other hand, cognitive

satisfaction refers to a more logical and rational evaluation of the job. Such satisfaction is an evaluation that does not rely on emotional judgements but instead evaluates conditions, opportunities, or outcomes (Moorman, 1993). While measures of job satisfaction may not explicitly be termed affective or cognitive, scholars have made clear distinctions between commonly used scales. Schleicher et al. (2004), for example, contend that the Overall Job Satisfaction Scale (OJS; Brayfield & Rothe, 1951) corresponds to an affective attitude with the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967) representing a cognitive attitude. The authors argue that like all attitude measures, both the OJS and the MSQ contain some degree of affect and some degree of cognition but demonstrate that the OJS is more affectively based than the MSQ and the MSQ is more cognitively based than the OJS. Similar classifications were made in previous research (e.g. Moorman, 1993).

The study by Moorman (1993) showed support for the relative importance of cognition-based over affect-based satisfaction, with cognitive based satisfaction showing greater relations with OCB. The study by Schleicher et al. (2004) however showed little difference between affective and cognitive based satisfaction in relation to performance. However, this study demonstrated the importance of considering attitude strength when investigating the relationship between attitudes and behaviour. The authors focused on the notion of consistency between the affective and cognitive components of attitudes. Affective-cognitive consistency (ACC) is a facet of attitude strength and the results showed that ACC was a significant moderator of the job satisfaction–job performance relationship, with those employees higher in ACC showing a significantly larger correlation between job satisfaction and performance than those lower in ACC (Schleicher et al. 2004).

In general, people who have positive attitudes toward an attitude object tend to hold feelings, beliefs and behaviours that are aligned in their favourability toward the object,

whereas people with negative attitudes regarding an attitude object should have feelings, beliefs and behaviours that express disfavour toward the object (see Eagly & Chaiken, 1993). However, people's feelings, beliefs and behaviours toward an object can sometimes differ in their valence (direction) and have implications for their overall attitude (Haddock & Maio, 2004). Furthermore, empirical studies demonstrate that some attitudes are uniquely related to feelings about the attitude object, whereas other attitudes are uniquely related to beliefs about the attitude object.

Such findings have shown low to moderate correlations between the different components of attitudes towards a large variety of issues. For example, feelings are particularly strong indicators of attitudes toward blood donation (Breckler & Wiggins, 1989), smoking (Trafimow & Sheeran, 1998), condom use (de Wit, Victoir, & Van den Bergh, 1997), deaf people (Kiger, 1997), politicians (Glaser & Salovey, 1998) and alcohol and marijuana use in frequent users of these drugs (Simons & Carey, 1998). Conversely, cognitions are strong predictors of reactions to persuasive messages (Breckler & Wiggins, 1991) and attitudes towards a variety of controversial social issues (e.g. capital punishment, legalised abortion and nuclear weapons; Breckler & Wiggins, 1989; Crites, Fabrigar, & Petty, 1994). These findings were confirmed in a recent meta-analysis in which, for cognitive behaviours (e.g. voting) cognitive evaluations were more central to the attitude concept than affective beliefs and vice versa for more affective behaviours (e.g. condom use; Glasman & Albarracin, 2006). There is also evidence to show that attitude-relevant feelings and beliefs are also clustered separately in memory (Trafimow & Sheeran, 1998).

Given the potential differences between cognitive and affective attitudes it is important to determine whether the measurement of LMX is related to an affective or cognitive attitude or some combination thereof. Since this thesis proposes that LMX perceptions can be conceptualised as attitudes, then it is important to examine the extent to

which the measure of LMX covers the three components of attitudes we described above (i.e. affect, cognition and behaviour). Looking at Table 2 it seems clear that the most commonly used measure of LMX, LMX-7, can be considered to represent a cognitive attitude towards the relationship. The scale clearly asked participants to make judgements about various aspects of their leader-follower relationship. These judgements are based on a logical and rational evaluation of the relationship rather than any emotional judgements or feelings. The third item, for example (How well does your leader recognize your potential?), is asking participants to think about their leader and whether or not he/she recognises their potential. This question is asking for a judgement based on observation and experience. While such a judgement will be subjective and influenced by feelings and emotions, it is nonetheless asking for a cognitive evaluation. Typically, affective attitudes require participants to indicate their feelings about an attitude object such as whether it is enjoyable (Lawton et al. 2009), pleasing (Arvola et al, 2008) or unpleasant (Brayfield et al. 1951). Therefore the LMX-7, which represents the most commonly used method of assessing LMX, is a cognitive attitude relating to the leader-follower relationship.

This judgement regarding LMX-7 as a cognitive attitude is supported in recent research (Lee et al. 2015), in which the authors conducted a content analysis of the items in a number of popular leadership measures. Each item of the various scales was rated as being predominantly affectively-, cognitively- or behaviourally-orientated. LMX-7 was rated as being predominantly cognitive in nature. 6 of the items were rated as reflecting a cognitive attitude, with 1 item viewed as being behavioural in nature. The behavioural item (I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so?) was so rated because it asks the respondee to evaluate how they would act in a given situation. Overall, it is the contention of this thesis that LMX-7 represents a follower's cognitive attitude towards their leader-follower relationship. This

thesis will examine how two dimensions of attitude strength will influence the LMX-Performance link. The first of these dimensions is attitude ambivalence and will be discussed below.

### **3.3. LMX Ambivalence**

*“I hate and yet love. You may wonder how I manage it. I don't know, but feel it happen, and am in torment”* Latin poet Catullus (84 –54 BC)

The above quote eloquently illustrates the experience of ambivalence and the potential negative emotions it can elicit. As discussed in previous sections, within attitude theory, attitudinal ambivalence has received a great deal of attention. Individuals experience ambivalence when positive and negative attitudes toward a single target coexist (Otnes, Lowrey, & Shrum, 1997; Priester & Petty, 1996). The current research focuses on investigating a novel concept: LMX ambivalence. This is defined as a leader-follower relationship that is subjectively evaluated as being made up of *both* positive and negative cognitions. This ambivalent cognition is distinct from the concept of emotional ambivalence which refers to the simultaneous experience of positive and negative emotions (e.g. Fong 2006). Indeed, the literature has distinguished between several different forms of ambivalence. One, often called subjective or felt ambivalence, represents the psychological experience of conflict, mixed feelings and indecision in the evaluation of an object (Priester & Petty, 1996). Subjective ambivalence is generally assessed using direct self-report measures asking people to report on these experiences (e.g. conflict) about the objective. Another type of ambivalence is often called objective ambivalence or potential ambivalence, and is generally assessed using a method developed by Kaplan (1972) in which a standard attitude scale (e.g. a bi-polar scale ranging from extremely negative to extremely positive) is split into two separate scales, each independently assessing the magnitude of one valence. If a

person endorses both positive and negative reactions towards the same object, then at least some objective ambivalence is present.

As alluded to above, from the attitudes literature two ways to measure attitude ambivalence has developed. One approach relies on items expressing the subjective feeling of ambivalence (e.g., “*I find myself ‘torn’ between two sides of the issue of...*”; Thompson, et al., 1995). The other approach employs formula-based measures that integrate the positive and the negative evaluations (e.g., Thompson et al., 1995). Therefore, the latter approach can be described as treating ambivalence as a structural property of an attitude, whereas the former views it as a meta-attitudinal aspect, based on an individual’s judgements of their own attitude. Although research suggests that both kinds of measures yield highly similar empirical results (e.g., Priester & Petty, 1996; Thompson, et al. 1995), subjective measures are conceptually distinct from objective measures of ambivalence because they tap directly into the amount of conflict or ambivalence experienced by participants, as opposed to simply identifying co-activation of opposing emotions (Fong, 2006). Therefore, in keeping with the conceptualisation of LMX ambivalence used in this, LMX ambivalence will be measured as subjective experiences of ambivalence.

Ambivalence is a notion that has received a great deal of research attention in the organisational and social sciences (Baek, 2010) and has sparked interest within organisational psychology/management research (e.g. Fong 2006; Piderit, 2000; Pratt, 2000; Vadera & Pratt, 2013). Of particular interest to the current research is the fact that ambivalence has also been applied to the study of close interpersonal relationships. Indeed, social psychologists have long studied ambivalence in interpersonal relationships (such as marriage and friendships) and found that individuals are capable of (i) consciously attending to positive and negative aspects of another entity and (ii) maintaining the state of ambivalence over the long term, even for many years (Thompson & Holmes, 1996). Such findings are particularly pertinent to

the study of LMX as it highlights the fact that close relationships, in a variety of contexts, are often characterised by ambivalent feelings. For example, research shows that it is common for individuals to construe their relationships as having a mix of positive and negative evaluations (Uchino et al. 2001). Such perceptions exist within all types of relationships such as: spouses (e.g. Uchino et al. 2014), parent-sibling relationships (e.g. Willson, Shuey, Elder, & Wickrama, 2006), friends (e.g. Holt-Lunstad, Uchino, Smith, & Hicks, 2007) and co-workers (Pratt & Doucet, 2000).

Ambivalence is also prominent in adult attachment theory; Bowlby (1982) saw ambivalence in relationships as dysfunctional and contrasted ambivalent attachments with secure and thus healthier attachments between children and parents and between adults. Mikulincer, Shaver, Bar-On and Ein-Dor (2010) reported a series of studies focusing on attachment-anxious individuals and the role of ambivalence in their relational tendencies. The authors highlighted that individuals with this type of attachment style wish to be close to their relationship partners but also feared rejection. A series of studies demonstrated that attachment-anxious individuals exhibited strong attitudinal ambivalence towards a romantic partner (assessed by both explicit and implicit measures). Such individuals also exhibited strong motivational ambivalence regarding closeness (Mikulincer et al. 2010). In the work arena, Pratt's (2000) research demonstrates that employees can hold ambivalent feelings toward their organisation and their co-workers. For instance, they report that call centre workers expressed ambivalence toward authority because managers place conflicting demands on workers but are also sources of emotional support (Pratt, 2000; Pratt & Doucet, 2000). A recent study focused on the ambivalent dynamics of loyalty in mentorships within the workplace (Oglensky, 2008). This study demonstrated that mentorship loyalty is an ambivalent source of tension in the relationship.

Furthermore, the nature of the relationship between leaders and their members is likely to lead to high levels of ambivalence for several reasons.

Firstly, ambivalence is likely to be predicted by familiarity because the more familiar an actor is with an object, the richer the store of information and the greater the probability of having encountered the object's multiple facets and imperfections (Ashforth et al. 2014). As Brooks and Highhouse (2006, p. 105) put it, "Familiarity breeds ambivalence." In the organisational context, Oglensky (2008) demonstrates that even robust mentor-protégé relationships are inherently ambivalent.

Secondly, leaders must perform complex roles that make relationship development with followers difficult. For example, leaders will almost certainly lead a group of employees and as such have to try to develop and maintain multiple relationships. This will place considerable constraints on leaders and require them to share important resources amongst group members. Findings from the interpersonal relationships literature suggest that dyadic ambivalence increases under conditions of dependence. Research focusing on familial relationships shows, for example, that such dependence may increase the obligations felt by family members to meet the needs of a parent or a child. These conditions may involve a reduction in choice or agency and an increase in obligatory commitments that produce repelling efforts and restrict an individual's ability to exit the situation (Firth, Hubert, and Forge 1970; Hirschman 1970; Smelser 1998). Additionally, Oglensky (2008) demonstrated that the loyalty associated with mentorships is a source of ambivalence and tension in the relationship. Data from indepth interviews showed that the mentoring relationship that is rooted in a protective, devoted, affectionate side of loyalty can also compel conformity, suppress dissent and curb professional growth. Furthermore, the ambivalence stirred up by loyalty issues manifests itself in everyday, ordinary interactions. Similarly, LMX is often characterised by dependence and loyalty as leaders may be vital for career progression and

hold valuable resources. Indeed, loyalty has been conceived as one of the key dimensions of the leader-member relationship (e.g. Dienesch & Liden, 1986; Liden and Maslyn, 1998).

Thirdly, leaders typically have to fulfil multiple organisational roles including a supervisor, subordinate, co-worker and friend. Leaders will often be responsible for both rewarding and punishing subordinates and will likely have a say in who is promoted. Pratt and colleagues' research demonstrated that call centre workers expressed ambivalence towards authority because managers place conflicting demands on workers but are also sources of emotional support (Pratt, 2000; Pratt & Doucet, 2000). As described by Larsen, McGraw and Cacioppo (2001), managers must deal with emotionally complex situations whereby they must often celebrate a success, while still recognising that the company could have done better or mourn a failure, while emphasising that things could have been worse. Leaders must often deal with inherent conflicts between work-related and friend roles, including norms of impartiality vs. favoritism, evaluation vs. acceptance and confidentiality vs. openness. Such complexity creates situations that are likely to give rise to high levels of relational ambivalence between leaders and their subordinates.

### **3.3.1. LMX Ambivalence as an Independent Variable**

In previous sections, when the concept of attitudinal ambivalence was introduced, it was suggested that it is a construct that differs from many of the other attitude strength dimensions. Whereas importance and other dimensions, such as certainty and intensity, represent meta-attitudinal evaluations regarding the qualities of an attitude, ambivalence reflects the underlying structure of an attitude. The relatedness of ambivalence with the structure of attitudes is supported by a recent study which utilised functional magnetic resonance imaging (fMRI) in order to understand the role of cognitive and social-affective processes in the experience of ambivalence and coping with its negative consequences

(Nohlen, van Harreveld, Rotteveel, Lelieveld & Crone, 2013) . The findings showed that specific areas of the brain are associated with the experience of ambivalence. Indeed, ambivalence has emerged as an area of research, in its own right, that has been able to shed light on the structural properties of attitudes (Ajzen, 2001). Researchers have regularly argued, and provided supporting data for, an indifference-ambivalence attitudinal dimension that assumes that attitudes are based on separate positive and negative components (e.g. Breckler, 1994; Kaplan, 1972; Katz, Wackenhut, & Hass, 1986; Thompson et al. 1995; Zanna & Thompson, 1991).

Several studies have demonstrated that ambivalence has direct effects on information processing that is not in line with attitude strength theory. Weak attitudes are defined as being less resistant to persuasion, less predictive of behaviour, less stable and having less impact on information processing (Petty & Krosnick, 1995). Ambivalent attitudes are typically seen as weak attitudes because, for example, they are typically less predictive of behaviour (e.g. Armitage & Conner, 2000). However, research has also demonstrated that ambivalent attitudes often have powerful effects on information processing; findings that are not aligned with attitude strength theory. For example, research has shown that ambivalent attitude holders use more effort and deliberation in processing information (Brömer, 1998; Jonas et al., 1997; Maio, Bell, & Esses, 1996). Van Harreveld, Van der Pligt, De Vries, Wenneker, and Verhue (2004) also found that ambivalent participants tended to select more attributes as being important to their evaluation of the attitude object and take longer to integrate their attributes into their evaluation. It is suggested that ambivalence leads to greater systematic processing of information; a comprehensive effort to analyse and understand information (Nordgren et al. 2005). As ambivalence reflects the underlying structure of an attitude and has powerful effects on information processing, it has often been investigated as an independent variable, with researchers investigating the direct effects on intentions and

behaviour. Two studies, for example, reported the effects of ambivalent attitudes on behavioural intentions. Sparks, Conner, James, Shepherd and Povey (2001) showed the direct negative effect of ambivalence and the intention to consume meat. Additionally, Povey et al. (2001) found ambivalence to be a significant predictor of intention to eat meat, after controlling for participants' general attitude. A more recent study by Olsen, Wilcox and Olsson (2005) investigated the direct effects of attitudinal ambivalence towards Norwegian seafood, customer satisfaction and loyalty (a behavioural measure of purchasing history). The findings indicated a negative relationship between ambivalence and both satisfaction and loyalty.

As well as the aforementioned studies, other research has directly manipulated the experience of ambivalence and examined the effects. Such studies demonstrate that manipulating the experience of ambivalence leads, for example, to the experience of negative effect (e.g. Nordgren et al. 2005). Another study, conducted by Jonas et al. (1997), experimentally manipulated ambivalence by providing participants with either evaluatively inconsistent or consistent information about a consumer product. The results demonstrated that ambivalence led to weaker behavioural intentions towards buying the product. As mentioned previously, a whole host of research has demonstrated the direct effects of having ambivalent interpersonal relationship on outcomes related to well-being (e.g. Uchino et al. 2001; Uchino et al. 2014). Holt-Lunstad et al. (2003) showed, for example, that interactions ambivalent network members (characterised by both positive and negative feelings) were associated with the highest levels of recorded blood pressure compared with positive, negative and indifferent network ties. Similarly, Uchino et al. (2004) demonstrated that the number of ambivalent ties an individual had in their social network was an independent predictor of the levels of reported psychological distress when controlling for the number of aversive ties.

The findings discussed in this section thus far, highlight that ambivalence is a unique dimension of attitude strength that represents the fundamental structure of an attitude. This structure represents the number of positive and negative evaluations that an individual holds about an attitude object. This underlying structure will clearly influence the overall evaluation of that attitude object. Generally speaking, the greater the ratio of positive to negative evaluations will determine the overall positivity of an attitude. However, as demonstrated in many studies (e.g. Krosnick et al. 1993), ambivalence and valence are distinct dimensions. The experience of ambivalence clearly has powerful effects above and beyond the overall valence of one's attitude. Furthermore, there is clear evidence that relational ambivalence has direct negative effects on well-being. Taken together, such findings suggest that the investigation of the direct effects of LMX ambivalence above and beyond the overall LMX relational quality is warranted. Focusing on this direct effect allows for greater attention to be paid to the distinct effects of LMX ambivalence and, in particular, on the mechanism that might explain how this type of relationship influences behavioural (performance) outcomes.

This approach is similar to the one taken by researchers examining the unique effect of LMX differentiation above and beyond overall LMX quality. Central to LMX theory is the notion that leaders differentiate among their followers. This differentiation tends to vary across work groups such that, in some groups, there is a high level of differentiation where leaders forms high quality exchanges with some, but low quality exchanges with others. In other groups, leaders maintain relatively similar relationships across group members. Scholars have focused much attention on the the implications of this differentiation for individuals and groups. In order to understand the effects of LMX differentiation, researchers control for the effects of overall quality (e.g. Liden et al. 2006). A study by Hooper and Martin (2008), for example, investigated whether perceptions of LMX variability (the extent to which LMX relationships are perceived to vary within a team) affected employee

wellbeing outcomes beyond the effects of personal LMX quality. The results indicated that perception of LMX variability was negatively related to employee job satisfaction and wellbeing and that these results were found to be above and beyond the effects of LMX quality. In a similar vein, the current research aims to investigate the direct effects of LMX ambivalence on performance outcomes, above and beyond overall LMX quality.

### **3.4. LMX Ambivalence and Negative Affect**

To date, LMX theory has almost exclusively been explored in the context of SET (Blau, 1964); the basic premise being that a supervisor develops a unique relationship with each follower (e.g. Graen & Uhl-Bien, 1995) which is negotiated over time as a result of exchanges between leaders and members. A high-quality relationship is characterised by positive reciprocal exchanges between leader and follower (Blau, 1964; Kelley & Thibaut, 1978). These exchanges involve a series of interactions that generate obligations (Emerson, 1976) and this leads to reciprocation of behaviour. The theory also suggests that the mutual reciprocation that symbolises high-quality LMX relationships results in increased affective attachment between leaders and followers (Liden & Maslyn, 1998; Maslyn & Uhl-Bien, 2001). However, despite the examination of affective attachment, there has been little investigation related to the effects of LMX on more transitory emotional states, despite widespread beliefs that supervisors are a key source of moods at work.

Leadership theorists have suggested that supervisors can elicit strong emotional responses in their followers with abusive supervisors, for example, expected to elicit frustration, anxiety and anger (Tepper, 2000). Recently, Glasø, & Einarsen (2006) demonstrated that leader-follower relationships are related to both positive and negative moods, emotions and emotion-laden judgements. In their study they showed that a wide

range of affective states were experienced by followers after interacting with their leaders. However, despite the assumption that leadership will elicit employee emotional states, there is a paucity of research examining the mediating effect of employee emotional states (e.g. moods) between leadership and employee outcomes. One exception is a study by Tsai, Chen, & Cheng (2009) showing that transformational leadership both directly influenced employee task performance and OCB, and had an indirect effect through employee positive moods. The current research aims to understand the effects of LMX on outcomes through followers' emotional responses. Specifically, it is suggested that LMX ambivalence will create feelings of negative affect in followers. The rationale for this is described below.

Ambivalence, in essence, involves cognitive inconsistency; a mixture of positive and negative thoughts. This inconsistency can be viewed in the context of a long history of research that demonstrates people's preference for cognitive consistency. Whether the focus of the conflict is between attitudes and behaviour (Festinger, 1957), attitudes and beliefs (Rosenberg, 1968) or between discrepant attitudes (Tesser & Conlee, 1975), studies point to a consistency-seeking motivation. Indeed, several theories in social psychology focus on this preference for evaluative consistency. Two seminal examples are balance theory (Heider, 1946) and cognitive dissonance theory (Festinger, 1957). Such theories posit that cognitive inconsistency is an aversive state that people are motivated to reduce. Festinger's (1957) theory of cognitive dissonance postulates that inconsistent cognitions elicit an aversive state of arousal (i.e. dissonance) which in turn produces a desire to reduce the underlying inconsistency and maintain a state of consonance. Although Festinger (1957) preferred the term dissonance over inconsistency, it seems useful to distinguish between the inconsistency of cognitive elements and the aversive feeling of dissonance that is assumed to arise from inconsistent cognitive elements (see Gawronski, Peters, & Strack, 2008). The affective consequences of (in)consistency are further assumed to depend on the nature of people's

goals, not on (in)consistency per se. Specifically, consistency should elicit positive feelings when it validates a desired belief but negative feelings, when it validates an undesired belief. Conversely, inconsistency is assumed to elicit negative feelings when it invalidates a desired belief but positive feelings, when it invalidates an undesired belief.

Social psychological research supports the notion that ambivalence can produce such negative emotions (e.g. Jonas et al. 1997; Maio, Bell, & Esses, 1996; Newby-Clark, McGregor, & Zanna, 2002; Nordgren, van Harreveld, & van der Pligt, 2006). Of particular interest to the current study are findings which demonstrate that cognitive ambivalence leads to aversive emotional reactions. A recent experimental study by Van Harreveld, Rutjens, Schneider, Nohlen and Keskinis (Study 2; 2014) demonstrated that induced cognitive ambivalence led to increased self-reported negative emotions in participants. Hass et al. (1992) examined the relation between ambivalence and negative affect in the context of racial conflict; finding that racial ambivalence was related to a more negative mood when ambivalent respondents were aware of their evaluative conflict. Similarly, Van Harreveld, Rutjens, Rotteveel, Nordgren and Van Der Pligt (2009) demonstrated that ambivalence was related to skin conductance levels. Specifically, the authors manipulated ambivalence cognitions and asked participants to write an essay about this topic. Results of the study showed that ambivalence was related to high levels of arousal when a choice had to be made (writing an essay for one side or the other), even before writing the essay.

The experience of negative affect is also central to explanations of the effects of relational ambivalence on health-related outcomes. Uchino et al. (2004), for example, suggest that ambivalent ties are stronger predictors of psychological distress than aversive ties because interactions with such network members may occur more frequently and such interaction may be a stronger source of interpersonal stress, heightened emotional responses or ruminative thinking. Similarly, Fingerma, Pitzer, Lefkowitz, Birditt, & Mroczek (2008)

suggest that the negative feelings in an ambivalent relationship may detract from the positive effects of support. The aforementioned research points to the fact that ambivalence creates negative emotions and this can be explained through the experience of cognitive inconsistency. Therefore, it is predicted that LMX ambivalence will be associated with higher levels of negative affectivity in followers.

The above reasoning suggests that LMX ambivalence will be related to the experience of negative affect. However, it is also important to note that overall LMX quality is also likely to be related to experience of affect (both positive and negative). A high quality LMX relationship should, for example, lead to experiences of positive affect (Glasø, & Einarsen 2006). It is the contention of this thesis that LMX ambivalence is a distinct facet of a followers' LMX attitude and, as such, should have independent effects above and beyond overall LMX quality. However, given the scarcity of work groups where all LMX relationships are of the same quality (e.g. Liden & Graen, 1980), it is likely that the more positive individuals perceive their LMXs to be, the less they will experience negative affect when interacting with their leader. Thus, in all analysis testing the effects of LMX ambivalence, overall LMX quality was controlled for in order to examine the unique contribution of LMX ambivalence beyond perceptions by individuals of their own LMX.

*Hypothesis 1:* LMX ambivalence will be positively associated with the experience of negative affect and this effect will be present when controlling for overall LMX quality.

### **3.5. Negative Affect and Job Performance**

As described above, LMX ambivalence is hypothesised to lead to increased negative affect. Affective processes, otherwise described as emotions, are vital in our understanding of

organisational behaviour. In their review of affect in organisations, Barsade and Gibson (2007) point to an “affective revolution” (pg. 36) that has taken place in the last 40 years in which academics and practitioners have begun to have a greater appreciation of the role that affect plays in organisational processes. Of interest to this thesis is the influence that affect has on employee performance. Many of the studies that have investigated the influence of affect on work-related performance have examined employees’ dispositional affect (see Staw and Cohen-Charash, 2005). A recent meta-analysis of such studies by Kaplan et al. (2009) demonstrated that negative affectivity had deleterious effects on task performance and OCBs and increased negative outcomes, including CPB and withdrawal behaviours.

Of interest to the current research is the negative affect caused by LMX ambivalence. Affective reactions to interactions with one’s leader do not represent dispositional levels of affectivity, but rather state-level affect caused from such interactions. Therefore, this thesis is interested in investigating negative affect, a subjective experience of distress (Watson & Tellegen, 1985), conceptualised as a state-like construct (e.g. Koy & Yeo, 2008). Scales such as the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) have been developed to measure how a person feels at a given point in time or over a given period of time. From a theoretical perspective, negative emotions are posited to have adverse effects on a variety of outcomes (Sarason, Sarason, & Pierce, 1990). Specifically, scholars have suggested that negative emotional states will impair performance and have typically utilised a resource allocation framework to explicate this link (e.g. Beal, Weiss, Barros, & MacDermid, 2005; Koy & Yeo, 2008).

Resource allocation theories have become the dominant frameworks for understanding the detrimental effects of negative emotional states (Koy & Yeo, 2008), highlighting that individuals have a limited amount of attentional resources available and that performance will be diminished if attentional resources are directed away from task

performance (Kanfer & Ackerman, 1989). Negative affect has been seen as a process that is likely to create off-task attentional demands (e.g. Koy & Yeo, 2008). Negative affect, for instance, has been associated with off-task activities such as self-focused attention (Mor & Winguist, 2002), rumination (Feldner, Leen-Feldner, Zvolensky, & Lejuez, 2006), appraisal and arousal (Beal et al. 2005). Moreover, attempts to regulate such negative affective experiences may serve to exacerbate the situation by further reducing attentional resources available for task performance (Beal et al. 2005). Such a theoretical account has been supported by empirical research demonstrating the deleterious effect of state negative affect on performance outcomes (e.g. Koy & Yeo, 2008; Gillet, Vallerand, Lafrenière, & Bureau, 2013; Wright, Cropanzano & Meyer, 2004). Thus it is predicted that the negative affect associated with LMX ambivalence will have a deleterious effect on task performance.

As well as task performance, resource allocation theories can explain the relationship between negative affect and OCB. The resource allocation framework has extended beyond the allocation of attention in performing job-related tasks (e.g. Hockey, 1997), to individual allocation of time towards OCB (Bergeron, 2007; Nielsen, Bachrach, Sundstrom, & Halfhill, 2012). The implication of such work is that like task performance, the performance of discretionary OCB requires the allocation of time and resources. In fact, some argue that the performance of OCB can be detrimental to task performance as it takes time away from the performance of such job-related activities (Nielsen et al. 2012). Helping behaviour, for instance, potentially requires the most time from at least one helper (Nielsen et al. 2012). For example, helping a new colleague learn a skill might require significant time allocation away from task work by both the helper and recipient.

Scholars have also argued that affect may influence both OCB and CPB. Weiss and Cropanzano (1996) suggested that some work behaviours are direct reactions to affective experiences in the workplace. This position is based on the social psychological findings that

show people in positive moods are more likely to help others than are those in negative or neutral moods (see Isen & Baron, 1991; Lee & Allen, 2002). In addition to helping others, George and Brief (1992) suggested that positive affective state can also lead to other discretionary behaviours such as protecting the organisation, making constructive suggestions, developing oneself and spreading goodwill. Research has supported such suggestions; a recent study, for example, used experience-sampling and showed positive affect and job satisfaction predicted reports of OCB over time (Ilies, Scott, & Judge, 2006). Spector and Fox (2002) developed a model suggesting that negative emotion will tend to increase the likelihood of CPB and positive emotion will increase the likelihood of OCB. This model was based on the premise that emotion can serve an adaptive function in response to environmental events (Plutchik, 1989; Spector & Fox, 2002). In other words, emotion is a functional instrument whereby ongoing activity is interrupted to force attention on crucial events that are relevant to physiological needs or that prompt alarming cognitive connections, such as threats to esteem. In such situations emotion can galvanise an individual into a response. Wallbott and Scherer (1989) detail five facets involved in the experience of emotion: evaluation of the situation, physiological changes, motor expression, motivation for action, and subjective feeling states. This model highlights that people are active agents in their own experiences. Because emotion can elicit action tendencies that can influence subsequent behaviour, in the case of strong negative emotion, for example, an individual might act impulsively, striking out at another person or object. Usually, however, such emotion will lead an individual to develop intentions to engage in certain behaviour at some point in time (Bies, Tripp, & Kramer, 1997).

Negative emotion tends to motivate behaviour that will reduce negative feelings and enhance positive feelings. Such behaviour has been termed problem-focused coping by Lazarus (1995). A large amount of research supports this proposition (e.g. Fox, Spector, &

Miles, 2001; Penney & Spector, 2005). For example, research by Bruk-Lee and Spector (2006) found that conflict with supervisors and co-workers led to increased incidents of self-reported CPB. This relationship was mediated by the experience of negative emotions and interestingly the results also showed that individuals varied the target of such negative behaviours depending on the sources of the conflict. Engaging in such behaviour might eliminate the immediate cause of a negative emotion, albeit in a destructive way and may even harm another individual or a group of individuals. Furthermore, if direct behaviour in response to negative emotions is not possible or desired, an individual might take actions designed to alter his or her emotions, without addressing the situational cause. This emotion-focused approach (Lazarus, 1995) might involve a number of actions such as, avoiding the situation or striking back secretly in retaliation. These examples of problem focus and emotional focus coping in response to negative emotions suggest how such emotions might lead an individual to engage in counterproductive workplace behaviour in response to negative emotions.

*Hypothesis 2:* Negative affect will be negatively associated with task performance.

*Hypothesis 3:* Negative affect will be negatively associated with OCB.

*Hypothesis 4:* Negative affect will be negatively associated with CPB.

### **3.6. LMX Ambivalence and Performance: The Mediating Role of Negative Affect**

The mediating role of negative affect between LMX ambivalence and task performance is premised on the notion that a LMX relationship characterised by ambivalent cognitions will elicit unpleasant feelings and negative emotions. Cognitive interpretation of environmental events provides the basis for the particular emotion experienced (Schachter & Singer, 1962). Such reactions are associated with the cognitive inconsistency that typifies

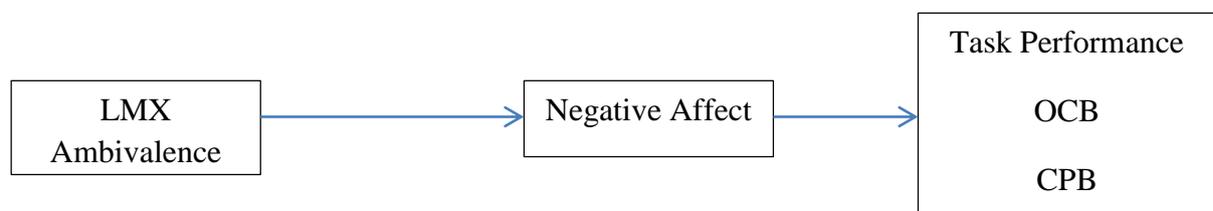
attitudinal ambivalence. It is the contention of the current research that when relational ambivalence is present, regardless of the overall quality of the leader-follower relationship, followers will experience negative affect. Research also shows that negative emotional states can have a deleterious effect on performance (e.g. Koy & Yeo, 2008) due to the distracting nature of the associated thoughts. Further, emotions can directly influence the engagement of discretionary behaviour at work; either positively, in the form of OCB or negatively, in the form of CPB (e.g. Spector & Fox, 2002). This thesis posits that high levels of LMX ambivalence will lead to increased negative affect and, in turn, to decreased job performance. Thus, based on theories of cognitive inconsistency and resource allocation theory it is argued that there is a negative relationship between LMX ambivalence and task performance, OCB and CPB, mediated by negative affect.

*Hypothesis 5:* Negative affect will mediate the relationship between LMX ambivalence and task performance.

*Hypothesis 6:* Negative affect will mediate the relationship between LMX ambivalence and OCB.

*Hypothesis 7:* Negative affect will mediate the relationship between LMX ambivalence and CPB.

**Figure 1:** LMX Ambivalence Conceptual Model: Demonstrating Predicted Linkages in Study 1.



### **3.7. LMX Ambivalence: Stability**

Many scholars have argued that ambivalence is accompanied by a motivation to reduce the associated unpleasant feeling (e.g. van Harreveld, et al. 2009). This is consistent with past theorising suggesting that people will devote attention to stimuli that can resolve conflict or dissonance (e.g. Berlyne, 1960; Festinger, 1957). ). Kruglanski and Shteynberg (2012) have argued that consistency is not a motivational force in itself, but the accidental outcome of epistemic processes that aim at validating propositions that are desired and invalidating propositions that are undesired. Ashforth et al. (2014) suggest that the more intense ambivalence becomes, the more the individual will be motivated to take action to reduce the discomfort. Research supports this view by showing that, for example, ambivalent respondents use more effort in processing information due to motivation to seek out and scrutinise any information that can resolve the tension (Brömer, 1998; Jonas et al. 1997; Maio, et al. 1996; Nordgren et al. 2006). The motivation to reduce the associated discomfort suggests that ambivalent attitudes should be relatively temporary rather than a reflection of stable evaluations. This clearly has implications for the current research as it suggests that ambivalence should only occur in newly formed leader-follower relationships and should not persist over time or be seen in established relationships. However, relational ambivalence represents a context where mixed thoughts seem to represent a more stable construct. Research on personal relationships (Thompson & Holmes, 1996) suggests that individuals can indefinitely maintain a state of ambivalence. One explanation for the potential stability of relational ambivalence comes from attachment theory.

One of the central postulations of Bowlby's (1973) attachment theory is that interactions with attachment figures are represented in internal working models of self and

others. Research suggests that attachment anxiety, a stable attachment style, is associated with relational ambivalence (Maio, Fincham, & Lycett, 2000; Mikulincer et al. 2010). As attachment styles are relatively stable over time (e.g. Zhang, & Labouvie-Vief, 2004) it follows that individuals with this attachment style may also maintain relational ambivalence over time. This view is supported by research suggesting that individuals with ambivalent attachment styles have relationships that are as enduring as those of securely attached individuals despite initially low levels of satisfaction (Kirkpatrick & Davis, 1994) and are just as likely as secure respondents to be in a relationship with the same partner identified four years earlier (Kirkpatrick & Hazan, 1994). It is therefore expected that LMX ambivalence will be a relatively stable construct that will exist in both newly formed and long standing LMX relationships. The current research tests its hypotheses on both newly formed leader-follower dyads (Study 1) and longer term dyads (Study 2). Furthermore the longitudinal nature of Study 1 permits the examination of the stability of LMX ambivalence over a period of 3 months. Based on the theory and research, described above, the following hypothesis can be forwarded:

*Hypothesis 8: LMX Ambivalence will be moderately stable over time.*

### **3.8. LMX Importance**

LMX importance can be defined as the extent to which a person perceives their leader-follower relationship as personally important. Attitude importance, as described in previous sections, refers to the extent to which a person is concerned with and cares about a particular attitude that he or she holds (Krosnick, 1989; Krosnick, 1990; Krosnick et al. 1993). In other words, it can be defined as the ‘subjective sense of psychological significance’ a person attaches to his or her attitude (Boninger et al. 1995b, pg 62). Krosnick and Abelson (1992) make the point that a number of attitude strength dimensions lend

themselves to be included in surveys because they are a) the easiest to measure in this format b) the easiest to comprehend conceptually and c) the most extensively validated as measures of attitude strength. Attitude importance was one of the five dimensions highlighted by the authors as being most suited for inclusion in survey research. Research using this type of research design, including attitude importance, demonstrated the moderating effect of attitude importance (e.g. Celuch et al. 2009; Holbrook et al. 2005; Zuwerink & Devine, 1996; Verbeke & Viaene, 1999).

Attitude importance is also theoretically relevant to the study of LMX and can therefore make a significant contribution to the advancement of the construct. Specifically, both the antecedents and consequences of attitude importance are interconnected with the study of LMX. For example, research shows that the importance that people attached to a particular attitude is determined by a) the degree to which they perceive that the attitude impacted on their material self-interest, b) the importance of the attitude to significant others and c) the degree to which the attitude was linked to their core values (Boninger et al. 1995a). All of these antecedents are relevant within the context of the LMX relationship. The concept of self-interest is inherent within the LMX relationship. The leader-follower relationship can be instrumental to achieving ones goals within an organisation. Leaders may exchange resources such as information, influence, desired tasks, latitude, support and attention, for the services of the employee, which may include task performance, commitment, loyalty and citizenship (e.g. Martin et al. 2010). Such exchanges are vital for employee progress in the organisation and to emphasise this, LMX is associated with salary progression, promotability, and career satisfaction (e.g. Wayne, Liden, Kraimer & Graf, 1999). Indeed, a fundamental motivation to form close relationships is that of self-expansion because in a close relationship, the other's resources, skills, networks, abilities, insights, perspectives, identities and the like become, to some extent, one's own (Aron, Aron, Tudor, & Nelson, 1991;

Lewandowski & Ackerman, 2006; Thomas et al. 2013). The idea of self-interest is therefore very relevant when considering the LMX relationship.

Similarly, social identification, another antecedent highlighted by Boninger et al. (1995a), is also significant when considered within the context of LMX. The notion of social identification suggests that an attitude may be important to a person because he or she identifies with another individual or with a social group for whom an attitude object has psychological significance (Eaton & Visser, 2008). Again, this complements theory and research on LMX, which also pays a great deal of attention to how the dyadic relationship is embedded within a social structure. For example, LMX differentiation research focuses on the fact that individuals are nested within workgroups of co-workers who have individual relationships with a common leader. Recent research has examined differentiation in LMX processes at the levels of group (e.g. Boies & Howell, 2006; Henderson, Wayne, Shore, Bommer, & Tetrick, 2008; Liden et al. 2006) and the individual-within-group (e.g. Henderson et al. 2008; Schriesheim, Castro, & Yammarino, 2000; Schriesheim, Neider, & Scandura, 1998). Such work has demonstrated that people pay attention to other LMX relationships within their workgroup and compare them with their own; a process which predicts performance (e.g. Vidyarthi, et al. 2010). The final antecedent identified by Boninger et al. (1995a), value relevance, is also highly relevant to the study of leadership and LMX.

The importance of values within the leadership domain has been highlighted in a number of studies. Such work highlights that values play a vital role in determining follower preferences for particular leaders, as well as the potential role that values may play, for example, in understanding when and how key behaviour-outcome relationships occur (Offermann, Hanges, & Day, 2001). In fact, values are a dominant and ubiquitous presence in the lives of individuals and organisations (e.g. Cha & Edmondson, 2006; Lord & Brown, 2001). Recent work has found self-concordance -the pursuit of goals aligned with one's

values -to be positively associated with outcomes, including job attitudes and performance, life satisfaction and subjective well-being (Bono & Judge, 2003; Judge, Bono, Erez, & Locke, 2005; Sheldon et al. 2004). The role of values within LMX theory is underdeveloped; however, Lord and Brown (2001) suggest that values influence follower affect, cognition, and behaviour by interacting with follower self-concepts. The idea that values play a key role in determining the leadership process is a potent one and it is somewhat of an oversight that LMX research has failed to pay much attention to the potential role that values may play in influencing both the development and consequences of the relationship. Attitude theory may provide a way to investigate the effect of values on the LMX relationship through the development of attitude importance.

### **3.9. LMX and Performance: The Moderating Role of LMX Importance**

LMX has been shown to have a positive effect on various aspects of performance with meta-analyses supporting this general trend (e.g. Dulebohn et al. 2014; Martin et al. 2015). As discussed previously, this thesis aims to examine the link between LMX and various aspects of performance (i.e. task performance, OCB and CPB). While research demonstrates significant associations between LMX and all of these facets of job performance (Martin et al. 2015), this literature also shows that a large degree of variability exists within the LMX-performance link. For example, the association between LMX and task performance has emerged as positive (e.g. Kacmar, Witt, Zivnuska, & Gully, 2003), weak (e.g. Rosse & Kraut, 1983) or non-significant (e.g. Liden et al. 1993; Vecchio, 1982). Indeed, a large range of correlations between LMX and performance have been reported in the literature, from as low as .01 (Loi and Ngo, 2009) to as high as .78 (Murphy & Ensher, 1999). With respect to the relationship between LMX and OCB, studies report a negative relationship between the two variables (e.g. Loi & Ngo, 2009) with others reporting non-significant (e.g. Wat & Shaffer,

2005), weak positive (e.g. Bernerth et al. 2007) and strong positive (e.g. Henderson et al. 2008) associations. While less research has focused on the link between member-rated LMX and CPB, those which have, also report a large range of correlations and a mixture of non-significant (e.g. van Dierendonck, Le Blanc & van Breukelen, 2002) and significant negative (e.g. Townsend, Phillips & Elkins, 2000) associations.

This variability in results clearly suggests that there is a lack of knowledge concerning whether all leader-member relationships are equally satisfying and whether all members reciprocate high LMX with increased performance. When dyadic exchange quality is weakly related to employee performance, leaders will need to identify alternative means of influencing member attitudes and behaviours (Erdogan & Enders, 2007). Indeed, the LMX literature has been regularly criticised for paying limited attention to moderators (e.g. Erdogan & Liden, 2002; House & Aditya, 1997; Schriesheim et al. 2000). The current research aims to investigate if LMX importance moderates the process through which LMX influences employee performance.

As a strength-related attitude feature, attitude importance has been shown to increase resistance to change (e.g. Fine, 1957; Gorn, 1975) and persistence over time (e.g. Krosnick, 1988a; Krosnick & Cornet, 1993) and to increase the impact of an attitude on thought (e.g. Howard-Pitney, Borigida, & Omoto, 1986; Krosnick et al. 1993). Similarly, attitudes that individuals consider very personally important are more predictive of behaviour than less important attitudes (e.g. Budd, 1986; Jaccard & Becker, 1985; Krosnick, 1988b; Parker, Perry, & Gillespie, 1974; Rokeach & Kliejunas, 1972;). Unlike attitude ambivalence, importance has almost exclusively been investigated as a moderating variable in the link between attitudes and outcomes. Other research has identified more fine-grained consequences of attitude importance which may also help to explain why attitude importance is associated with stronger attitude-behaviour links (see Eaton & Visser, 2008). Unlike other

attitude strength properties, previous research (e.g. Visser, Krosnick, & Simmons, 2003) has shown that attitude importance may be characterised as a motivational variable impelling the individual to express one's attitude by acting in accordance with it (Krosnick & Petty, 1995).

The aforementioned research, combined with the vast literature supporting the fact that various dimensions of attitude strength are associated with stronger attitude-behaviour relationships, suggests that the LMX-performance link will be contingent upon the degree to which individuals feel their LMX relationship is important to them. The current research aims to investigate how LMX importance will moderate the process through which LMX influences key performance outcomes; task, OCB and CPB. Specifically this will involve an examination of how LMX importance influences the social exchange process discussed below.

### **3.10. LMX and Felt Obligations: A Social Exchange Perspective**

The current research assumes that LMX and felt obligations are causally related yet conceptually distinct. LMX, as previously described is an experience-based attitude concerning the relationship as viewed by employees. Felt obligation is a prescriptive belief regarding whether one should care about the leader's well-being and should help the leader reach his or her goals. According to SET, and because of the reciprocity norm, LMX will lead to a felt obligation to care about and aid the leader. SET has been applied extensively to various workplace relationships (e.g. Cole, Schaninger & Harris, 2002; Cropanzano & Mitchell, 2005; Shore, Coyle-Shapiro, Chen & Tetrick 2009). As discussed previously, LMX theory builds on SET (Blau, 1964; Gouldner, 1960), by positing that a supervisor develops a unique relationship with each follower (e.g. Graen & Uhl-Bien, 1995), which is negotiated over time as a result of exchanges between leaders and members. A high-quality relationship

is characterised by positive reciprocal exchanges between leader and follower (Blau, 1964; Kelley & Thibaut, 1978).

While different views of social exchange have emerged, theorists agree that it involves a series of interactions that generate obligations (Emerson, 1976). It is the generation of these obligations that leads to reciprocation of behaviour. According to Gouldner (1960), the fundamental principles of reciprocity lie in the imbedded obligations created by exchanges of benefits or favours among individuals. This concept, which he termed the 'generalised norm of reciprocity', evokes obligations toward others on the basis of past behaviours. In relation to LMX, it is theorised that the positive treatment associated with high quality LMX should lead to the feeling of obligation to repay this treatment.

Many researchers have investigated the role that these felt obligations play in social exchange relationships within organisations. Focusing on the employee-employer relationship, Eisenberger, Armeli, Rexwinkel, Lynch and Rhoades (2001) demonstrated that POS was positively related to employees' felt obligation to care about the organisation's welfare and to help the organisation reach its objectives. Similar findings have also emerged in relation to the effect of the psychological contract on employee outcomes. One study, for example, showed that when employees perceive that their expectations (in relation to the psychological contract) have been met, they felt greater obligation to contribute to the good of the organisation and conform to organisational values and norms (Flood, Turner, Ramamoorthy, & Pearson, 2001). Another study, also focusing on the psychological contract, found that socio-emotional fulfilments were most strongly related to employee obligations compared with economic and developmental fulfilments (Bal, Jansen, Van Der Velde, De Lange, & Rousseau (2010); a finding echoed in previous findings (Turnley, Bolino, Lester, & Bloodgood, 2003).

Although the aforementioned research was focused on the social exchange relationship that exists between employer and employee, the LMX relationship should evoke similar feelings of obligations towards the other member of the dyad. Indeed Uhl-Bien and Maslyn (2003) demonstrated the role of reciprocity in LMX by examining both positive and negative norms of reciprocity in managerial work relationships. The findings showed that relationship quality was associated with reciprocity as reported by both followers and leaders.

### **3.11. Role of LMX Importance in the Dyadic Social Exchange Process**

According to the social exchange process described above, high quality leader-follower relationships will engender feelings of obligation in followers to reciprocate their leader's actions. However, research has not examined factors that may influence this exchange process that occurs within LMX relationships. Not all high quality LMX relationships result in high levels of felt obligations in followers. In other words, research is needed to understand the moderating factors of link between LMX and felt obligations. Gregory (1975), for example, observed that feelings of obligation are not incurred when recipients (of gifts, concessions etc.) feel entitled to what is given. More recently, a study conducted by Eisenberger et al. (2001) examined the mediating role of felt obligations towards the organisation in explaining the relationship between POS and various outcomes, including performance. The study also investigated the moderating role of exchange ideology; employees' application of the reciprocity norm to their relationship with the work organisation. The results showed a positive relationship between POS and felt obligation but also that the relationship between these variables was greater for employees with a strong exchange ideology. Specifically, the research demonstrated that employees with a strong

exchange ideology expressed little obligation when they believed that their organisation showed little commitment to them. In contrast, when POS was high, employees with a strong exchange ideology expressed approximately the same level of felt obligation as employees with a weak exchange ideology (Eisenberger et al. 2001). More recently, Shore, Bommer, Rao & Seo (2009) showed that the effects of social exchange are moderated by reciprocation wariness (reflecting fear of exploitation in reciprocation). Specifically, highly wary employees responded less favourably to social exchange than those employees who were low on wariness. These and other findings demonstrate that social exchanges and the reciprocation are not always straightforward and may be influenced by various factors.

The current research investigates the moderating effect that attitude importance may have on the social exchange relationship that links LMX with felt obligation. There are several theoretical reasons to predict that LMX importance will moderate this relationship.

Firstly, high quality LMX is theorised to engender a high degree of mutual obligation between exchange partners (Blau, 1964). However, Gouldner's (1960) norm of reciprocity highlights that the perceived value of the investment is important in creating a felt obligation to reciprocate and, over the course of time, social exchange develops when both parties reciprocate the receipt of valued resources. Inherent in this description is the emphasis placed on the value of the investment, which suggests that reciprocation may depend on the perceived value of the exchange offered by the other member of the dyad. SET, therefore posits that to determine the degree of their obligation to others, individuals assess the value of the resources received from a giver. According to Gouldner (1960), the socio-emotional value of a resource depends on the degree to which it symbolises the donor's positive valuation of the recipient. Consistent with this view, both organisational support theory and psychological contract theory assume that favourable treatment received from the organisation is valued more by the recipient if thought to be given freely rather than forced by external constraints

such as, changes in a union contract or government health and safety regulations (Aselage & Eisenberger, 2003). Applying this logic to LMX theory it can be argued that the degree to which followers perceive their LMX relationship to be important should influence the degree to which they feel an obligation to reciprocate the behaviour of their leader. Specifically, if followers ascribed little importance to their dyadic relationship they may equally assess less socio-emotional value in the exchange of resources and therefore may feel less obliged to repay favourable treatment. In this case, even the existence of a high-quality LMX relationship may not be enough to produce higher levels of felt obligation to the supervisor. Thus, it is argued that high levels of both LMX importance and LMX quality are required to produce higher levels of felt obligations.

Secondly, from an attitude perceptible, the relationship between LMX, felt obligation and performance has many parallels with the theory of planned behaviour which provides an argument for how attitudes predict behaviour (e.g. Ajzen, 1988, 1991). This seminal work, simply put, suggests that attitudes lead to behaviour through the development of intentions, explicit plans or motivations, to commit a specific act. The model, as described previously, also highlights other factors that influence the development of these intentions. Clear analogies can be drawn between the behavioural intentions described in TPB and the development of felt obligations defined with SET. Similar to behavioural intentions, felt obligations reflect individuals' internalised belief that they need to act in a way that reciprocates previous behaviour. Previous research has demonstrated that attitude importance influences the development of behavioural intentions both directly (Costarelli & Colloca, 2007) and through moderating the effect of attitudes on the development of intentions (Smith, Terry, Crosier, & Duck, 2005; Theodorakis, 1994). Similarly, the current research argues that LMX importance will accentuate the link between LMX quality and felt obligations. Thus, it is argued that followers' form their intention to oblige their supervisors by considering how

much they will get in return for their efforts if they consider their relationship with their leader to be important.

Thirdly, attitude theory demonstrates that attitude important influences the effect of an attitude on subsequent cognitions and behaviours. Previous research (e.g. Visser et al. 2003) has shown that attitude importance may be characterised as a motivational variable propelling the individual to express their attitude by acting in accordance with it (Craig, Martinez, Kane, & Gainous, 2002; Krosnick & Petty, 1995). For example, attitude importance predicts the frequency with which people perform attitude-expressive behaviours and whether or not people vote in an election to express their attitudes (e.g. Visser et al. 2003). Furthermore, importance triggers the accumulation of knowledge by inspiring selective exposure to, and selective elaboration of, relevant information (Holbrook et al. 2005). In addition to motivating people to actively seek out attitude-relevant information, attitude importance also leads people to attend more closely to that information and to process it more deeply (e.g. Celsi & Olson, 1988; Holbrook et al. 2005). It is predicted, therefore, that LMX importance will influence the relationship between LMX quality and felt obligations by influencing followers' perceptions, elaborating on favourable treatment given by leaders and making such behaviours salient and easy to recall. Thus, put simply, because important attitudes exert a more powerful influence on thinking and behaviour, higher levels of LMX importance are hypothesised to amplify the effects of LMX quality.

*Hypothesis 9: LMX Importance will moderate the strength of the relationship between LMX and Felt Obligations, such that the relationship is stronger when LMX importance is high.*

### **3.12. Felt Obligations and Performance**

As described in the previous sections, based on theories of social exchange and reciprocity, a positive relationship is predicted between LMX quality and felt obligation towards one's supervisor, moderated by LMX importance. SET (Blau, 1964) suggests that individuals who receive favourable treatments from others are likely to return the other party's favour based on the norm of reciprocity (Gouldner, 1960). Thus, feelings of obligations should lead to followers trying to repay the favourable treatment associated with high quality LMX through behaviours that benefit the leader such as, increased task performance, OCB, and reduced CPB. Accordingly, performance is a form of currency in the social exchange between leader and follower and a means of fulfilling obligations for reciprocity (Wang, Law, Hackett, Wang, & Chen, 2005). A positive association is therefore expected between felt obligations and the three facets of job performance of interest to the current study, because performance helps attain the reciprocity obligations of followers and represents a currency of exchange (Wang et al. 2005). Despite the centrality of this social exchange theorisation to the development of LMX theory, there is a lack of empirical investigation into the role of felt obligations as the underlying mechanism linking LMX to work outcomes. Research has however shown that felt obligation mediates the associations between POS and affective commitment, organisational spontaneity and in-role performance (Eisenberger et al. 2001). The authors argued that meeting obligations helped employees maintain the positive self-image of those who repay debts, avoid the social stigma associated with the reciprocity norm's violation and obtain favourable treatment from the organisation (Eisenberger et al. 2001). Flood et al. (2001) demonstrated that obligations mediated the link between organisational processes, organisational commitment and intentions to stay in the organisation. A more recent study also found that felt obligation predicted task performance (Takeuchi, Yun, & Wong, 2011).

*Hypothesis 10:* Felt obligations will be positively associated with task performance.

*Hypothesis 11:* Felt obligations will be positively associated with OCB.

*Hypothesis 12:* Felt obligations will be negatively associated with CPB.

### 3.13. LMX and Performance: Felt Obligations as a Mediator

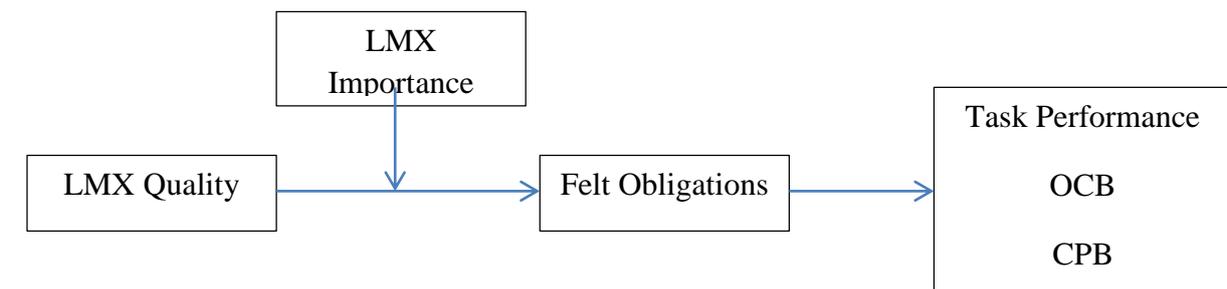
With Hypotheses 9, 10, 11 and 12 in place, a mediation model of LMX and individual performance can be advanced. Specifically, it is posited that higher levels of LMX will lead to increased levels of felt obligation when LMX importance is also high and felt obligation, in turn, will lead to increased levels of task performance and OCB and decreased levels of CPB. Therefore, based on SET and attitude strength, the current research argues for a positive relationship between LMX and employee performance, mediated by felt obligation and moderated by LMX importance. This theoretical model is depicted in Figure 2 below.

*Hypothesis 13:* Felt obligations will mediate the moderated relationship between LMX quality, LMX importance and task performance.

*Hypothesis 14:* Felt obligations will mediate the moderated relationship between LMX quality, LMX importance and OCB.

*Hypothesis 15:* Felt obligations will mediate the moderated relationship between LMX quality, LMX importance and CPB.

**Figure 2:** LMX Importance Conceptual Model: Demonstrating Predicted Linkages in Study 1 and 2.



### 3.14. Summary of Thesis Hypotheses

The previous sections of this chapter have elucidated the theoretical rationale for the hypotheses advanced in this thesis; these are summarised in Table 3 below.

**Table 3:** Summary of thesis hypotheses\*

Hypothesis	
<b>H<sub>1</sub></b>	LMX ambivalence will be positively associated with the experience of negative affect
<b>H<sub>2</sub></b>	Negative affect will be negatively associated with task performance
<b>H<sub>3</sub></b>	Negative affect will be negatively associated with OCB
<b>H<sub>4</sub></b>	Negative affect will be positively associated with CPB
<b>H<sub>5</sub></b>	Negative affect will mediate the relationship between LMX ambivalence and task performance
<b>H<sub>6</sub></b>	Negative affect will mediate the relationship between LMX ambivalence and OCB
<b>H<sub>7</sub></b>	Negative affect will mediate the relationship between LMX ambivalence and CPB
<b>H<sub>8</sub></b>	LMX Ambivalence will be moderately stable over time
<b>H<sub>9</sub></b>	LMX Importance will moderate the strength the relationship between LMX and Felt Obligations, such that the relationship is stronger when LMX importance is high

<b>H<sub>10</sub></b>	Felt obligations will be positively associated with task performance
<b>H<sub>11</sub></b>	Felt obligations will be positively associated with OCB
<b>H<sub>12</sub></b>	Felt obligations will be negatively associated with CPB
<b>H<sub>13</sub></b>	Felt obligations will mediate the moderated relationship between LMX quality, LMX importance and task performance
<b>H<sub>14</sub></b>	Felt obligations will mediate the moderated relationship between LMX quality, LMX importance and OCB
<b>H<sub>15</sub></b>	Felt obligations will mediate the moderated relationship between LMX quality, LMX importance and CPB
<b>H<sub>16</sub>**</b>	The relationship between LMX ambivalence and task performance will be moderated by POS such that the negative effect will be reduced when POS is high
<b>H<sub>17</sub>**</b>	The relationship between LMX ambivalence and OCB will be moderated by POS such that the negative effect will be reduced when POS is high

\*In all the hypotheses related to LMX ambivalence, LMX quality was controlled for in order to determine the unique effects

\*\*This hypothesis is formulated in Study 2 and is specific to that study.

## **CHAPTER 4 – STUDY 1: AN INITIAL TEST OF LMX IMPORTANCE AND LMX AMBIVALENCE**

### **4.1. Chapter Summary**

Chapter 4 details the method and results of the first study. The chapter begins with a discussion of the study setting, its participants and the sample characteristics. This is followed by an outline of the research design in terms of procedure and the measures used. The statistical analyses used within this study are introduced and the results from this are presented. This is followed by a presentation of the key findings and discussion of the implications. The chapter closes with a brief discussion of how the research findings can be expanded upon in Study 2.

### **4.2. Method**

#### **4.2.1. Research design**

A longitudinal design was adopted to collect survey data from participants at two time points across a 3 month time period. Such a research design helped to minimise methodological problems related to common source variance as the data was cross source and collected over

time. This longitudinal field study aimed to evaluate the effects of two novel constructs: LMX importance and LMX ambivalence on various aspects of followers' performance and to ascertain the mechanism through which the effects of these variables occurred.

#### **4.2.2. Study setting**

To test the hypotheses (Table 3), Study 1 utilised project teams consisting of four or five students engaged in a Business Strategy Module (BSM) as part of their degree course. The module involved teams working on the design and manufacturing of a car within a simulated environment. The module ran for three academic terms (25 weeks), and was compulsory to all second year students studying towards a business degree. As part of the BSM, students were required to work in teams for the duration of the module and engaged in a wide range of assessed and developmental activities, the results of which contributed towards their degree grade. The BSM is a well-established part of the degree programme and consequently, I had no involvement in its design, co-ordination, delivery or assessment. The module was designed to model the organisational context and each team was required to have a 'Managing Director' to occupy the official leader role. The managing director was responsible for team formation, development and performance across the duration of the module. Furthermore, the Managing Director was responsible for scheduling and conducting team meetings as well as representing the company to external stakeholders. Therefore, while these leaders had no official form of power (either coercive or reward based), they are responsible for conflict resolution, task allocation and making the final decisions.

Support for the validity of such student project teams comes from the fact that the use of such team and computer-based simulations are common within organisational research. Of particular relevance to the present research, a longitudinal study conducted by Nahrgang, Morgeson and Ilies (2009), which investigated LMX development over time with student

participants engaged in a business simulation task working with teams with an appointed team leader. Similarly, other scholars have utilised similar samples to examine propositions related to leadership and other organisational processes (e.g. Palanski & Yammarino 2011; Mathieu & Rapp; 2009). Most important to the validity of the sample used in this study is the fact that previous research has been conducted using students working on this module (in different cohorts). For example, Yeow and Martin (2013) conducted a longitudinal field experiment examining a leader self-regulation intervention with teams working on the same BSM module. More recently Guillaume, van Knippenberg, and Brodbeck, (2014) examined individual performance in culturally diverse teams using student teams from the BSM module. Given the reasoning discussed above, the present sample is well suited to the intended objectives of this study.

#### **4.2.3. 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. To ensure ethical standard were upheld, all participants gave informed consent before completing the questionnaire. All feedback provided was anonymous and was at a team level so that individual responses could not be determined. The intended questionnaire and procedure for data collection across the two time points were discussed in detail with the module leader and agreed prior to the start of the module.

#### **4.2.4. Procedure**

The project teams controlled EUROCAR© (Orange, 2005), a realistic and involved computer simulation of the European automobile industry. Students took charge of a simulated company, made decisions that they inputted into the simulation and competed against other teams. Each team was required to attend ten weekly one-hour lectures and

respective one-hour tutorials. These tutorials took place with up to six teams who competed against each other in the simulation, viewing each other as competitors. During the tutorials, teams were taught relevant theory and practical business skills to aid them in developing their company. For example, they each learned and practised how to produce a business plan and produce clear business reports. During these tutorials, teams also received a standardised report about their company's performance based on the output from the previous simulation session. Teams participated in this simulation throughout the course which consisted of them competing in six fortnightly one-hour sessions with the other teams in their respective tutorial groups. Teams working within the simulation provided a highly suitable sample to test the hypotheses because the task provided a realistic setting, mimicking an organisational setting with clear consequences of good team performance (marks contribute to their overall assessment and prizes were given to top performing teams). As discussed above, similar samples have been used regularly in I/O psychology (e.g. Guillaume, et al. 2013; Nahrgang, et al. 2009; Yeow & Martin, 2013). The teams replicated organisational project teams who work on a shared task for a fixed amount of time. In the interest of closer replication, the teams were embedded in a wider context in which they had to interact with other teams and with various other people outside of their team (such as tutors, clerical staff, and lecturers) which is again similar to organisational teams.

In order to reduce problems related to common method variance a longitudinal design was used and the data was collected from both leaders and followers. Thus, team members completed the measures of LMX, LMX Importance and LMX ambivalence and, at a later time period, team members also rated their feelings of negative affect, positive affect and felt obligations; at the same time point, the MDs rated their team members' task performance. Such a design also permitted greater confidence to suggest the direction of effects between the independent and dependent variables. As highlighted above, data was collected at two time

points: time 1 (3 weeks into the life cycle of the team), and then subsequently at time 2, three months later.

A survey design was used and participants were given the opportunity to complete questionnaires during their tutorial sessions. Full details of these questionnaires are provided in the appendix. The surveys were distributed as paper copies during the start of each tutorial and took, on average, 15 minutes to complete. No explicit inducement or reward was offered for participation and confidentiality was assured. Students were provided feedback for use in a reflective essay that was part of the module, but it was made clear that such feedback was not a requirement for this essay. Both team leaders and team members completed questionnaires and the data was later matched. Specifically, team member reports of LMX quality, LMX importance, LMX ambivalence, felt obligations and negative were matched with the leader's perceptions of the given member's performance (task performance, OCB and CPB). The aim was to collect complete dyad-level data for every leader-follower dyad in every team at two time points. In order to match team member and team leaders, participants were required to provide their student numbers as a unique identifier as well as their team number. Students were assured that the data would be kept anonymous and no one other than the lead researcher (myself) would see their responses.

#### **4.2.5. Study Sample**

Participants were 538 upper-level undergraduates studying business administration or related degrees (e.g. Marketing, Finance) at a business school in the UK. They worked as part of a two term long business module, in one of 130, four to five member teams. The module was a major component of their degree and the marks derived from it contributed to their overall assessment. Each team acted as the senior management team with the responsibility to design, market, and manufacture a car (more description of the task is given below). The

average age was 20 years, 46% were female, and 27% were born outside the UK. Team members assigned themselves roles (such as Finance Director, Marketing Director etc.) and each team had to assign someone the role of Managing Director. Team members' responses to the questionnaires were matched with those of the Managing Director, providing matched data for 325 dyads.

#### **4.2.6. Rationale for time lag**

As described, the variables of interest were measured longitudinally. 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). Data was collected at two time points; at Time 1, groups had been working together for three weeks. Previous research demonstrates that, by this time, LMX relationships will already have formed; with Liden et al. (1993) demonstrating the existence of relationship development after only two weeks. Using similar participants (i.e. those working in project teams) Nahrgang, et al. (2009) investigated the development of LMX over a period of eight weeks, demonstrating that higher and lower-quality leader-member relationships tended to develop fairly quickly. Specifically, the authors reported that leaders differentiate between followers as early as the initial interaction. Data for the second time lag was collected three months after Time 1. As discussed previously, the period of three months was chosen because it allowed enough time for significance influence to occur but short enough that changes could be readily observed. As noted by Demerouti, Bakker and Bulters (2004), a time lag of three months has the advantage that the occurrence of radical changes in the work (or the private situation) is relatively unlikely, thereby enabling the evaluation of the effects of more structural and changeable characteristics of work, like the amount of work pressure. This

time period is consistent with other longitudinal research (e.g. Lin & Leung, 2010; Stinglhamber & Vandenberghe, 2003; Morrison, 1993; Leiter and Durup, 1986; Macewen & Barling, 1988). Significantly, one of the few studies to test the effects of LMX on performance over time also utilized a three-month time lag between measures of LMX and subsequent performance (Bauer, Erdogan, Liden & Wayne, 2006). Furthermore, the longitudinal study conducted by Nahrgang et al. (2009) demonstrated that LMX and performance were significantly related, within similar types of project teams and within a period of eight weeks.

### 4.3. Measures

#### 4.3.1. Team-Member (Follower) Survey

Measures of LMX quality (Time 1), LMX ambivalence (Time 1 and 2), LMX importance (Time 1 and 2), negative and positive affect (Time 2), felt obligations (Time 2) and demographic information from team members were collected. Responses to survey questions were measured on 5-point scales (for example: 1 \_ *strongly disagree*, 5 \_ *strongly agree*). For each measure, all items were averaged to create a composite mean score, with higher scores indicating higher levels of the underlying construct.

***Leader-Member Exchange (LMX):*** This 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). The LMX-7 instrument (see Table 2 for items) is the most commonly used measure of LMX (Martin et al. 2010) and includes seven items, where members rated the extent to which they felt they had a good relationship with their leader. Higher scores reflect a high quality LMX relationship. An example item includes “My managing director recognises my potential” ( $\alpha = .85$ ).

***LMX Ambivalence.*** As discussed previously, much of the research related to ambivalence derives from the attitude literature. Generally, researchers have approached the measurement of attitude ambivalence in two ways. One approach relies on items expressing the subjective feeling of ambivalence (e.g. “I find myself ‘torn’ between two sides of the issue of...”; Thompson et al. 1995). The other approach employs formula-based measures that integrate the positive and the negative evaluations (e.g. Kaplan, 1972; Thompson et al. 1995). Therefore, the latter approach can be described as treating ambivalence as a structural property of an attitude, whereas the former views it as a meta-attitudinal aspect, based on an individual’s judgements of their own attitude. Although research suggests that both kinds of measures yield highly similar empirical results (e.g. Thompson et al. 1995; Priester & Petty, 1996), subjective measures are conceptually distinct from objective measures of ambivalence because they tap directly into the amount of conflict or ambivalence experienced by participants, as opposed to simply identifying co-activation of opposing emotions (Fong, 2006). Therefore, in keeping with the conceptualisation of subjective evaluations of LMX ambivalence, individual subjective experiences of ambivalence were measured using a scale developed for this study. In order to measure respondents’ cognitive evaluations of ambivalence towards the LMX relationship, items from the LMX-7 measure were adapted, based upon Jamieson’s (1993) ambivalence scale (see appendix). Thus, for each LMX item, participants were asked to what degree they were conflicted about their thoughts. Example statements include: “You have conflicting thoughts about your relationship with your leader: Sometimes you think it is good, while at other times you think it is bad.” and “You find yourself feeling torn about whether you have a good or bad relationship with your leader”. For each item, participants indicated how strongly they agreed or disagreed with the statement (Time 1  $\alpha = .89$ ; Time 2  $\alpha = .89$ ).

***LMX Attitude Importance*** – Within the attitude literature, attitude importance is operationalised as meta-attitudinal property of an attitude and, as such, is assessed via self-report. This involves asking participants the degree to which an attitude is important to them (e.g. Visser et al. 2003; Jacks & Devine, 2000; Miller & Peterson, 2004; Celuch et al. 2009). To ensure that the importance of the LMX relationship was measured specifically, the LMX-7 instrument was adapted to focus on how important each aspect was to followers. So, for example, the item “My working relationship with my manager is effective”, was changed to “It is important to me that my working relationship with my manager is effective”. This was done for all LMX-7 items, giving a seven item attitude importance scale (time 1  $\alpha = .77$ ; Time 2  $\alpha = .77$ ).

***Positive and negative affectivity.*** One widely used tool to assess positive and negative affectivity is the Positive and Negative Affect Schedule (PANAS; Watson et al. 1988). The PANAS is a 20-item self-report measure designed to evaluate the extent to which an individual is high or low on positive and negative affect. Researchers assert that affect is both a trait (dispositional) and a state (situational) and can be measured accordingly (Watson & Clark, 1984, Watson et al. 1988). To accommodate measurement of trait or state affect, survey instructions are often modified to reflect trait (e.g. how do you usually feel) or state (e.g. how do you feel today) language (Watson et al. 1988); that is, respondents are typically asked to recall their affect in general, at a specific time or a specific period of time (Hufford, 2007). As the current study is interested in examining the association between LMX ambivalence and negative affect, it was measured as a state; individuals were asked to rate the scale based on how they felt when interacting with their leader during the simulation. Such a period of time is in line with other research which has investigated affective responses to leadership. For example, Hoobler and Hu (2013) used the PANAS with a timeframe of “the past few months” for reports of negative affect. This timeframe represents somewhere in between state- and trait-

like negative affect (Spector, 2000). As indicated by the authors, the period of time was chosen to “operationalise negative affect as a malleable state-like mood in our model but, at the same time, to match the definition of abusive supervision being “the sustained display of.... behaviour” over time”. Such a rationale matches the goals of the current study which also aims to understand the effect of LMX ambivalence over a sustained period of time. While the effects of LMX ambivalence were predicted to be mediated by negative affect, positive affect was also measured as a control variable (positive affect  $\alpha = .89$ ; negative affect  $\alpha = .88$ ).

***Felt obligations towards leader.*** Felt obligations were measured using an adapted version of the 7 items developed by Eisenberger et al. (2001) to measure employees' felt obligation to care about the organisation and to help it reach its goals. In order to measure felt obligations towards the supervisor, the referent was changed. An example item is: I feel a personal obligation to do whatever I can to help my managing director achieve his/her goals ( $\alpha = .83$ ).

#### **4.3.2. Team leaders (MD) survey**

Ratings of team members' performance were collected from each group's MD at both time points. As with the team member survey, responses to survey questions were measured on 5-point scales (1 \_ *strongly disagree*, 5 \_ *strongly agree*). Scores from all included items were averaged to create a composite score, with higher scores indicating higher levels of the underlying construct.

***Task performance.*** Team members' task performance was assessed by the leader using four items (Nahrgang et al. 2009). Example items include ‘This team member's performance is very high’ and ‘This team member is very effective’ (time 1  $\alpha = .93$ ; time 2  $\alpha = .96$ ).

**OCB:** Seven items from Williams and Anderson (1991) were used to operationalise OCB. Specifically, this referred to citizenship behaviours targeted at individuals (OCBI). Thus, MDs reported the extent to which team members engaged in interpersonally directed OCBs; a sample item is “Helps others who have heavy workloads” (time 1  $\alpha = .83$ ; time 2  $\alpha = .91$ ).

**CPB:** Counterproductive behaviour was measured by a scale developed by Bennett and Robinson (2000), consisting of 7 items regarding behaviours directed at interpersonal deviance (toward individuals) and 7 items directed at organisational deviance (toward the employee’s organisation) for a total of 14 items (time 1  $\alpha = .87$ ; time 2  $\alpha = .87$ ). Two items from the original scale were not included due to their lack of applicability for this sample (e.g. falsified a receipt to get reimbursed for more money than you spend on business expenses), giving a total of 12 items.

## **4.4. Results**

### **4.4.1. Measurement evaluation**

Table 4 presents the means, standard deviations and Pearson correlation coefficients of the variables measured in Study 1. This table combined scales from both the leader (i.e. managing director) and team members across the two time points. Cronbach’s alpha of all measures exceeded acceptable levels of scale reliability (i.e.  $>.70$ ). This suggests that the scales used had acceptable internal consistency. It is notable that both LMX ambivalence and LMX importance demonstrate good levels of reliability as this provides initial support for their use as reliable scales. Furthermore, both LMX ambivalence and LMX importance demonstrate stability over time. The correlation between LMX ambivalence at time 1 and time 2 was .44 and a similar correlation of .47 was found with LMX importance over time.

These correlations suggest that both constructs were relatively stable over a 3 month period. The few studies that have measured LMX (in)stability have revealed that relationship quality tends to be relatively stable over time, with correlations ranging from .41 to .72 (Bauer & Green, 1996; Liden et al., 1993; Nahrgang, Morgeson, & Ilies 2009; Volmer, Niessen, Spurk, Linz, & Abele, 2011). Thus, with respect to the findings related to LMX ambivalence and LMX importance, the findings of the current suggest that the additional facets of the LMX relationship, importance and ambivalence, show similar levels of stability compared with LMX quality. This finding, with respect to LMX ambivalence, show support for Hypothesis 8.

Upon reviewing the correlations displayed in Table 4, of particular interest is the relationship between LMX quality and the constructs developed for use in this thesis (LMX importance and LMX ambivalence). The correlation between LMX ambivalence and LMX quality was -.47 (time 1) and -.32 (time 2), while LMX quality and LMX importance was .56 (time 1) and .49 (time 2). While these are significant correlations, they are not so high as to suggest multicollinearity amongst the variables. However, while the aforementioned correlations provide some initial support for the reliability of the scales, further evidence of discriminant validity is required. To provide such evidence, confirmatory factor analysis was conducted and the results are discussed below.

**Table 4:** Means, Standard Deviations and Correlations of the Variables used in Study 1

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.LMX (T1)	3.86	0.63															
2.LMX Ambivalence (T1)	2.49	0.75	-.47*														
3.LMX Ambivalence (T2)	2.7	0.72	-.32*	.44*													
4.LMX Importance (T1)	4.04	0.5	.56*	-.22*	-.09												
5.LMX Importance (T2)	3.86	0.49	.22*	-.13*	.07	.47*											
6.Felt Obligations (T2)	3.87	0.66	.26*	-.11	-.15*	.25*	.39*										
7. Negative Affect (T2)	1.74	0.66	-.19*	.26*	.25*	-.12*	-.06	-.08									
8.Positive Affect (T2)	3.66	0.72	.50*	-.35*	-.34*	.30*	.32*	.43*	-.31*								
9.Task Performance (T1)	4.04	0.78	.11*	-.13*	-.13*	.03	-.02	.00	-.11	.09							
10.Task Performance (T2)	3.97	0.92	.11*	-.18*	-.19*	.08	.06	.08	-.21*	.17*	.58*						
11.OCB (T1)	3.74	0.69	.04	-.14*	-.11	-.04	-.03	.05	-.11*	.07	.70*	.56*					
12.OCB (T2)	3.74	0.9	.11*	-.20*	-.17*	.05	.05	.06	-.19*	.17*	.46*	.83*	.60*				
13.CPB (T1)	1.19	0.32	-.11*	.12*	.01	-.01	-.07	-.08	.10	-.12*	-.44*	-.37*	-.45*	-.34*			
14.CPB (T2)	1.29	0.45	-.19*	.20*	.18*	.00	-.06	-.14*	.20*	-.26*	-.31*	-.53*	-.29*	-.50*	.58*		
15.Age	21.5	1.74	.04	-.06	-.08	-.01	-.06	.02	-.05	.03	-.08	-.02	-.03	.01	.01	-.04	
16.Gender	0.48	0.5	-.07	-.03	.03	-.04	-.05	-.06	-.08	-.03	.00	.05	.05	.06	.00	-.05	-.01

\*. Correlation is significant at the 0.05 level (2-tailed).

T1 = Time 1, T2 = Time 2

N = 290 – 471 Performance, OCB and CPB rated by leaders, all other variables are follower rated

#### 4.4.2 Discriminant validity

Both LMX ambivalence and LMX importance are conceptualised as distinct facets of one's attitude towards one's leader-follower relationship. Thus, it is assumed that both concepts should be related to, yet distinct from, LMX quality. While the correlation between LMX quality and LMX ambivalence and LMX importance suggest that this is the case, it is necessary to apply the appropriate statistical technique to determine the distinctiveness of the constructs. Confirmatory factor analysis (CFA) is a technique that gauges the extent to which there is covariance among groups of observed variables that make up a factor or theoretical construct (Schumacker & Lomax, 2004). In other words, the technique determines how well the data 'fit' the proposed factor structure. It achieves this through detecting the extent to which the observed variables are generated by the underlying latent constructs and thus, the strength of the regression paths from the individual items to the observed variables (factor loadings) (Byrne, 2012). Therefore, in order to determine how well the items used to measure LMX ambivalence and LMX importance actually fit these latent constructs, CFA can be used to compare various models where these observed variables are considered separate from each other (as well as other factors such as LMX quality) to models where the constructs are considered part of a single construct.

To assess the model, researchers use numerous fit indices. Scholars suggest utilising several such indices when assessing model fit (Byrne, 2012). The chi-square ( $X^2$ ) test of model fit assesses the suggested model against the data with a non-significant low value indicating that the two covariance matrices are not significantly different and therefore an acceptable fit. Given the prominence of the likelihood ratio statistic ( $X^2$ ) in the literature, it is included in this research. This measure, however, has limitations as it is possible that it may falsely indicate poor fit for models with large sample sizes or large correlations among variables (Bollen &

Long, 1993). As a result, it is typically not solely relied upon for the assessment of model fit but is used in combination with other fit indices. These include incremental indices which, unlike absolute fit indices, use a reference model to determine model fit. Two of the most frequently used incremental indices of fit are the CFI (Bentler, 1990) and the TLI (otherwise known as the non-normed fit index, NNFI; Tucker & Lewis, 1973). Both of these indices 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 between 0 and 1, with values close to 1 being associated with well-fitting model (Bryne, 2012). For many years, the cut off point for what was considered a good model fit was set at  $> .90$  (Bentler, 1992), but this benchmark has been raised so that a value nearer to  $.95$  is now considered more acceptable (Hu & Bentler, 1995). In comparison with CFI, TLI is a non-normed index which therefore can incorporate values outside of the range 0-1. Despite this, it is still usual to interpret its values in the same way as for CFI.

The final two goodness-of-fit indices, typically incorporated when conducting CFA, are the Root Mean Square Error of Approximation (RMSEA; Steiger & Lind, 1980) and the Standardised Root Mean Square Residual (SRMR) both of which are absolute indices of fit (Bryne, 2012). In contrast to the aforementioned incremental fit indices, these indices depend only on determining how well the suggested model fits the sample data. Therefore, while CFI and TLI measures 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 to constitute acceptable fit (Browne, MacCallum, Kim, Andersen & Glaser, 2002).

In order to conduct CFA on the present data set, Mplus version 6.11 was used with the indices described above (CFI, TLI, RMSEA & SRMR) as indicators of model fit. In the first instance, the focus was on the three variables associated with LMX attitude; LMX quality, LMX ambivalence and LMX importance. A model in which these three variables were each

considered to be a separate factor was compared with various two-factor models as well as a single factor model where all the items were included as one latent factor. The results of these analyses are included in Table 5 below.

**Table 5:** Confirmatory factor analyses with LMX quality, LMX ambivalence and LMX Importance.

<b>Model</b>	<b>df</b>	<b>X<sup>2</sup></b>	<b>CFI</b>	<b>TLI</b>	<b>RMSEA</b>	<b>SRMR</b>
Three-factor model	186	643.80	.86	.85	.08	.06
Two-factor model <sup>1</sup>	188	872.57	.80	.77	.10	.08
Two-factor model <sup>2</sup>	188	1208.99	.70	.66	.12	.11
Two-factor model <sup>3</sup>	188	1197.43	.70	.66	.12	.13
One-factor model	189	1542.59	.60	.55	.14	.12

*Note:*

Two-factor model<sup>1</sup> combines LMX and LMX Importance

Two-factor model<sup>2</sup> combines LMX and LMX Ambivalence

Two-factor model<sup>3</sup> combines LMX Ambivalence and LMX Importance

As can be seen in Table 5, the model that best fits the data is the three-factor model where the three variables are considered to be separate factors. This model produced significantly better fit than each of the other models test based on the results of a chi squared difference test, which was significant at the .01 level. This suggests that the LMX attitude facets are best considered to be separate factors rather than one underlying construct. Despite this, it should be noted that even the three factor model which provides the best model fit, did not produce model fit indices that can be considered ‘good’ fit. As discussed previously, the benchmark for the CFI value to be considered good fit is near to .95 (Hu & Bentler, 1995).

This value was not achieved in the three factor model. Similarly the RMSEA and SRMR values in the three factor model were not  $<.05$ , again indicating that this model is not a good fit (Browne et al. 2002).

The above analysis concentrated on assessing the discriminant validity of the various LMX attitude constructs. However, the conceptual models that will be tested in this thesis focus on differential effects of LMX ambivalence and LMX importance. Indeed, the hypotheses test unique mechanisms and effects of both constructs separately. Specifically, LMX ambivalence is seen as an independent variable with its effects on performance being explained through the negative affect mediation pathway. LMX importance, on the other hand, is predicted to moderate the effect of LMX quality on felt obligation, which in turn is predicted to influence performance. Thus to further assess the discriminant validity of the constructs, CFA was used to assess various models for both LMX ambivalence and LMX importance. In this analysis the two constructs were not included together but rather, each was included with the corresponding mediator and LMX quality. The results of this analysis are shown below in Table 6.

**Table 6:** Confirmatory factor analyses with LMX quality, LMX ambivalence and negative affect

<b>Model</b>	<b><i>df</i></b>	<b><math>X^2</math></b>	<b>CFI</b>	<b>TLI</b>	<b>RMSEA</b>	<b>SRMR</b>
Three-factor model	249	724.55	.88	.87	.07	.06
Two-factor model <sup>1</sup>	251	1234.85	.75	.73	.10	.08
Two-factor model <sup>2</sup>	251	1641.05	.65	.61	.12	.14
Two-factor model <sup>3</sup>	251	1691.79	.64	.60	.12	.14
One-factor model	252	2229.45	.50	.45	.14	.16

*Note:*

Two-factor model<sup>1</sup> combines LMX and LMX Ambivalence

Two-factor model<sup>2</sup> combines LMX and Negative Affect

Two-factor model<sup>3</sup> combines LMX Ambivalence and Negative Affect

The CFA analysis displayed in Table 6 shows that the three factor model, where LMX, LMX ambivalence, and negative affect are considered to be distinct factors, provides the best model fit. The three factor model is a significantly better fit than any of the other models which combine the variables in a two factor model or indeed the model which views them all as one latent factor. The differences were significant based on the results of a chi squared difference test, which was significant at the .01 level. This analysis therefore suggests that LMX ambivalence is best conceptualised as a distinct factor from overall LMX quality. Again, the model fit indices suggest that the three factor model falls short of what would be considered good model fit.

The CFA shown in Table 7 below demonstrates that the three factor model, where LMX, LMX importance and felt obligations are considered to be distinct factors, provides the best model fit. As can be seen in Table 7, the three factor model produced a significantly better level of model fit ( $X^2 = 542.33$ ,  $df = 149$ ,  $p < .00$ ; CFI = .85; TLI = .83; RMSEA = .08) when compared with any of the two factor models or the one-factor model based on the results of chi squared difference tests, which were significant at the .01 level. The results therefore support the distinctiveness and discriminant validity of one of the focal variables in this study; LMX importance. Again the model fit indices suggest that the three factor model falls short of what would be considered good model fit.

**Table 7:** Confirmatory factor analyses with LMX quality, LMX importance and felt obligations

<b>Model</b>	<b><i>df</i></b>	<b><i>X</i><sup>2</sup></b>	<b>CFI</b>	<b>TLI</b>	<b>RMSEA</b>
Three-factor model	149	542.33	.85	.83	.08
Two-factor model <sup>1</sup>	151	761.27	.77	.74	.10
Two-factor model <sup>2</sup>	151	959.48	.69	.65	.12
Two-Factor Model <sup>3</sup>	151	1019.83	.67	.62	.12
One-factor model	152	1220.37	.59	.54	.13

*Note:*

Two-factor model<sup>1</sup> combines LMX and LMX Importance

Two-factor model<sup>2</sup> combines LMX Importance and Felt Obligations

Two-factor model<sup>3</sup> combines LMX and Felt Obligations

#### **4.4.3. Hypothesis testing and statistical analysis**

As previously discussed, the aim of the current research is to elucidate the mechanisms through which different facets of LMX (i.e. quality, ambivalence and importance) influence employee performance. Thus, the current study is interested in mediation analysis. A mediator (M) is an intervening or process variable and mediation analysis is the process analysis that elucidates the mechanism through which the factor (X) affects the outcome (Y). More specifically, mediation analysis aims to ascertain whether the mediator M partially or totally mediates the X - Y relationship; and if partially, then by how much? (Kenny, 2012; MacKinnon, 2008). Increasingly, researchers are interesting in exploring such explanatory mechanisms when investigating a given phenomenon, as well as establishing its boundary conditions. This emphasis is predicated on the increasing importance that is ascribed to achieving a deeper understanding of constructs and how that understanding can be applied (Hayes, 2009). Mediation analysis has developed significantly over recent years with the commonly used causal step process (Baron & Kenny, 1986) now seen by most researchers as an out-dated approach. The step-by-step approach has been

largely usurped by more sophisticated methods that adopt bootstrapping for inferences about indirect effects (Hayes, 2009).

Study 1 tests two separate mediation models. The LMX ambivalence model aims to examine the mediating role of negative affect. The LMX importance model is concerned with the role of felt obligations in explaining the link between LMX quality and performance, moderated by LMX importance. This analysis is further complicated by the fact that the variables of interest exist within teams. Therefore, as participants within this study consisted of individuals nested within project teams, there is the potential that uncorrected tests of individual-level relationships may inadvertently contain team level effects (e.g. Bauer, Preacher and Gil, 2006). To assess this possibility ICC(1) (Bliese, 2000) was calculated, indexing the amount of variance in a given variable that can be attributed to group membership, therefore establishing the degree of dependence in the data. An ICC(1) value of .31;  $F(123, 240) = 2.29, p < .01$  was found for Task Performance and .37;  $F(123, 239) = 2.73, p < .01$  for OCB; both of which are moderately high (Bliese, 1998). The value of .60;  $F(123, 240) = 5.52, p < .01$  for CPB was high. This indicated that a significant portion of the variance in the ratings of team members' performance could be accounted for by group membership. Thus, because the data structure in the sample violated the assumption of independence, a multilevel mediation approach described by Bauer et al. (2006) was used.

#### **4.4.4. LMX ambivalence: mediation analysis**

In order to test the hypotheses related to LMX ambivalence, a multivariate three-level model was used; with the mediator, negative affect (M) and the criterion performance variables (Y) as outcome variables. Furthermore, control variables, the independent variable of LMX ambivalence (X) were included as fixed effects in each of the two equations

predicting M and Y. Both equations further included a separate intercept that was allowed to vary within each equation across supervisor, as well as between each equation.

The analytic method outlined above was conducted using mixed method analysis in SPSS (version 22). As the effects of LMX ambivalence on various outcomes were tested, the results are presented separately for each of the three performance variables (task performance, OCB and CPB). The results of this analysis are shown in Tables 8-11.

**Task Performance**

LMX Ambivalence, LMX, Age and Gender were included as fixed effects in each of the equations predicting the mediator and outcome. Positive Affect and previous performance level (time 1 individual performance) were also included as fixed effects in equations predicting the outcome variable. The results, shown in Table 8, provide support for hypothesis 1; showing that LMX ambivalence had a significant positive relationship with negative affect ( $b = .19, t(285) = 3.32, p < .01$ ). Simultaneously, it was found that negative affect had a significant negative relationship with task performance ( $b = -.15, t(244) = -2.463, p < .01$ ), providing support for hypothesis 2. In order to test the significance of the mediated pathway, 95% Monte Carlo confidence intervals were calculated by means of bootstrapping with 20,000 repetitions (Bauer et al. 2006). According to this method, mediation can be inferred if the confidence interval does not include 0. Applying this approach, 95% confidence intervals of -0.05928 (lower level) and -0.00425 (higher level) with an indirect effect of -.027 were found; suggesting a significant mediation effect and supporting hypothesis 5.

**Table 8:** Regression results for LMX Ambivalence – Task Performance Mediation Model

	<b>Mediation Model</b>
--	------------------------

	Negative Affect (M) X → M			Task Performance (Y)M → Y		
	Coefficient <sup>b</sup>	SE	t	Coefficient <sup>b</sup>	SE	t
Intercept	1.77	.59	3.02**	2.33	.66	3.53**
<i>Controls</i>						
Age	-.01	.02	-.22	-.01	.02	-.30
Gender <sup>a</sup>	-.11	.08	-1.49	-.03	.07	-.48
LMX	-.09	.07	-1.39	-.15	.08	-1.84
Positive Affect				.18	.06	2.88**
Task Performance (Time 1)				.54	.05	10.43**
<i>X</i>						
LMX Ambivalence	.19	.06	3.32**	-.05	.06	-.89
<i>M</i>						
Negative Affect				-.15	.06	-2.46**

N= 291 Team N = 124

\*p<.05, \*\*p<.01

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

## OCB

The same multilevel analysis as outlined above was conducted in order to test the hypotheses, concerning the effect of LMX ambivalence on team member OCB, mediated by negative affect. As such, LMX Ambivalence, LMX, Age and Gender were included as fixed effects in each of the equations predicting the mediator and outcome (OCB). Positive Affect and previous OCB level (time 1 OCB) were also included as fixed effects in equations

predicting the outcome variable. Both equations also included a separate intercept that was allowed to vary within each equation across individuals and groups, as well as between each equation.

As with task performance, the results, shown in Table 9, are in line with the mediation hypothesis. LMX ambivalence had a significant positive relationship with negative affect ( $b = .19, t(285) = 3.28, p < .01$ ). Simultaneously, negative affect was found to have a significant negative relationship with OCB ( $b = -.13, t(240) = -2.320, p < .01$ ), providing support for hypothesis 3. The significance of the mediated pathway was calculated using 95% Monte Carlo confidence intervals by means of bootstrapping with 20,000 repetitions (Bauer et al. 2006). According to this method, mediation can be inferred if the confidence interval does not include 0. Applying this approach, 95% confidence intervals of -0.05307 (lower level) and -0.003398 (higher level) with an indirect effect of -.024; suggesting a significant mediation effect and supporting hypothesis 6.

**Table 9:** Regression results for LMX Ambivalence – OCB Mediation Model

	Mediation Model					
	Negative Affect (M) X → M			OCB (Y) M → Y		
	Coefficient <sup>b</sup>	SE	t	Coefficient <sup>b</sup>	SE	t
Intercept	1.79	.59	3.05**	1.97	.63	3.13**
<i>Controls</i>						
Age	-.01	.022	-.24	.00	.02	-.13
Gender <sup>a</sup>	-.11	.08	-1.50	-.04	.07	-.53
LMX	-.09	.07	-1.40	-.12	.08	-1.60
Positive Affect				.13	.06	2.88*
OCB (Time 1)				.60	.06	10.38**

<i>X</i>						
LMX Ambivalence	.19	.06	3.28**	-.04	.06	-.68
<i>M</i>						
Negative Affect				-.13	.06	-2.32*

N= 291 Team N = 124

\*p<.05, \*\*p<.01

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

## CPB

As with the other models, the effect of LMX ambivalence on CPB was examined using multilevel analysis in order to test the mediation model. However, support was not found for a mediated pathway between LMX ambivalence and CPB (see Table 10). No significant effect was demonstrated between negative affect and CPB ( $b = .01, t(199) = .610, n.s$ ). Thus no support was found for hypotheses 4 and 7.

**Table 10:** Regression results for LMX Ambivalence – CPB Mediation Model

	Mediation Model					
	Negative Affect (M) X → M			CPB (Y) M → Y		
	Coefficient	SE	t	Coefficient	SE	t
Intercept	1.78	.59	3.03**	.34	.23	1.51
<i>Controls</i>						
Age	-.01	.02	-.24	.00	.01	.37
Gender <sup>a</sup>	-.11	.08	-1.44	.00	.03	.18
LMX	-.09	.07	-1.39	.03	.03	.84

Positive Affect				-.07	.02	-3.01*
CPB (Time 1)				.82	.05	14.91**
<i>X</i>						
LMX Ambivalence	.19	.06	3.30**	.01	.02	.68
<i>M</i>						
Negative Affect				.01	.02	.61

N= 291 Team N = 124

\* $p < .05$ , \*\* $p < .01$

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

Looking at Table 10, it is clear that the previous rating of CBP (CPB time 1) had a large effect on subsequent CPB at time 2 ( $b = .82$ ,  $t(260) = 14.914$ ,  $p < .01$ ). Positive affect also had a significant effect on CPB at time 2. Given the strong effects of time 1 CPB and positive affect, it is of interest to conduct the analysis without including these control variables (see Table 11). When these variables are removed from the analyses, significant effects are found between LMX ambivalence and negative affect ( $b = .19$ ,  $t(286) = 3.303$ ,  $p < .01$ ) and between negative affect and CPB ( $b = .06$ ,  $t(224) = 2.272$ ,  $p < .05$ ). Support for mediation (hypothesis 7) is found as the 95% confidence intervals of .0014 (lower level) and .0268 (higher level) does not cross zero, with an indirect effect of .0114.

**Table 11:** Regression results for LMX Ambivalence – CPB Mediation Model (with previous CPB removed)

	<b>Mediation Model</b>					
	<b>Negative Affect (M) X → M</b>			<b>CPB (Y) M → Y</b>		
	<b>Coefficient</b>	<i>SE</i>	<i>t</i>	<b>Coefficient</b>	<i>SE</i>	<i>t</i>
Intercept	1.78	.59	3.03**	.91	.28	3.27**
<i>Controls</i>						
Age	-.01	.02	-.24	.01	.01	1.52
Gender <sup>a</sup>	-.11	.08	-1.44	.00	.04	-1.44
LMX	-.09	.07	-1.39	-.05	.03	-1.57
<i>X</i>						
LMX Ambivalence	.19	.06	3.30**	.05	.03	1.92
<i>M</i>						
Negative Affect				.06	.03	2.27*

N= 291 Team N = 124

\*p<.05, \*\*p<.01

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

#### **4.4.5. LMX importance: moderated mediation analysis**

As with LMX ambivalence, the hypotheses related to LMX importance were tested using a multivariate three-level model, with the mediator felt obligation (M) and the criterion performance (Y) as outcome variables. Control variables, the independent variable of LMX quality (X) and the moderator variable of LMX importance (Z) were included as fixed effects in each of the two equations predicting M and Y. Both equations further included a separate intercept that was allowed to vary within each equation across supervisor, as well as between each equation. The equation predicting M and Y further included the interaction term

between LMX quality and LMX importance (X\*Z) in order to test Hypothesis 9. As the effects of LMX importance on various outcomes were tested, the results are presented separately for each of the three performance variables (task performance, OCB and CPB). The results of this analysis are shown in Tables 12-14.

### **Task Performance**

LMX Importance, LMX Quality, Age and Gender were included as fixed effects in the equation predicting the mediator (felt obligation). Previous performance level (time 1 task performance), Age and Gender were included as fixed effects in equations predicting the outcome variable (task performance). Both equations also included a separate intercept that was allowed to vary within each equation across individuals and groups, as well as between each equation.

The results, shown in Table 12, do not support the moderated mediation hypothesis. Although the interaction between LMX importance and LMX quality did moderate the link between LMX quality and the mediator, felt obligations ( $b = .10, t(302) = 3.372, p < .01$ ), there was no significant relationship between felt obligations and task performance ( $b = .07, t(249) = 1.149, n.s.$ ) and therefore no support was found for hypothesis 10. Thus, although support is found for hypothesis 9, there is no evidence of mediation (hypotheses 13). Looking at the results of the analysis it is again clear that previous levels of task performance (time 1) are having a big impact on later task performance (at time 2). Removing time 1 performance from the analysis, thus moving the focus away from effects on performance change, shows that felt obligations still didn't have a significant association with task performance. However, the magnitude of the effect is substantially larger ( $b = .10, t(267) = 1.56, p < .12$ ).

**Table 12:** Regression results for LMX Importance – Task Performance Moderated Mediation Model.

	Moderated Mediation Model					
	Felt Obligation (M) X →			Task Performance (Y) M →		
	M			Y		
	Coefficient <sup>b</sup>	SE	t	Coefficient <sup>b</sup>	SE	t
Intercept	3.68	.44	8.27**	1.86	.56	3.33**
<i>Controls</i>						
Age	.01	.02	.362	-.01	.02	-.54
Gender <sup>a</sup>	-.06	.07	-.87	.02	.07	.29
Task Performance (T1)				.54	.05	10.72**
X						
LMX Quality	.10	.04	2.27*	.04	.05	.70
Z						
LMX Importance	.13	.04	3.08**	-.03	.05	-.59
X x Z						
<i>LMX Quality x LMX Importance</i>	.10	.03	3.37**	-.04	.03	-1.22
M						
Felt Obligation				.07	.06	1.15

N= 291 Team N = 124

\*p<.05, \*\*p<.01

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

**OCB**

LMX Importance, LMX Quality, Age and Gender were included as fixed effects in the equation predicting the mediator (felt obligation). Previous OCB level (time 1 OCB), Age and Gender were included as fixed effects in equations predicting the outcome variable. Both equations also included a separate intercept that was allowed to vary within each equation across individuals and groups, as well as between each equation.

As with task performance, the results, shown in Table 13, do not support the moderated mediation hypothesis. Again, no significant relationship between felt obligations and OCB ( $b = -.01, t(241) = -.185, n.s.$ ) was found and no support for hypothesis 11 was provided. As with task performance, it is clear from the results in Table 13 that previous level of OCB (time 1) is having a big impact on later OCB (at time 2). Removing time 1 OCB from the analysis, thus moving the focus away from effects on OCB change, shows that felt obligations still do not have a significant association with OCB. However, the magnitude of the effect is substantially larger ( $b = .09, t(250) = 1.461, p < .15$ ).

**Table 13:** Regression results for LMX Importance – OCB Moderated Mediation Model

	Moderated Mediation Model					
	Felt Obligation (M) X → M			OCB (Y) M → Y		
	Coefficient <sup>b</sup>	SE	t	Coefficient <sup>b</sup>	SE	t
Intercept	3.68	.44	8.28**	1.58	.50	3.14**
<i>Controls</i>						
Age	.01	.02	.36	-.00	.02	-.17
Gender <sup>a</sup>	-.06	.07	-.88	.02	.07	.23
OCB (T1)				.64	.06	11.19**
X						
LMX Quality	.10	.04	2.29*	.05	.05	1.05

<i>Z</i>						
LMX Importance	.13	.04	3.08**	-.05	.04	-1.18
<i>X x Z</i>						
<i>LMX Quality x LMX Importance</i>	.10	.03	3.36**	-.05	.03	-1.60
<i>M</i>						
Felt Obligation				-.01	.05	-.19

N= 291 Team N = 124

\*p<.05, \*\*p<.01

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

## CPB

As with the previously described analysis, LMX Importance, LMX Quality, Age and Gender were included as fixed effects in the equation predicting the mediator (felt obligation). Previous CPB level (time 1 CPB), Age and Gender were included as fixed effects in equations predicting the outcome variable (CPB). Both equations also included a separate intercept that was allowed to vary within each equation across individuals and groups, as well as between each equation.

A similar pattern of results to those found in previous analysis was observed. Again, as highlighted in Table 14, no support is found for the moderated mediation hypothesis. A significant relationship was not found between felt obligations and CPB ( $b = .02, t(208) = .815, n.s.$ ) thus hypotheses 12 and 15 were not supported.

**Table 14:** Regression results for LMX Importance –CPB Moderated Mediation Model

	Moderated Mediation Model					
	Felt Obligation (M) X → M			CPB (Y) M → Y		
	Coefficient <sup>b</sup>	SE	t	Coefficient <sup>b</sup>	SE	T
Intercept	3.72	.44	8.41**	.09	.18	.49
<i>Controls</i>						
Age	.01	.02	.27	.01	.01	.73
Gender <sup>a</sup>	-.06	.07	-.86	-.00	.02	-.08
CPB (T1)				.85	.05	16.27**
<i>X</i>						
LMX Quality	.09	.04	2.20*	-.03	.02	-1.65
<i>Z</i>						
LMX Importance	.14	.04	3.16**	.02	.02	1.15
<i>X x Z</i>						
<i>LMX Quality x LMX Importance</i>	.10	.03	3.34**	.00	.01	.25
<i>M</i>						
Felt Obligation				.02	.02	.82

N= 291 Team N = 124

\*p<.05, \*\*p<.01

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

Again, as with the previous analysis, previous ratings of CPB (time 1) had a very large effect on subsequent ratings of CPB (time 2). When time 1 CPB was removed as a control variable, the effect of felt obligations on CPB was more pronounced; although still non-significant (b = -.05, t(231) = -1.674, p<.10.).

#### 4.5. Study 1: Summary of Findings

Study 1 provided the first empirical investigation of two novel constructs: LMX ambivalence and LMX importance. These new concepts, based on attitude strength theory, were predicted to have differential effects on the LMX-performance link. Study 1 had several aims; firstly to demonstrate that the aforementioned constructs could be measured in a reliable way, secondly to establish that the concepts could be differentiated from overall LMX quality and thirdly to investigate the effects of both LMX ambivalence and LMX importance on follower performance. The results of Study 1 show mixed support for the aforementioned aims. The data supported the contention that both constructs are distinct from overall LMX quality. CFA results showed that LMX quality, LMX importance and LMX ambivalence are best supported by a model which considers these constructs to be separate. Furthermore, both constructs were shown to be reliable as indicated by having Cronbach's alpha scores substantially above .70 (at both time points). In terms of the effects of the two construct on performance outcomes, mixed support was found for the various hypotheses. This will be discussed below for LMX importance and LMX ambivalence respectively.

In terms of LMX ambivalence, the results of Study 1 provide initial support for most of the hypotheses by showing significant associations between LMX ambivalence and negative affect, as well as between negative affect and performance outcomes. Furthermore, evidence of a mediation model was found for both task performance and OCB. Initial support for a similar pathway linking LMX ambivalence with CPB was not found. However, when certain control variables were removed from the analysis, support was found for a mediated pathway. Specifically, when previous CPB (CPB time 1) and positive affect were not included, the mediation model was significant. It should be noted that removing previous

CPB from the analysis changed the emphasis of the analysis from looking at the effect of LMX ambivalence (through negative affect) on changes in the level of leader-rated CPB to looking at the effect of LMX ambivalence on subsequent CPB.

In all the models, negative affect was shown to fully mediate the relationship between LMX ambivalence and the performance outcomes. This lends support to the theoretical mechanism posited in this thesis. According to theories of cognitive consistency, inconsistent cognitions associated with ambivalence, are aversive and lead to negative emotional states (e.g. Heider, 1946; Festinger, 1957). This relationship was found in Study 1 which showed that ambivalent cognitions related to the leader-follower relationship produced negative emotional states. Moreover, as predicted, the resulting negative affect negatively impacted employees performance in accordance with resource allocation theories (e.g. Conway and Giannopoulos, 1993; Seibert and Ellis, 1991) and emotion-centered models of voluntary work behaviour (e.g. Spector & Fox, 2002). All the reported results were found while controlling for LMX quality. This is an important finding as it suggests that the effects of LMX ambivalence occur regardless of overall LMX quality. This supports the assertion that LMX ambivalence has a distinct effect on performance outcomes that are unique from the effects of overall LMX quality.

The results provide limited support for the hypotheses related to the effects of LMX importance. Evidence was found for the moderating role of importance in the relationship between LMX quality and felt obligations. However, while evidence was found to demonstrate that LMX importance does moderate the effect of LMX quality on felt obligations, no evidence of moderated mediation was found for any of the outcome variables. Thus, while support was found for hypothesis 1, no support was found for hypotheses 10-15, as higher levels of felt obligation did not predict any of the performance related outcomes. These findings contradict studies that show a positive association between felt obligations

and outcomes such as in-role performance and organisational commitment (Arshadi, 2011; Eisenberger et al. 2001; Lew, 2009). However, there are two key differences between these studies and the design of Study 1. First, studies investigating felt obligations have tended to focus on felt obligations towards the organisation rather than towards a leader. Thus, such studies are focusing on a different referent. However, regardless of the referent, the rationale is the same; that favourable treatment by the organisation or agents of that organisation (i.e. leaders) will lead to employees feeling obliged to repay favourable treatment in the form of attitudes and behaviours that benefit the organisation. For example, Eisenberger et al. (2001) showed that POS led to increased performance and commitment because employees felt obliged to repay the support provided by the organisation. The theoretical explanation is based on social exchange which is also used to explain why LMX leads to the same positive employee outcomes. Therefore, regardless of whether the referent is the organisation or the supervisor, felt obligations should lead to better employee outcomes.

The fact that felt obligations were not associated with increased performance in Study 1 is more likely to be explained by the second key difference between this study and previous work that has investigated felt obligations. Previous studies have investigated felt obligations within the organisational context (Arshadi, 2011; Eisenberger et al. 2001; Lew, 2009), whereas Study 1 was based on student project teams. As discussed previously, such student teams were designed to emulate, as much as possible, real organisational teams. For instance, the teams replicated organisational project teams working on a shared task for a fixed amount of time. The teams were also embedded in a wider context in which they had to interact with other teams and with various other people outside of their team (such as tutors, clerical staff and lecturers) which again shared similarities with organisational teams. However, despite the attempt to try to make the student teams as realistic as possible, clearly it is impossible to replicate what it is like to work in a real company, with real responsibility and a supervisor

with more legitimate power. The fact that Study 1 was conducted with student teams might therefore explain the failure for felt obligations to translate into significant effects on performance. While students might have felt compelled to reciprocate positive supervisor relations, the relationship may be less powerful in student teams. Reciprocity is linked to equity theory which suggests that people pursue reciprocity in interpersonal and organisational relationships and highlights that what they invest in and gain from a relationship should be proportional to the investments and gains of the other party in the relationship. This focus on equity may be vital in understanding why less powerful effects of felt obligation were found in Study 1.

The resources exchanged between a supervisor and followers in an organisation are likely to be much more substantial in terms of their value when compared with the resources exchanged in student teams. In his theory of reciprocity, Gouldner (1960) describes this equity principle as equivalence (the extent to which the amount of return is roughly equivalent to what was received). Supervisors in organisation will often have genuine power to change the working experience of their followers by being able to provide valued resources such as, the creation of desired work arrangements, information, support and training opportunities (e.g. Liden et al. 2000). In the student project team utilised in Study 1, the MD's had very little legitimate power to offer valued resources to other members of the group. Therefore, even high quality LMX relationship engendering feelings of obligation, may have not been enough to motivate team members to significantly increase their performance levels.

Overall, Study 1 provides encouraging findings by showing that both LMX ambivalence and LMX importance can be measured and adds to our understanding of the LMX concept. However, Study 1 is limited by the use of student project teams, which may not accurately represent the exact nature of leader-follower relationships that exist in

organisations. Therefore, Study 2 aims to replicate and extend the findings of Study 1 within an organisational setting.

## **CHAPTER 5 – STUDY 2: INVESTIGATION OF LMX IMPORTANCE AND LMX AMBIVALENCE IN AN ORGANISATIONAL SETTING**

### **5.1.Chapter Summary**

Chapter five details the method and results of Study 2. This chapter begins with a discussion of the purpose of Study 2, including the theorised role of POS as a moderator in the link between LMX ambivalence and employee performance. Subsequently, the study setting, its participants and the sample characteristics will be introduced. This is followed by an outline of the research design in terms of procedure and the measures used. The statistical analyses used within this study are introduced and the results from this are presented. This is followed by a presentation of the key findings and discussion of the implications.

### **5.2.Purpose of Study 2**

As discussed, Study 1 provided initial support for the benefits of integrating LMX and attitude strength. The results provided support for the discriminant validity of both constructs. LMX ambivalence demonstrated strong effects on both task performance and OCB, even when controlling for overall LMX quality. Initial support was also found for the moderating role of LMX importance in the relationship between LMX quality and felt obligations. However, no support was found for the moderated mediation model related to LMX importance. As noted above, one reason for this may have been the context of Study 1. Specifically, the nature of the student sample may have constrained the role played by the leader. Therefore, a key aim of Study 2 is to examine LMX importance and LMX ambivalence in an organisational context thus providing a test in a setting that provides greater ecological validity. Accordingly, in Study 2 the same theoretical model of LMX importance was tested.

In Study 1, reported above, it was demonstrated that LMX ambivalence, unlike LMX importance, did have a significant effect on performance. Specifically, a negative relationship was shown between LMX ambivalence and subsequent task performance and OCB of team members. These findings were in line with the previous theorising that predicted ambivalent relationships and the associated cognitive inconsistency would produce negative affect and ultimately lead to poorer outcomes. Given the strong support for the hypothesised relationships, Study 2 has two aims in relation to the examination of LMX ambivalence. Firstly, to test the construct in an organisational setting to determine whether the effects seen in Study 1 will transfer to the organisational context. Secondly, because Study 1 showed strong support for the predicted effects of LMX ambivalence, Study 2 aimed to extend the model to incorporate a theoretically relevant moderator of this relationship. Thus, in Study 2 the role of POS was examined as a potential buffer of the negative effects of LMX ambivalence. The theoretical rationale for the focus on POS is described below, but first the key differences between Study 1 and 2 are discussed.

### **5.3. Differences between Study 1 and Study 2**

As described above, a main aim of Study 2 is to replicate and extend Study 1 within an organisational context. Clearly this is vital as ultimately LMX is an organisational phenomenon that influences the way employees think, feel and behave. The vast majority of LMX studies are therefore conducted in organisational contexts, with a few exceptions (e.g. Nahrgang et al. 2009). Therefore, it is unclear if the results from Study 1 will generalise to an organisational context where there are full-time employees. It should be noted there is no particular theoretical reasons to expect that there would be differences between a student sample and an organisational sample. Scholars have argued that the generalisability of student samples is not necessarily more at stake than if the study had been conducted in a

specific company (e.g. Brown & Lord, 1999; Nahrgang et al. 2009; van Knippenberg & van Knippenberg, 2005). Indeed, leadership researchers have previously tested the same hypotheses in both student and organisational samples and found comparable results across the samples (van Knippenberg & van Knippenberg, 2005). Notwithstanding this viewpoint, it is clear that additional research, conducted in organisational settings, would be beneficial, allowing the establishment of a broader basis for any conclusions. Thus, an important difference between Study 1 and 2 was the context.

As well as the context, Study 2 had some other key differences. Firstly, CPB was not included as an outcome measure. Rather, due to restrictions in questionnaire length, the focus was on task performance and OCB as the focal outcomes of Study 2. These outcomes were of greater interest to the organisations that agreed to be involved in the project. Furthermore, there was some reluctance from the organisations to ask supervisors to rate instances of CPB in their staff. Secondly, negative affect was not measured as a mediator in the link between LMX ambivalence and performance; instead, Study 2 focused on the direct effect between the two. The lack of measurement of negative affect was largely a result of having to collect organisational data very quickly after study 1. Initially, the aim of the two studies was to explore LMX ambivalence as a moderator of the LMX-performance link. Thus, due to space restrictions negative and positive affect were not included as scales in study 2. However, to better understand when LMX ambivalence leads to performance, POS was investigated as a potential moderator. The rationale for this relationship is described in the section below.

#### **5.4. LMX Ambivalence and Performance: The Moderating Role of POS**

As with LMX theory, POS is based on SET, focusing on exchanges between employees and the employing organisation (Eisenberger, Huntington, Hutchison, & Sowa, 1986). According to Eisenberger, Aselage, Sucharski, & Jones (2004), the organisation serves

as an important source of socio-emotional resources, such as respect, caring, affiliation, and tangible resources such as benefits and wages. Thus, POS signals an employer's commitment to employees, which is reciprocated by increased efforts to help the organisation. A key objective of Study 2 is to examine whether POS has a moderating effect on the relationship between LMX ambivalence and task performance. As discussed and shown in Study 1, LMX ambivalence had a negative impact on performance and OCB, due to the associated negative emotion. The experience of such negative emotion may be mitigated when employees feel supported by the organisation (i.e. report higher levels of POS). POS is expected to reduce aversive psychological and psychosomatic reactions (i.e. strains) to stressors by indicating the availability of material aid and emotional support, when needed, to face high demands at work (Rhoades & Eisenberger, 2002). Such buffering effects of POS on stressor–strain relationships can be considered as part of the socioemotional need-fulfilling role of POS. POS has been shown to be negatively associated with strains experienced in the workplace (e.g. Venkatachalam, 1995) and is hypothesised to influence employees' general affective reactions to their job, including job satisfaction and positive mood (Rhoades & Eisenberger, 2002). Indeed, empirical studies demonstrate that POS has a positive impact on employees' job-related affect (e.g. job satisfaction and positive mood) by reducing negative reactions to stressors (Eisenberger et al. 2001; George & Brief, 1992; George, Reed, Ballard, Colin & Fielding, 1995). Thus, POS may reduce employees' stress levels when they encounter stressors, thereby lessening the deleterious effect on subsequent performance.

As described in previous sections, resource allocation theories suggest that negative affect is likely to create off-task attentional demands thus shifting attentional resources away from task performance (Kanfer & Ackerman, 1989; Koy & Yeo, 2008). Conversely, organisations that care about employees' well-being are more likely to try to decrease avoidable work complications and distractions for their workers, such as conflicting job

requirements (Stamper & Johlke, 2003). For example, the policies and practices of such organisations may specify and clarify job expectations and norms for their employees in order to better prepare them for work tasks (Guzzo, Noonan & Elron 1994; Wayne, Shore and Liden, 1997). Therefore, while negative affect may reduce the attentional resources away from task performance, POS is likely to have the opposite effect by reducing role conflict (e.g. Babakus, Cravens, Johnson, & Moncrief, 1996) and removing distractions.

POS may therefore mitigate the negative effect of LMX ambivalence in two different, albeit linked, ways. Firstly, POS is expected to buffer aversive psychological and psychosomatic reactions (i.e. strains) to stressors. Secondly, it is predicted to mitigate the distracting effects of negative affect by providing resources and role clarity. Given these predictions, the following hypothesis can be proposed:

*Hypothesis 16:* The relationship between LMX ambivalence and task performance will be moderated by POS such that the negative effect will be reduced when POS is high.

*Hypothesis 17:* The relationship between LMX ambivalence and OCB will be moderated by POS such that the negative effect will be reduced when POS is high.

## **5.5. Method**

### **5.5.1. Research design**

A cross-sectional survey design was used in Study 2. Data was collected from both leaders and followers in order to reduce the potential for common source bias. Thus, leaders rated each of their followers' levels of performance and OCB.

### **5.5.2. Access and ethics**

After being granted ethical approval by the University Research and Ethics Committee, research proposals were sent to a multiple organisations both within the UK and abroad. The proposals provided an overview of the research objectives as well as the intended benefits to participating organisations. This mainly included the production of a detailed feedback report. The research proposal also contained information regarding how the research would be conducted, highlighting the need for matched dyads and the requirement for leaders to rate their individual followers. Realistic time frames for the research were given and ethical assurances regarding confidentiality were made. Organisations who responded with interest in the study were contacted and, where possible, face-to-face meetings were arranged. If the organisation was based outside the UK, then communication was completed via telephone and email. Eventually, 3 organisations agreed to take part in the study. Two organisations were based in the UK based and the other in India.

### **5.5.3. Study setting**

As noted above, data was collected from three organisations. Organisations 1 and 2 were both based in the UK while the third was a UK-owned organisation based in Chennai, India. Participants in all three samples worked in a service centre environment, providing telephone support or telephone sales. The first organisation provided customer service support for a large online estate agent. Employees' roles involved making appointments and following up house viewings. Part of the job involved encouraging potential clients to use other services such as conveyancing and financial services. The second organisation provided HR services and outsourced their services to many companies. The nature of the work undertaken by this company involves working with organisations with no designated HR department to ensure that they meet all necessary legal requirements in terms of policies and contracts. In addition, employees may deal with employee relations issues. Finally, the third organisation was a

Business Process Outsourcer, providing a range of services. As with organisation 2 this involves outsourcing business processes to smaller companies who do not have systems in place. This may, for example, involve IT solutions.

#### **5.5.4. Study sample**

Data was collected from 76, 14 and 292 followers from Organisations 1, 2 and 3 respectively. This represented a total response rate of 89%. Combined, the three samples consisted of 381 employees and 72 direct supervisors giving an overall matched sample of 320 dyads. The average age of the combined sample was 28 years and 60% of respondents were male. The average organisational tenure was 23 months.

#### **5.5.5. Procedure**

A short online survey was produced, taking approximately 10-15 minutes to complete. A separate questionnaire was produced for leaders and followers. The questionnaire was distributed via an email link (see Appendix 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 online cover sheet informed participants that by continuing to the next page they agreed to participate in the research.

### **5.6. Measures**

#### **5.6.1. Follower survey**

Measures of LMX quality, LMX ambivalence, LMX Importance, Felt Obligations and POS as well as demographic information were collected from team members. With the exception of POS, all these variables were measured with the same scales used in Study 1. As in Study 1, responses to survey questions were measured on 5-point scales (for example: 1 \_

*strongly disagree, 5 \_ strongly agree*). For each measure, all items were averaged to create a composite mean score, with higher scores indicating higher levels of the underlying construct.

***Leader-Member Exchange (LMX)***: LMX was measured using the LMX-7 (see Table 2) scale ( $\alpha = .83$ ).

***LMX Ambivalence***. As in Study 1, in order to measure respondents' feeling of ambivalence towards the LMX relationship, items from the LMX-7 measure were adapted, based upon Jamieson's (1993) ambivalence scale ( $\alpha = .92$ ).

***LMX Attitude Importance*** – As in Study 1, the LMX-7 instrument was adapted to focus on how important each aspect was to followers ( $\alpha = .82$ ).

***Felt Obligations towards leader*** – 7 items developed by Eisenberger et al. (2001),  $\alpha = .71$ .

***POS*** - Was measured using the 6-item short version of the scale (Eisenberger et al. 2001). An example item is: "*The organisation takes pride in my accomplishments*". ( $\alpha = .74$ ).

### **5.6.2. Leaders survey**

Ratings of followers' performance were collected from their immediate supervisor. The scales for both task performance and OCB are the same as the one used in Study 1. As with the follower survey, responses to survey questions were measured on 5-point scales (1 \_ *strongly disagree, 5 \_ strongly agree*). Scores from all included items were averaged to create a composite score, with higher scores indicating higher levels of the underlying construct.

**Task Performance.** Followers' task performance was assessed by the leader using four items (Nahrgang et al. 2009). Example items include 'This employee's performance is very high' and 'This employee is very effective' ( $\alpha = .95$ ).

**OCB** –seven items from Williams and Anderson (1991) were used to operationalise OCB. Specifically, this referred to citizenship behaviours targeted at individuals (OCBI). Thus leaders reported the extent to which followers engaged in interpersonally directed OCBs; a sample item is "Helps others who have heavy workloads" ( $\alpha = .87$ ).

## **5.7. Results**

### **5.7.1. Measurement evaluation**

Table 15 presents the means, standard deviations and Pearson correlation coefficients of the variables measured in Study 2. This Table combines measures from both the leader and followers surveys. Cronbach's alpha of all measures exceeded acceptable levels of scale reliability (i.e.  $>.70$ ). This suggests that the scales used had acceptable internal consistency. Study 1 showed that both LMX ambivalence and LMX importance demonstrated good levels of reliability and stability over time, providing initial support for their use as reliable scales. This is echoed in the results of Study 2 which also show that both LMX ambivalence and LMX importance are highly reliable with Cronbach's alphas of .92 and .82 respectively.

**Table 15:** Means, Standard Deviations, Correlations and of the Variables used in Study 2

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. LMX	3.92	0.58												
2. LMX Ambivalence	2.96	0.88	-.22*											
3. LMX Importance	4.04	0.49	.33*	-.12*										
4. Felt Obligations	3.72	0.6	.38*	.02	.37*									
5. POS	3.43	0.6	.38*	-.22*	.17*	.24*								
6. Task Performance	3.98	0.89	.34*	-.26*	.14*	.29*	.30*							
7. OCB	3.6	0.79	.29*	-.25*	.19*	.24*	.21*	.58*						
8. Gender <sup>a</sup>	0.4	0.49	.00	.02	.03	-.02	.00	.02	-.04					
9. Age	28.2	7.39	-.03	-.03	-.04	-.05	.10*	.05	.05	-.03				
10. Dyadic Tenure	22.73	30.51	.04	.02	-.03	.10	.07	-.02	.04	-.04	.34*			
11. Organisation 1			-.05	-.11*	.26*	-.02	-.19*	-.07	-.12*	.04	-.10	-.19*		
12. Organisation 2			.06	-.11*	-.04	-.01	.04	-.05	-.04	-.05	.22*	.36*	-.10	
13. Organisation 3			.02	.15*	-.23*	.03	.16*	.09	.13*	-.02	-.01	.02	-.90*	-.35*

N= 320 - 382

\*. Correlation is significant at the 0.05 level (2-tailed).

a 1 = Female, 0 = Male

Upon reviewing the correlations displayed in Table 15, of particular interest is the relationship between LMX quality and the attitude strength constructs; LMX importance and LMX ambivalence. The correlation between LMX ambivalence and LMX quality was  $-.22$ . This correlation is lower than those found in Study 1 ( $-.47$  at time 1 and  $-.32$  at time 2). The relatively modest correlation found in Study 2 again supports the notion that LMX ambivalence is distinct from overall LMX quality. Similarly, the correlation between LMX importance and LMX quality was also smaller in Study 2 ( $.33$ ) when compared with Study 1 ( $.56$  at time 1 and  $.49$  at time 2). Again, as with LMX ambivalence, the relatively modest correlation between LMX importance and LMX quality supports the assertion that the two constructs are distinct. To further explore the relationship amongst these constructs, confirmatory factor analysis was conducted and the results are discussed below.

### **5.7.2. Discriminant Validity**

As discussed in Study 1, LMX quality, LMX ambivalence and LMX importance are conceptualised as distinct facets of one's attitude towards the leader-follower relationship. Attitude strength research supports the contention that these facets are best understood by a multifactor model (e.g. Krosnick et al. 1993). Study 1 supported this view, with CFA results showing that LMX quality, LMX importance and LMX ambivalence fitted a three factor model better than any model where these facets were combined. However, it is important to ascertain the discriminant validity in Study 2, for several reasons. Firstly, this is the first empirical test of the constructs so it is critical to have confidence that they are distinct from LMX quality. Thus, demonstrating discriminant validity across multiple studies adds conviction to the view that LMX quality, LMX importance and LMX ambivalence are separate facets of the leader-follower relationship. Secondly, the CFA results of Study 1 demonstrate that, while a model in which these three variables were each considered to be

separate factors did indeed fit the data best, the indices were not sufficient to be considered 'good' fit. As discussed previously, the benchmark for the CFI value to be considered good fit is near to .95 (Hu & Bentler, 1995) and this is not demonstrated by the three factor model. It is therefore important to determine whether better fit statistics are achieved in Study 2. Thirdly, as mentioned previously, Study 1 was limited by its use of student participants. It is vital to demonstrate discriminant validity in an organisational context; the setting for Study 2. Fourthly, Study 2 includes POS as a potential moderator of the effect of LMX ambivalence and this variable needs to be included in the CFA to ensure it is distinct from the other constructs.

As in Study 1, various models were compared using CFA in order to determine how well the items used to measure LMX quality, LMX ambivalence, and LMX importance fit these latent constructs. In order to determine whether the variables are distinctive, the same indices used in Study 1 will be employed when assessing model fit. Thus,  $\chi^2$ , CFI, TLI and RMSEA will again be used as indices of model fit. Using Mplus (version 6.11), various models were tested to establish discriminant validity. First, as shown in Table 16, the three variables associated with LMX attitude; LMX quality, LMX ambivalence and LMX importance, were analysed. A model in which each of these three variables was considered to be a separate factor, was compared with various two-factor models. It was also compared with a single factor model, where all the items were included as one latent factor.

**Table 16:** Confirmatory factor analyses with LMX quality, LMX ambivalence and LMX importance

<b>Model</b>	<b>df</b>	<b>X<sup>2</sup></b>	<b>CFI</b>	<b>TLI</b>	<b>RMSEA</b>
Three-factor model	186	495.45	.92	.90	.07
Two-factor model <sup>1</sup>	188	1090.91	.75	.72	.11
Two-factor model <sup>2</sup>	188	1231.59	.71	.68	.12
Two-factor model <sup>3</sup>	188	1327.20	.69	.65	.13
One-factor model	189	2019.94	.50	.44	.16

*Note:*

Two-factor model<sup>1</sup> combines LMX and LMX Importance

Two-factor model<sup>2</sup> combines LMX and LMX Ambivalence

Two-factor model<sup>3</sup> combines LMX Ambivalence and LMX Importance

As can be seen in Table 16, the model that best fits the data is the three-factor model where the three variables are considered to be separate factors. This model produced significantly better fit than each of the other models tested, based on the results of a chi squared difference test, which was significant at the .01 level. This suggests that, as in Study 1, the LMX attitude facets are best considered to be separate factors rather than one underlying construct. Despite this, it should be noted that even the three factor model, which provides the best model fit, did not show model fit indices that can be consider ‘good’ fit. As discussed previously, the benchmark for the CFI value to be considered good fit is near to .95 (Hu & Bentler, 1995). This value was not achieved in the three factor model, which was found to be .92. Similarly, the RMSEA and SRMR values in the three factor model were not below .05, again indicating that this model is not a good fit (Browne et al. 2002).

However, the values are closer to a model that can be considered a good fit than the values seen in Study 1.

The conceptual models that will be tested in Study 2 examine differential effects of LMX ambivalence and LMX importance in separate models. Thus, to further assess the discriminant validity of the constructs, CFA was used to assess separate models for both LMX ambivalence and LMX importance. In this analysis, the two constructs were not included together but rather each was included with the mediator or moderator and LMX quality. The results of this analysis are shown below.

**Table 17:** Confirmatory factor analyses with LMX quality, LMX Importance and Felt Obligations

<b>Model</b>	<b>df</b>	<b>X<sup>2</sup></b>	<b>CFI</b>	<b>TLI</b>	<b>RMSEA</b>
Three-factor model	167	406.30	.91	.90	.06
Two-factor model <sup>1</sup>	169	997.44	.68	.65	.11
Two-factor model <sup>2</sup>	169	867.55	.73	.70	.10
Two-Factor Model <sup>3</sup>	169	877.90	.73	.70	.11
One-factor model	170	1365.26	.55	.49	.14

*Note:*

Two-factor model<sup>1</sup> combines LMX and LMX Importance

Two-factor model<sup>2</sup> combines LMX Importance and Felt Obligations

Two-factor model<sup>3</sup> combines LMX and Felt Obligations

LMX importance was included in a model with LMX quality and felt obligations; these are shown in Table 17 above. The CFA results show that the three factor model, where LMX, LMX importance and felt obligations are considered to be distinct factors, provides the best model fit. This three factor model represents a significant better fit than any of the other

models that combine the variables in a two factor model or indeed the model which views them all as one latent factor. The differences were significant, based on the results of a chi squared difference test, which was significant at the .01 level. This analysis therefore suggests that LMX importance is best conceptualised as a distinct factor from overall LMX quality. Again, the model fit indices suggest the three factor model falls short of what would be considered good model fit.

The discriminant validity of LMX ambivalence was also analysed separately and included in a model with POS and LMX quality. The results of this analysis are displayed in Table 18, below.

**Table 18:** Confirmatory factor analyses with LMX quality, LMX Ambivalence and POS

<b>Model</b>	<b><i>df</i></b>	<b><math>X^2</math></b>	<b>CFI</b>	<b>TLI</b>	<b>RMSEA</b>
Three-factor model	167	430.64	.93	.92	.06
Two-factor model <sup>1</sup>	169	1169.79	.73	.69	.13
Two-factor model <sup>2</sup>	169	1299.93	.69	.65	.13
One-factor model	170	1987.86	.51	.45	.17

*Note:*

Two-factor model<sup>1</sup> combines LMX and LMX Ambivalence

Two-factor model<sup>2</sup> combines LMX Ambivalence and POS

The CFA, shown in Table 18, demonstrates that the three factor model, where LMX, LMX ambivalence and POS are considered to be distinct factors, provides the best model fit. As can be seen in Table 18, the three factor model produced a significantly better level of model fit ( $X^2 = 430.64$ ,  $df = 167$ ,  $p < .00$ ; CFI = .93; TLI = .92; RMSEA = .06) when compared with any of the two factor models or the one-factor model based on the results of chi squared difference tests, which were significant at the .01 level. The results therefore support the

distinctiveness and discriminant validity of one of the focal variables in this study; LMX ambivalence. Again, the model fit indices suggest that the three factor model falls slightly short of what would be considered good model fit.

### **5.7.3. Hypothesis testing and statistical analysis**

As with Study 1, this study is concerned with examining two models; the first related to LMX ambivalence and the second related to LMX importance. The LMX ambivalence model focuses to the moderating role of POS in the link between LMX ambivalence and performance. The LMX importance model, as in the first study, is concerned with the role of felt obligations in explaining the link between LMX quality and performance, moderated by LMX importance. Unlike Study 1, the participants were not working in teams. However, groups of employees did report to the same supervisor and that supervisor provided ratings of multiple individuals. Therefore, although individuals were not part of functional teams, the data can't be considered purely dyadic as individuals are nested, due to having a common supervisor. Therefore, as with Study 1, the nature of the data means there is the potential that uncorrected tests of individual-level relationships may inadvertently contain group level effects (e.g. Bauer et al. 2006). To assess this possibility, the ICC(1) score was calculated (Bliese, 2000) in order to establish the degree of dependence in the data. An ICC(1) value of .23 ( $F(60,261) = 2.61, p < .01$ ) for task performance and .25 ( $F(59,258) = 2.80, p < .01$ ) for OCB was found to be moderately high (Bliese, 1998). This indicated that a significant portion of the variance in the ratings of team members' OCB and task performance could be accounted for by having the same supervisor as other followers. Thus, because the data structure in the sample violated the assumption of independence, the multilevel mediation approach described by Bauer et al. (2006) was used. In testing both the LMX ambivalence model and LMX importance model a multivariate model was used.

#### **5.7.4. LMX ambivalence and POS: moderation analysis**

For the purposes of hypothesis testing, moderated hierarchical regression analyses were conducted (see Tables 19 and 20). Prior to analysis, all the variables involved in the interaction term were mean-centered (Aiken & West, 1991). This interaction term consisted of the product of LMX ambivalence and POS. In order to account for the nested nature of the data, a model with varying intercepts was specified using SPSS mixed procedure. Thus, although any group level effects that may be present were allowed for within the analysis. As in Study 1, LMX quality was controlled for in order to determine the unique effects of LMX ambivalence above and beyond relationship quality. Age, gender, organisation membership and dyadic tenure were also controlled for.

#### **Task Performance**

To test the moderating role of POS in the relationship between LMX ambivalence and task performance (Hypothesis 16), a moderated hierarchical regression analysis was performed, as shown in Table 19. As in Study 1, LMX quality was controlled for in this analysis, in order to determine the unique effects of LMX ambivalence above and beyond relationship quality. Age, gender, organisation membership and dyadic tenure were also controlled for. In the first step, task performance was regressed on the control variables: LMX quality, organisational membership, employee age, gender and organisational tenure as well as the moderating variable, POS (centred). In the second step, LMX ambivalence (centered) was added. Then, in the third step, the product of the LMX ambivalence and POS was added to the equation (Aiken & West, 1991). Hypothesis 16 proposed that POS would moderate the negative relationship between LMX ambivalence and task performance. The moderated relationship was found to be significant ( $B = .08$ ,  $t(292) = 1.978$ ,  $p < .05$ ).

**Table 19:** Hierarchical moderated regression analysis results for interactions between LMX and POS predicting task performance

	Task Performance		
	Coefficient <sup>b</sup>	SE	t
<i>Control Variables</i>			
Gender <sup>a</sup>	-.00	.09	-.04
Dyadic Tenure	.00	.00	.37
LMX	.44	.09	5.02**
Organisation 1	-.22	.17	-1.29
Organisation 2	-.51	.29	-1.77
<i>Independent variable</i>			
LMX Ambivalence	-.15	.05	-3.08**
<i>Moderating variable</i>			
POS	.09	.05	1.94*
<i>Two Way Interaction</i>			
LMX Ambivalence x POS	.08	.04	1.98*

\*= significant  $p < .05$  \*\*=significant  $p < .01$

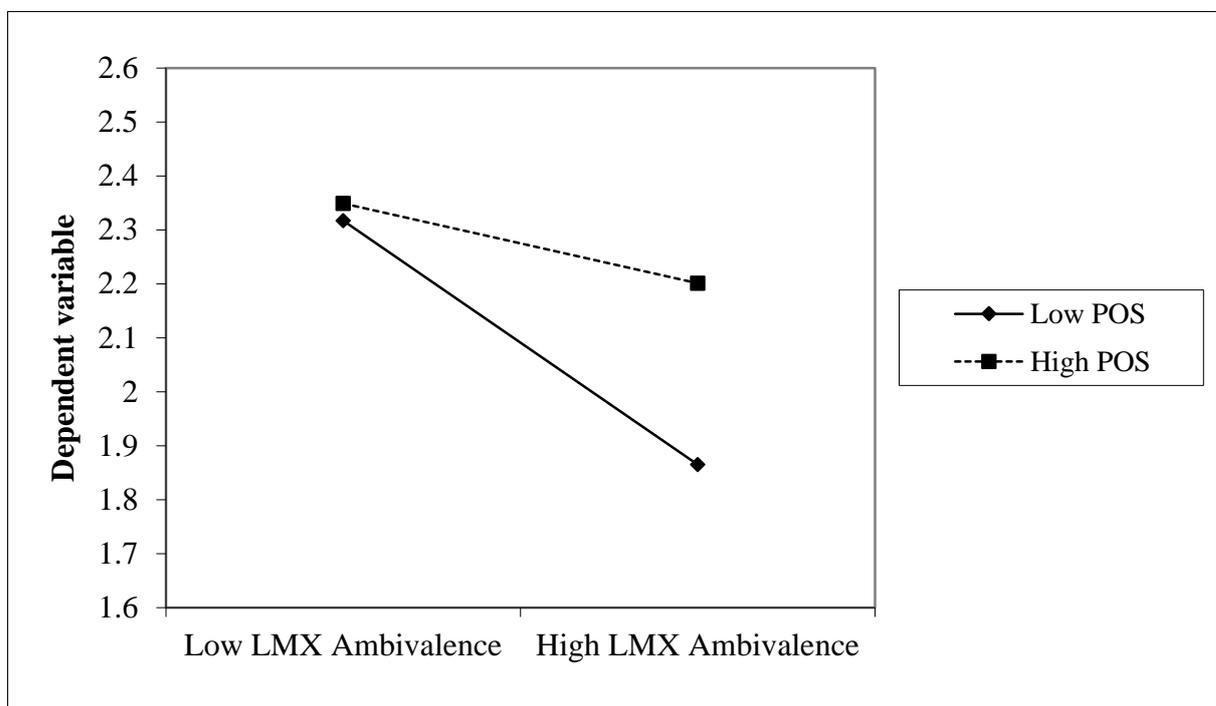
N= 292-308

<sup>a</sup> 1 = Female, 0 = Male

In order to explore the nature of the significant interaction the conditional effects at two levels of the moderator (POS) were reviewed. The results show that the relationship between LMX Ambivalence and task performance was significant at low levels of the moderator (-1 SD). In other words, the negative relationship between LMX ambivalence and task performance was significant for employees who reported low POS ( $\beta = -.33$ ,  $t(310) = -4.15$ ,  $p < .01$ ). When employees reported higher levels of POS (= 1 SD), LMX ambivalence was not significantly associated with performance ( $\beta = -.11$ ,  $t(310) = -1.68$ , *n.s.*). To examine the pattern

of relationships, the significant interaction was plotted; Figure 3 depicts the relation between LMX ambivalence and task performance at high and low values of POS (1 standard deviation above and below the mean). To facilitate interpretation, simple slopes were plotted and probed the for these high and low values of LMX ambivalence as recommended by Bauer et al. (2006).

**Figure 3:** Task performance as a function of ambivalence for high (+1 SD) and low POS (-1 SD)



As predicted and illustrated in Figure 3, POS moderated the relationship between LMX ambivalence and task performance, with high levels of POS attenuating the effect.

### OCB

To test the moderating role of POS in the relationship between LMX ambivalence and OCB (Hypothesis 17), a moderated hierarchical regression analysis was performed (Table 20). As in the previous analysis, LMX quality was controlled for in order to determine the unique effects

of LMX ambivalence above and beyond relationship quality. Age, gender, organisation membership and dyadic tenure were also controlled for. In the first step, OCB was regressed on the control variables: LMX quality, organisational membership, employee age, gender and organisational tenure as well the moderating variable, POS (centered). In the second step, LMX ambivalence (centered) was added. Then, in the third step, the product of the LMX ambivalence and POS was added to the equation (Aiken and West, 1991). As can be seen in Table 20, a significant, negative relationship between LMX ambivalence and OCB was found ( $B = -.14$ ,  $t(304) = -3.20$ ,  $p < .01$ ). Hypothesis 17 proposed that POS would moderate the negative relationship between LMX ambivalence and OCB. However, the moderated relationship was not found to be significant ( $B = -.02$ ,  $t(291) = -.638$ ,  $n.s$ ). Thus POS did not moderate the relationship between LMX ambivalence and OCB and no support was found for hypothesis 17.

**Table 20:** Hierarchical moderated regression analysis results for interactions between LMX and POS predicting OCB

	OCB		
	Coefficient <sup>b</sup>	SE	t
<i>Control Variables</i>			
Employee Gender <sup>a</sup>	.08	.08	1.01
Dyadic Tenure	.00	.00	1.49
LMX	.32	.08	4.02**
Organisation 1	-.19	.16	-1.20
Organisation 2	-.50	.25	-1.96*
<i>Independent variable</i>			
LMX Ambivalence	-.14	.04	-3.20**
<i>Moderating variable</i>			
POS	.00	.04	-.06

*Two Way Interaction*

LMX Ambivalence x POS	-0.02	.04	-.64
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\*= significant  $p < .05$  \*\*=significant  $p < .01$

N= 292-308

<sup>a</sup> 1 = Female, 0 = Male

### **5.7.5. LMX importance and felt obligations: moderation mediation analysis**

In order to test the hypotheses, concerning the moderating effect of LMX importance in the relationship between LMX quality and employee task performance and OCB, mediated by felt obligations, the same analytic method used in Study 1 was conducted using mixed method analysis in SPSS (version 22). Whereas Study 1 accounted for team membership, in this study supervisory membership was considered. Therefore, as participants within this study consisted of individuals nested within supervisory teams, there is the potential that uncorrected tests of individual-level relationships may inadvertently contain team level effects. Consequently, the hypotheses were tested by using a multivariate three-level model with the mediator felt obligation (M) and the criterion OCB (Y) as outcome variables. Furthermore, control variables, the independent variable of LMX quality (X) and the moderator variable of LMX importance (Z) were included as fixed effects in each of the two equations predicting M and Y. Both equations further included a separate intercept that was allowed to vary within each equation across supervisor, as well as between each equation. The equation predicting M further included the interaction term between LMX quality and LMX importance (X\*Z) in order to test Hypothesis 1. This interaction term was created from the product of the centred values of the LMX quality and LMX importance scales. As the effects on various outcomes were tested, the results are presented separately for each of the

performance variables (task performance and OCB). The results of this analysis are shown in Tables 20-23.

### **Task Performance**

LMX Importance, LMX Quality, the interaction term (LMX x LMX Importance), Age, Gender, Organisational Tenure and Organisational Membership were included as fixed effects in the equation predicting both the mediator (felt obligation) and the outcome variable (task performance). Both equations also included a separate intercept that was allowed to vary within each equation across individuals and groups, as well as between each equation. The results, shown in Table 21, do not support the moderated mediation hypothesis. LMX quality was positively related to the level of felt obligations ( $b = .16, t(371) = 5.520, p < .01$ ), and felt obligations was also associated with task performance ( $b = .26, t(289) = 3.317, p < .01$ ). However, the interaction term had no significant effect on felt obligations ( $b = .02, t(371) = .893, n.s.$ ) thus LMX importance did not moderate the effect of LMX quality on perceptions of felt obligations.

However, the results do suggest some findings of interest. In particular, LMX importance has a significant positive influence on felt obligations ( $b = .18, t(371) = 5.775, p < .01$ ), even when controlling for LMX quality. This suggests that the perceptions of LMX importance engender feelings of felt obligations toward the supervisor. Indeed, felt obligations mediate the relationship observed between LMX importance and task performance. In order to test the significance of the mediated pathway 95% Monte Carlo confidence intervals were by means of bootstrapping with 20,000 repetitions (Bauer et al. 2006). Applying this approach 95% confidence intervals of .02 (lower level) and .08 (higher level) with an indirect effect of .05 were found; suggesting a significant mediation effect.

**Table 21:** Regression results for Task Performance Moderated Mediation Model (Study 2)

	Moderated Mediation Model					
	Felt Obligation (M) X → M			Task Performance (Y) M → Y		
	Coefficient	SE	t	Coefficient	SE	t
Intercept	3.85	.11	33.48**	2.89	.365	7.94
<i>Controls</i>						
Age	-.01	.00	-1.33	.01	.01	.75
Gender <sup>a</sup>	-.03	.06	-.53	.01	.09	.15
Organisational Tenure	.00	.00	2.32*	.00	.00	.24
Organisation 1	-.11	.07	-1.47	-.24	.18	-1.30
Organisation 2	-.17	.16	-1.09	-.42	.29	-1.43
<i>X</i>						
LMX Quality	.16	.03	5.52**	.26	.05	5.03**
<i>Z</i>						
LMX Importance	.18	.03	5.78**	-.01	.05	-.25
<i>X x Z</i>						
<i>LMX Quality x LMX Importance</i>	.02	.02	.89	-.02	.03	-.60
<i>M</i>						
Felt Obligation				.26	.08	3.32**

\*= significant p<.05 \*\*=significant p<.01

N= 292-308

<sup>a</sup> 1 = Female, 0 = Male

As discussed above, evidence of a moderated mediation effect was not found when data was included from all three organisations. However, interestingly, when the data

collected from the Indian sample (organisation 3) was analysed alone there is evidence of support for the hypothesised model. However, when testing the model outlined above with this sample, convergence was not achieved despite increasing the number of iterations allowed. Upon further investigation it was found that there was very little group variance influencing the mediator, felt obligations. A non-significant ICC(1) was found at the group (i.e. supervisor) level suggesting a very small percentage (2%) of the variance in employees' felt obligations were accounted for by sharing a supervisor ( $ICC = 0.02$ ,  $X^2 = 6.69$ , n.s.). Accordingly, the mediator was removed from the random intercept, thus not allowing it to vary across supervisor. Doing so enabled the multivariate model to converge. As there is no evidence for any significant differences in ratings of felt obligation based on having a particular supervisor then including random slopes for the mediator based on supervisor is not required. The multivariate model still controlled for systematic differences between supervisors in terms of mean rating.

The results of the analysis of just the Indian data set are included below (Table 22). In this analysis LMX quality was significantly related to felt obligations ( $b = .16$ ,  $t(222) = 3.86$ ,  $p < .01$ ) and felt obligations were significantly related to task performance ( $b = .36$ ,  $t(185) = 3.61$ ,  $p < .05$ ). A significant mediation was found as the 95% confidence intervals did not pass through zero (LL: .05, UL: .21), with an indirect effect of .12. Furthermore, a significant interaction effect was found, with the interaction between LMX quality and LMX importance significantly influencing felt obligations ( $b = .07$ ,  $t(231) = 2.126$ ,  $p < .05$ ). This interaction effect can be seen in figure 4 below.

**Table 22:** Regression results for Task Performance Moderated Mediation Model – Just Indian Sample

	Moderated Mediation Model					
	Felt Obligation (M) X → M			Task Performance (Y) M → Y		
	Coefficient	SE	t	Coefficient	SE	t
Intercept	3.94	.20**	19.75	2.11	.46	4.60**
<i>Controls</i>						
Age	-.01	.01	-1.47	.01	.01	.73
Gender <sup>a</sup>	.06	.07	.83	-.05	.12	-.46
Organisational Tenure	.00	.00	1.69	.01	.00	2.04*
<i>X</i>						
LMX Quality	.30	.04	4.11**	.24	.12	2.02*
<i>Z</i>						
LMX Importance	.32	.08	4.24**	.01	.12	.10
<i>X x Z</i>						
<i>LMX Quality x LMX Importance</i>	.23	.12	2.13*			
<i>M</i>						
Felt Obligation				.41	.10	4.17**

N= 193- 241 Supervisor N = 36

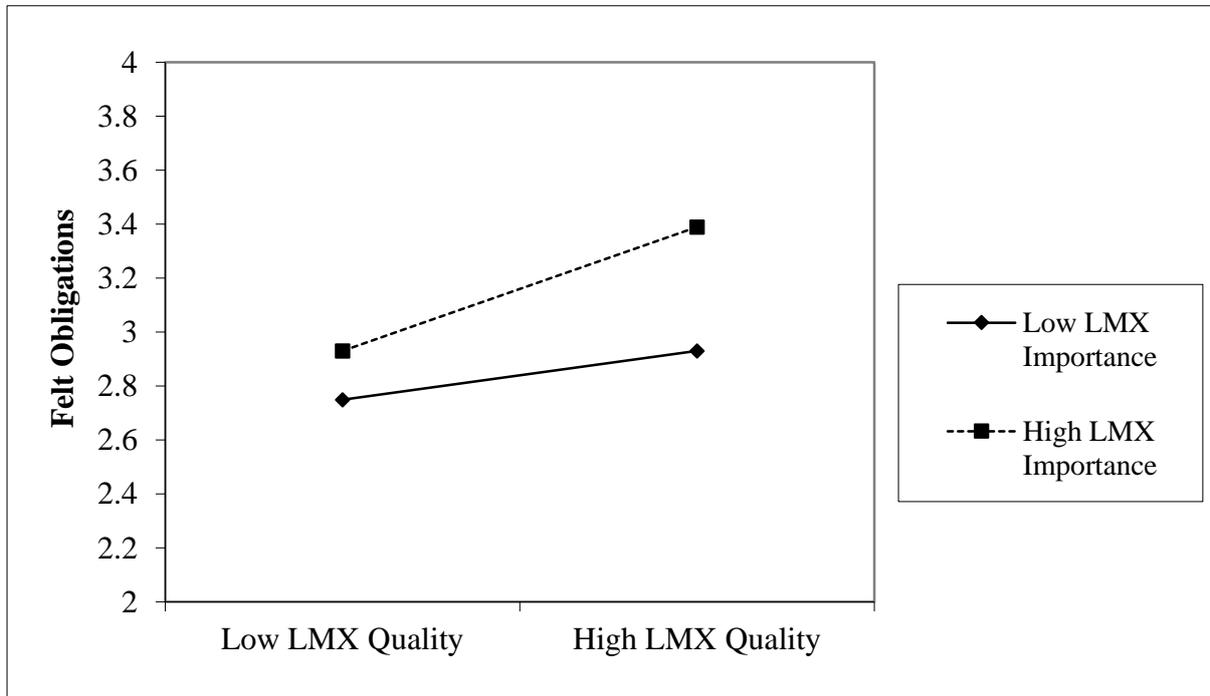
Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

The results of the analysis described above, shown in Table 22, provide initial support for hypotheses 9 and 10. Hypothesis 9 proposed that the relationship between LMX quality and felt obligations is moderated by LMX importance. Specifically, a more positive

effect of LMX on felt obligations was found when LMX importance was higher. As discussed above, the interactive effect of LMX quality and LMX importance on felt obligations is significant, suggesting a significant interaction effect. To facilitate interpretation, the simple slopes for two values of LMX importance (1 Standard Deviation (SD) Below the Mean indicating lower levels of LMX importance and 1 SD above the mean, indicating high levels of LMX importance) were probed, as recommended by Bauer et al. (2006). In line with the hypotheses, Figure 4 shows a stronger positive slope at higher levels of LMX importance ( $b = .42, t(234) = 4.412, p < .01$ ) compared with lower levels of LMX importance ( $b = .19, t(234) = 2.065, p < .05$ ). Thus, hypothesis 9 was supported. This interaction effect can be plotted according to the approach outlined by Aiken and West (1991) and can be seen in figure 4 below.

**Figure 4:** Felt obligation as a function of LMX quality for high (+1 SD) and low LMX Importance (-1 SD)



Hypothesis 13 proposed that, for employees with higher levels of LMX importance, felt obligations mediate the relationship between LMX quality and task

performance. In order to test whether felt obligation mediated the interaction between LMX quality and LMX importance, mediation analysis was conducted at both higher and lower levels of LMX importance. The conditional indirect effects of LMX quality on task performance via felt obligations become increasingly negative for followers with lower levels of LMX importance and increasing positive for followers with higher levels LMX importance. At low levels of LMX importance, a conditional indirect effect of .08 (Confidence Intervals: LL: .01, UL: .17) was found. At higher levels of LMX importance a conditional indirect effect of .17 (Confidence Intervals: LL: .07, UL: .30) was found. Thus the results support hypothesis 13.

## **OCB**

As in the previous analysis, LMX Importance, LMX Quality, the interaction term (LMX x LMX Importance), Age, Gender, Organisational Tenure and Organisational Membership were included as fixed effects in the equation predicting both the mediator (felt obligation) and the outcome variable (OCB). Both equations also included a separate intercept that was allowed to vary within each equation across individuals and groups, as well as between each equation.

As with task performance, the results, shown in Table 23, do not support the moderated mediation hypothesis. LMX quality was positively related to the level of felt obligations ( $b = .16, t(37) = 5.46, p < .01$ ) however, felt obligations were not significantly associated with OCB ( $b = .10, t(290) = 1.35, n.s$ ) and no significant interaction effect was found between LMX importance and LMX quality in the association with felt obligations ( $b = .02, t(372) = .99, n.s$ ). As such, no support was found for hypotheses 9, 11 or 14.

**Table 23:** Regression results for OCB Moderated Mediation Model

	Moderated Mediation Model					
	Felt Obligation (M) X → M			OCB (Y) M → Y		
	Coefficient	SE	t	Coefficient <sup>b</sup>	SE	t
Intercept	3.84	.11	33.46**	3.14**	.33	9.53**
<i>Controls</i>						
Age	-.01	.00	-1.35	.00	.01	.79
Gender <sup>a</sup>	-.03	.06	-.53	-.07	.08	-.81
Organisational Tenure	.00	.00	2.44*	.00	.00	1.32
Organisation 1	-.10	.07	-1.36	-.20	.16	-1.26
Organisation 2	-.18	.16	-1.12	-.38	.26	.16
<i>X</i>						
LMX Quality	.16	.03	5.46**	.16	.05	3.62**
<i>Z</i>						
LMX Importance	.18	.03	5.75**	.08	.04	1.73
<i>X x Z</i>						
<i>LMX Quality x LMX Importance</i>	.02	.02	.99	-.01	.03	-.27
<i>M</i>						
Felt Obligation				.10	.0737	1.35

As with the task performance results, evidence of a moderated mediation effect was not found when data was included from all three organisations. However, as in the previous analysis, when the data collected from the Indian sample was analysed alone, there was evidence to support the hypothesised moderated mediation model. These results are

included below in Table 24. As in the previous analysis, convergence was not achieved initially due to minimal group variance influencing the mediator, felt obligations. Again, this was removed from the random intercept, thus not allowing it to vary across supervisor. Doing so enabled the multivariate model to converge. The results of the analysis described above, shown in Table 24, provide support for hypotheses 9 and 11. The interactive effect of LMX quality and LMX importance on felt obligations is significant ( $b = .22$ ,  $t(234) = 1.95$ ,  $p < .05$ ), suggesting a significant interaction effect and supporting hypothesis 9.

**Table 24:** Regression results for OCB Moderated Mediation Model – Just Indian Sample

	Moderated Mediation Model					
	Felt Obligation (M) X → M			OCB (Y) M → Y		
	Coefficient	SE	t	Coefficient	SE	t
Intercept	3.82	.16	23.98**	2.39**	.39	6.70**
<i>Controls</i>						
Age	-.01	.01	-1.47	.01	.01	.77
Gender <sup>a</sup>	.06	.07	.83	.06	.10	.59
Organisational Tenure	.00	.00	1.50	.01*	.00	.12*
<i>X</i>						
LMX Quality	.30	.07	4.11**	.15	.10	1.51**
<i>Z</i>						
LMX Importance	.32	.08	4.24**	.18	.10	1.82**
<i>X x Z</i>						
<i>LMX Quality x LMX Importance</i>	.22	.12	1.95*			
<i>M</i>						
Felt Obligation				.22**	.09	2.62**

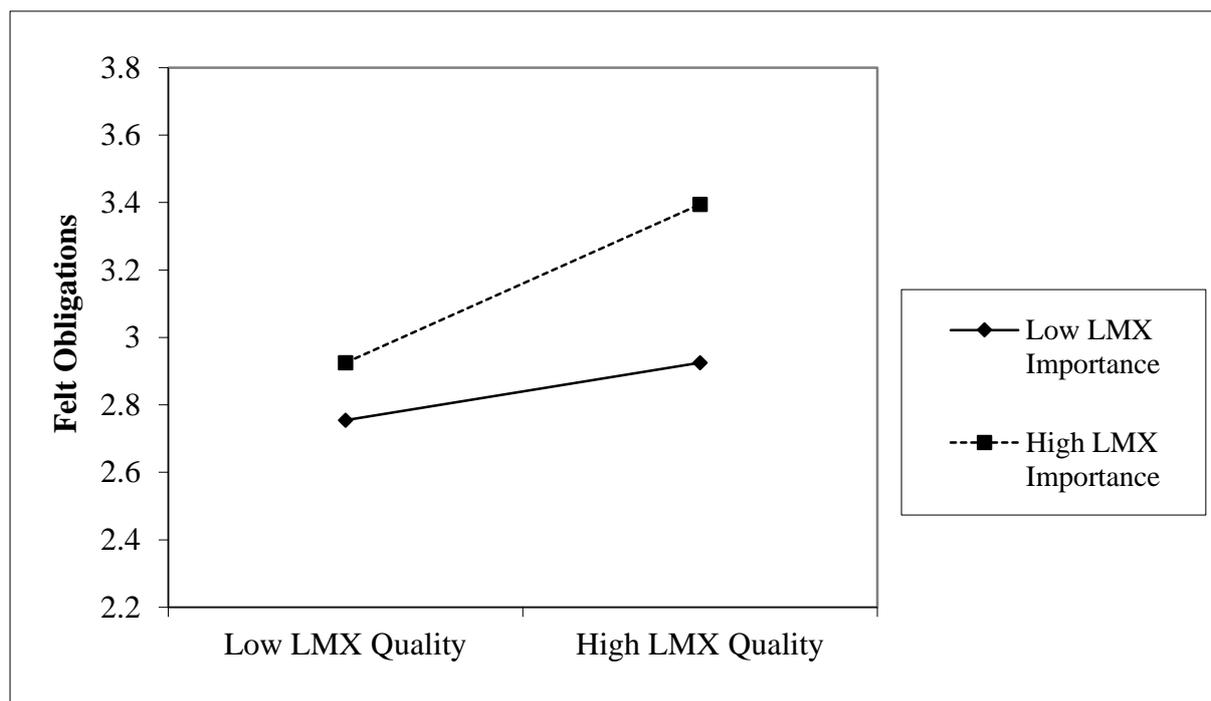
N= 193- 241 Supervisor N = 36

Estimation Method = REML

<sup>a</sup> 1 = Female, 0 = Male

To facilitate interpretation, simple slopes for two values of LMX importance (1 Standard Deviation (SD) Below the Mean indicating lower levels of LMX importance and 1 SD above the mean, indicating high levels of LMX importance) were plotted and probed (Bauer et al. 2006). In line with hypothesis 9, Figure 5 shows a stronger positive slope at higher levels of LMX importance ( $b = .41, t(234) = 4.41, p < .01$ ) compared with lower levels of LMX importance ( $b = .19, t(234) = 2.07, p < .05$ ). This interaction effect can be plotted according to the approach outlined by Aiken and West (1991) and can be seen in figure 5 below.

**Figure 5:** Felt obligation as a function of LMX quality for high (+1 SD) and low LMX Importance (-1 SD)



Hypothesis 14 proposed that, for employees with higher levels of LMX importance, felt obligations mediate the relationship between LMX quality and OCB. As shown in Table 24, LMX quality was significantly related to felt obligations ( $b = .30, t(234)$

= 4.11,  $p < .01$ ) and felt obligations were significantly related to OCB ( $b = .22$ ,  $t(177) = 2.620$ ,  $p < .01$ ). In order to test the significance of the mediated pathway, 95% Monte Carlo confidence intervals by means of bootstrapping with 20,000 repetitions were calculated (Bauer et al. 2006). A significant mediation was found as the 95% confidence intervals did not pass through zero (LL: .02, UL: .14), with an indirect effect of .07. Thus, evidence of mediation was found. In order to test whether felt obligation mediated the interaction between LMX quality and LMX importance, the same mediation analysis was conducted at both higher and lower levels of LMX importance. The conditional indirect effects of LMX quality on OCB via felt obligations become increasingly negative for followers with lower levels of LMX importance and increasing positive for followers with higher levels LMX importance. At low levels of LMX importance a conditional indirect effect of .04 was found (Confidence Intervals: LL: .00, UL: .10). At higher levels of LMX importance a conditional indirect effect of .09 was found (Confidence Intervals: LL: .02, UL: .18). Thus, the results support hypothesis 14.

## **5.8. Study 2: Summary of Findings**

The results of Study 2 build on those of Study 1 and add support to a number of the hypotheses of this thesis. Firstly, the data provide strong evidence that the constructs of LMX importance and LMX ambivalence are distinct from overall LMX quality. As in Study 1, the correlations between these variables were modest and CFA results clearly suggest that the optimal way to operationalise the variables is as separate constructs. This contention is in line with attitude strength research which asserts that there are a number of features of strong attitudes that differentiate them from weak attitudes (e.g. Petty & Krosnick, 1995; Visser, et al. 2006), highlighting the conceptual distinctions between each of the various strength-related features. Scholars have, for example, highlighted that attaching a great deal of personal

importance to an attitude is psychologically distinct from simply possessing a great deal of information about an attitude object or holding the attitude with a high degree of certainty. The current research makes the same argument, suggesting that an overall attitude towards one's LMX (i.e. LMX quality) is conceptually distinct from how much importance is attached to this attitude or whether one has mixed cognitions about one's leader-follower relationship. Using CFA, attitude scholars have investigated the possibility that a common underlying construct could account for covariation among sets of strength-related attributes (e.g. Krosnick et al. 1993; Krosnick, Jarvis, Strathman, & Petty, 1994; Lavine, Huff, Wagner, & Sweeney, 1998; Visser, 1998). Such work has consistently emphasised that a model in which the strength-related features are considered to be distinct (albeit correlated) constructs provide the best fit. Thus, the results of this study support this perspective by suggesting that attitude strength facets can be viewed as distinctive constructs.

As well as discussing how strength related features are structured, attitude scholars have extensively examined the effects that different strength-related feature have on the consequences of attitudes. Such work has demonstrated that various attitude strength facets influence the effect of attitudes on behaviour (e.g. Berger, 1992; Visser et al. 2003; Visser et al. 2007). The findings from Study 2 provide some support for the integration of attitude strength and LMX by also demonstrating that two facets of attitude strength (importance and ambivalence) influence the leader-follower relationship. Specifically, the results suggest that having ambivalence cognitions about the relationship has a negative effect on performance (both task performance and OCB). Thus, in accordance with theories of cognitive consistency (e.g. Heider, 1946; Festinger, 1957), Study 2 showed that LMX ambivalence negatively impacted employee performance. Furthermore, this study demonstrates that the adverse effects of LMX ambivalence can be ameliorated by the perception of high levels of organisational support. That is, organisations that are seen to value employees' contributions, act in their best

interests, show genuine concern for their welfare and help employees when they most need it, should be perceived as supportive (Rhoades and Eisenberger, 2002) and that this kind of support can tangibly help to buffer the detrimental effect of ambivalent leader-member exchanges.

With regards to LMX ambivalence, the data corroborated some of the predictions of Study 2, showing support for hypothesis 16. Specifically, POS moderated the negative relationship between LMX ambivalence and task performance. This result was found while controlling for overall LMX quality, thus demonstrating that LMX ambivalence has effects beyond those of overall LMX quality. The moderating effect of POS was not found when OCB was the outcome and therefore hypothesis 17 was not supported. What is highlighted in the results of Study 2 is that ambivalence can be a powerful influence on individuals; something that has consistently been shown in previous research focusing on ambivalent relationships (e.g. Uchino et al. 2004; Uchino et al. 2001; Uchino, et al. 2014). Overall, the results of Study 1 and Study 2 provide strong support for the contention that leader-follower relationships can be viewed as more than a uni-dimensional construct characterised by either positive or negative exchanges but instead, such relationships can, in many instances, be characterised by *both* positive and negative exchanges. Understanding dyadic relationships in this way, as highlighted in the current research, can extend our understanding of LMX and both how and when it influences important work outcomes.

Unlike the LMX ambivalence results, the data provided less support for the various hypotheses related to LMX importance. As with Study 1, initially the moderated mediation model did not produce significant results. Specifically, no evidence of a significant interaction effect of LMX importance and LMX quality was found. In other words, LMX importance did not moderate the effects of LMX quality on felt obligations as predicted. This was contrary to the results of Study 1 which did show this interaction effect, although felt obligations did not

predict subsequent performance. Conversely, Study 2 did demonstrate the predicted association between felt obligations and both performance outcomes. The results of this study also highlight that LMX importance was significantly associated with felt obligations, suggesting that the importance of the leader-follower relationship may influence employee perceptions directly, above the effects of overall LMX quality. Interestingly, support was found for the moderated mediation hypotheses when the analysis was conducted with just the data from the Indian organisation. In this context, felt obligations did mediate the moderated relationship between LMX quality, LMX important and both task performance and OCB. Therefore, some support was found for the predictions related to the effects of LMX importance, although these appear to be context dependent.

The fact that support for the LMX importance hypotheses was found only in the Indian context warrants further attention. It is important to consider why this might be the case. Doing so may serve to fuel further research which aims to understand how the culture in which leadership is embedded might influence the LMX relationship and, in particular, the role of LMX importance. The differential effects found between UK (Organisations 1 and 2) and Indian (Organisation 3) are due to differences in the data collected. The question is whether such differences are simply a result of dissimilar sample sizes or due to a fundamental variation existing between the two cultures. As can be seen in Table 25, the UK sample is much smaller than the Indian sample. Interestingly, the range of scores reported for the LMX importance scale is smaller in the UK sample when compared with the Indian sample. The more restricted range of the UK sample makes it less likely that interaction effects will be found (McClelland & Judd, 1993) Effect sizes are determined, in part, by the variability of the measures, with variables with restricted ranges resulting in smaller effect sizes. McClelland & Judd (1993) demonstrated that problems with restricted range are exacerbated (or compounded) when

testing for interaction effects. The small sample and restricted range of the LMX importance variable may explain why moderation effects were not found in this sample.

**Table 25:** Comparison of descriptive statistics between UK and Indian samples

Variable	Sample N		Sample Mean		Sample St Dev		Sample Range	
	UK	Indian	UK	Indian	UK	Indian	UK	Indian
LMX	90	248	3.90	3.94	.67	.53	2.00-5.00	1.57-5.00
LMX Importance	90	248	4.24	3.98	.42	.51	3.00-5.00	1.86-5.00
Felt Obligations	90	241	3.69	3.76	.56	.62	1.67-5.00	2.00-5.00
Task Performance	77	203	3.85	3.95	.99	.86	1.75-5.00	1.50-5.00
OCB	77	199	3.42	3.61	.82	.77	1.14-5.00	2.00-5.00

In addition to the issue of restricted range discussed above, there appear to be clear differences in the correlations between variables as a function of culture. Tables 26 and 27 show the correlations between variables of interest in the UK and India samples respectively. As shown in these tables, a far larger correlation exists between LMX and LMX importance in the Indian sample compared to the UK sample (.41 vs .14). LMX importance is also much more highly correlated with both outcome variables in the Indian sample.

**Table 26:** Correlation Table for UK sample only

	1	2	3	4
1. LMX				
2. LMX Importance	.14			
3. Felt Obligations	.35**	.35**		
4. Task Performance	.41**	.03	.14	
5. OCB	.34**	.07	.01	.41**

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

**Table 27:** Correlation Table for Indian sample only

	1	2	3	4
1. LMX				
2. LMX Importance	.41**			
3. Felt Obligations	.38**	.38**		
4. Task Performance	.29**	.19**	.40**	
5. OCB	.25**	.26**	.34**	.70**

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

A smaller sample size may not be the only reason for the different results found between samples as cultural differences between the UK and India may also play a role. Results of a recent meta-analysis have highlighted the role played by national culture in influencing relationships between LMX and its correlates (Rockstuhl et al. 2012). The results of this analysis showed that relationships of LMX with a number of outcomes (including OCB) were stronger in horizontal-individualistic (e.g. Western) contexts than in vertical-collectivistic (e.g. Asian) contexts. The authors posited that such difference might be due to the fact that followers' responses in Asian contexts may also be influenced by collective interests and role-based obligations. In other words, the results of the meta-analysis suggest that in eastern cultures, leader-follower relationship may be considered of less importance than in western cultures. This might go some way to explaining why a lower mean of LMX importance was found in the Indian context compared with the UK. In the more collectivist culture (India), the obligations felt by employees may be more diffuse and related not only to the leader but more

generally to co-workers and the collective interest. However, when LMX importance is perceived as high, it may interact and generate a greater sense of felt obligation specifically to one's supervisor. Clearly, more research is needed to further understand the role of LMX importance but, based on the current findings, there is some support for the concept.

## **CHAPTER 6: GENERAL DISCUSSION AND INTEGRATION OF RESEARCH FINDINGS**

### **6.1 Chapter Summary**

This final chapter provides an overall discussion of the findings of this thesis. Initially, the findings of each model (LMX importance and LMX ambivalence) will be discussed separately, with the main findings from both studies discussed, along with the theoretical and practical implications. Next, the strength and limitations of the methodological approaches used in both studies will be considered. This is followed by a more general discussion about the overall theoretical and practical implications of this thesis, with a particular focus on the integration between leadership and attitudes. As a part of this section, some potential avenues for further research are also highlighted along with some complementary methodological approaches which have the potential to extend, strengthen and broaden the present research findings. Finally, 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.

### **6.2. General Discussion**

The hypotheses presented and tested in this thesis were all predicated on the same premise; that leadership perceptions represent subjective evaluations and judgements and can therefore be conceptualised as attitudes. The subsequent theoretical integration between LMX and attitude theory was tested in two empirical studies. Specifically, two distinct sets of hypotheses were examined; one relating to LMX ambivalence and one relating to LMX importance (see Figures 1 and 2). In both models, the outcomes were related to job performance and encompassed a range of behaviours (task performance, OCB and CPB).

In regard to LMX ambivalence, it was examined how and when the construct, which is experienced by many followers, influenced levels of job performance. The mediating of negative affect was examined (in Study 1) in order to explain how such ambivalent relationships have deleterious effects on followers' performance. Researchers have previously reported negative relationships between ambivalent interpersonal relationships and individuals' well-being (e.g. Uchino et al. 2004; Uchino et al. 2001; Uchino, et al. 2014; Uchino et al. 2012). However, to date, such relationships have not focused on behavioural consequences of ambivalent relationships. This literature was extended and applied to an important interpersonal relationship within the organisational domain; the leader-follower relationship. The current research provided the first test of how ambivalent relationships in the workplace influence performance outcomes. More generally, this thesis is one of only a few study to investigate how ambivalence influences performance (for exceptions see Pratt, 2000; Fong, 2006). Across the two studies, the results supported the hypotheses, predicated on theories of cognitive consistency which argue that inconsistent cognitions, associated with ambivalence, are aversive and lead to negative emotional states (e.g. Heider, 1946; Festinger, 1957). Moreover, as predicted, it was found that negative affect had a detrimental effect on employees' performance in accordance with resource allocation theories (e.g. Conway & Giannopoulos, 1993; Seibert & Ellis, 1991). Furthermore, we showed that the adverse effects of LMX ambivalence can be ameliorated by the perception of high levels of organisational support. That is, organisations that are seen to value employees' contributions, act in their best interests, show genuine concern for their welfare and help employees when they most need it, should be perceived as supportive (Rhoades & Eisenberger, 2002) and that this kind of support can buffer the detrimental effect of ambivalent leader-member exchanges.

Compared with the aforementioned LMX ambivalence findings, the results of the LMX importance model were far less supportive of the hypotheses presented. Across the two

studies, minimal support was found for the predicted relationships. In Study 1, evidence was found for the moderating role of importance in the relationship between LMX quality and felt obligations. However, no evidence of moderated mediation was found for any of the outcome variables. In Study 2, contrary to those of Study 1, no evidence of a significant interaction effect of LMX importance and LMX quality was found. In other words, LMX importance did not moderate the effects of LMX quality on felt obligations as predicted. Conversely, Study 2 did demonstrate the predicted association between felt obligations and both performance outcomes; a result not found in Study 1. As discussed previously, support for the predicted moderated mediation model (Figure 2) was only found when the analysis was conducted with just the data from the Indian organisation. Clearly further work is needed to explore LMX importance.

The theoretical integration and the resulting conceptual models, described above, were developed with six core aims in mind. The results will be discussed in relation to each of these aims in later sections, but first these aims will be briefly recapped.

Firstly, the main overarching aim of this thesis was to provide an empirical test of a theoretical integration between LMX and attitudes. Previous research approaching leadership from an attitudinal perspective has focused on general attitudes such as satisfaction with supervision (e.g. Phillips, Douthitt & Hyland, 2001). However, this body of work is limited by a failure to incorporate the nuances involved in conceptualising and measuring an attitude. As noted in the introduction, attitudes are extremely complex and their impact is determined by a range of factors. The studies presented in this thesis clearly demonstrate that attitude research can be easily incorporated into leadership research. Importantly, the results of the studies also show, for the most part, that integration between LMX and attitudes is a fruitful endeavour that has the potential to extend our understanding of this important leadership topic. Such assimilation represents an important step in the development of LMX theory by providing a

more nuanced view of leader-member relationships. In a broad sense, this thesis highlights the need for LMX to move beyond focusing on the relationship as purely good or bad and begin to appreciate other facets of the relationship that may determine its impact. Not only can future research continue to shed light on LMX, but scholars can apply the same approach to other prominent leadership theories.

Secondly, by integrating the concept of attitude strength with the study of LMX, the current research aimed to shed light on the LMX-performance link. It is a link that has been found to be inconsistent with a range of correlations shown by various researchers. This thesis has demonstrated that incorporating attitude strength into the investigation of LMX can help shed light on when and how leader-follower relationships influence key work outcomes. Investigating the role of both LMX ambivalence and LMX importance provided strong support for the benefits of considering both as distinct facets of the LMX relationship. LMX ambivalence provided an understanding of the underlying structure of the LMX attitude that showed significant effects on employee behaviour, above and beyond overall LMX quality. LMX importance was shown to moderate the effect of LMX quality in one organisational sample and further work can aim to shed light on this construct and when it influenced the LMX-performance link. Overall, it clear that the results provide initial evidence that incorporating attitude strength and LMX merits further research attention.

Thirdly, by incorporating components of attitude strength into leadership research, the current research sought to build on the current use of these constructs within I/O psychology. This extension contributes both practical and theoretical direction to researchers interested in incorporating attitude strength outside of the attitude literature and builds on recent work demonstrating the importance of considering attitude strength. Recent research in the organisational behaviour domain, for example, has demonstrated that job attitude strength moderates the relationship between job satisfaction and several criteria of interest to

organisational scholars (job performance, organisational citizenship behaviour, withdrawal; Schleicher, et al. 2015). Other research examined a specific aspect of attitude strength, affective-cognitive consistency (ACC), demonstrating the moderating effect it had on the job satisfaction-job performance relationship, with those employees high in ACC showing a significantly larger correlation between job satisfaction and performance than those low in ACC (Schleicher, et al. 2004). Similarly, research shows that job ambivalence (i.e. the coexistence of positive and negative job evaluations) moderates the job satisfaction-OCB relationship (Ziegler et al. 2012). Such work provides some of the best examples of how the intricacies of attitude theory can be applied to the organisation context and the results of this thesis lend further credence to the utility of such an endeavour. The current study builds on the aforementioned studies by showing that attitude strength can be incorporated in other areas of organisational psychology; namely leadership.

Fourthly, as discussed in previous chapters, ambivalence is a topic that has been investigated in a number of research domains, including the social sciences (Baek, 2010) and has sparked interest within organisational psychology/management research (e.g. Fong 2006; Piderit, 2000; Pratt, 2000; Vadera & Pratt, 2013). Interesting findings have led numerous researchers to articulate the need to account further for ambivalence in organisational settings (e.g. Kreiner & Ashforth, 2004; Oreg & Sverdlik, 2010). By examining LMX ambivalence, this thesis aimed to contribute to the small, but growing, body of work pertaining to ambivalence in the workplace. Despite increasing interest in the concept of ambivalence within organisations, little is known about how mixed feelings influence performance outcomes. By investigating ambivalence within the framework of LMX theory, the current research contributes to this workplace ambivalence literature by demonstrating that mixed feelings can be a negative force within organisations. Furthermore, the findings highlight that considering only the overall quality of leader-member relationships fails to fully capture the

types of dyadic relationships that may develop. Specifically, in relation to ambivalence, the research shows that in addition to conceptualising leader-follower relationship in terms of being high or low in quality, such relationships can, in many instances, be characterised by *both* positive and negative exchanges. This thesis, to my knowledge, provides the first conceptualisation and empirical test of LMX ambivalence. The studies demonstrated that ambivalent leader-member relationships were associated with poorer job performance and importantly that the effect was shown to exist when controlling for LMX quality.

Fifthly, and finally, by integrating LMX with attitude theory, this thesis aimed to contribute to the recent resurgence in the interest in a social psychological approach to leadership (e.g. Hogg, 2001). This renewed interest is best characterised by new theoretical approaches that apply the study of social cognition and social identity to the arena of leadership (Thomas et al. 2013). These new social psychological approaches to leadership provide a social cognitive framework for social psychology to investigate leadership in the broader group context; rather than focusing purely on a leader-centric approach (Haslam et al. 2011; Hogg, 2001). Integrating leadership with attitude theory provides a novel social cognitive approach to the understanding of leadership. Such an approach also highlights the importance of moving away from a leader-centric approach that assumes leadership measures accurately reflect leaders' behaviours, to a more follower-centric approach, that characterises leadership perceptions as a property of follower and leader (Thomas et al. 2013).

A leader-centric approach assumes that leadership measurement accurately reflects the behaviours and styles of the leaders themselves. Recently, scholars have emphasised that using follower reports of leader behaviour suggests that behavioural ratings reflect not only recall of actual behaviours but also inferences based on semantic memory which may vary among individuals (Hansbrough, et al. 2014). Similarly, by considering leader perceptions as attitudes, this thesis has shown that such perception can be influenced by attitudinal processes

that may not accurately reflect leader behaviour. Attitudes are, for instance, shaped by various content and motivations that influences information processing and the stability of such attitudes. Thus, the current research shows that leadership perceptions are a property of both the leader's behaviour and the follower's subjective interpretation of that behaviour. Acknowledging the role of follower-centric processes in the formation and maintenance of leadership perceptions allows a consideration of a wide range of factors that can affect this interpretative process. A central proposition of this thesis is that drawing upon an attitudes framework offers many insights into how this interpretation process occurs.

As described above, this thesis had several aims which have been largely supported by the empirical findings. In the sections below, the findings will be discussed in further detail before the theoretical and practical implications are considered.

### **6.3. LMX Ambivalence: Discussion of Findings**

As described above, the results of Study 1 and 2 provide largely unequivocal support to the theoretical framework integrating LMX and ambivalence perspectives in relation to followers' performance. Ambivalent attitudes are those that are defined by equivalently strong positive or negative evaluations of an object (Thompson et al. 1995). Ambivalence is typically seen as a dimension of attitude strength, with higher levels of ambivalence being associated with a weaker attitude and consequently displaying weaker attitude-behaviour relationships (e.g. Conner et al. 2002; Jonas et al. 2000b). However, ambivalence differs from other strength related features such as importance in that it represents a structural property. Often an implicit assumption is made that attitudes can be represented in terms of a single, bipolar (positive-negative) dimension. Increasingly, however, attitude researchers have acknowledged the likelihood that some attitudes are ambivalent or characterised by the co-

existence of both positive and negative evaluations (e.g. Cacioppo & Berntson, 1994; Thompson et al. 1995; Zanna & Rempel, 1988).

Ambivalence represents an alternative to the traditional unidimensional view, by highlighting that attitudes are comprised of two separate unipolar dimensions (i.e. one negative and one positive). While many attitudes may be largely univalent (i.e. high on one of the evaluative dimensions and low on the other), ambivalence allows the possibility that a given attitude may simultaneously be made up of relatively strong positive and negative evaluations. This bipolar argument has been previously applied to interpersonal relationships, with relational ambivalence frameworks suggesting that simultaneous positive and negative cognitions often emerge within relationships.

Researchers have previously reported negative consequences between ambivalent interpersonal relationships and individuals' well-being (e.g. Uchino et al. 2004; Uchino et al. 2001; Uchino, et al. 2014). The current research extended this literature and applied it to a vital interpersonal relationship within the organisational domain; the leader-follower relationship. In doing so, relational ambivalence encapsulates leader-follower relationships that are judged as neither definitively good nor definitively bad but comprise both cognitions. Thus, LMX was integrated with attitudinal ambivalence. Such bi-polar relationships, to date, have not been considered in the context of LMX. Instead, organisational researchers have examined ambivalence towards the organisation (Kreiner & Ashforth, 2004), towards organisational change (Oreg & Sverdlik, 2011), towards loyalty in mentor-protégé relationships (Oglensky, 2008) and the effects of ambivalence on work-life on employee commitment (Pratt & Rosa, 2003).

LMX researchers have previously only considered relationships that differ in quality, on a continuum ranging from bad-good, negative-positive or low-quality-high-quality. Generally, leader-follower relationships that are considered high-quality are associated with

better work outcomes (Martin et al. 2015). However, such work also shows that a large amount of variation exists in the strength of the link between LMX and outcomes. Some studies, for example, demonstrate non-significant associations between LMX and task performance (e.g. Liden et al. 1993; Loi & Ngo, 2009; Vecchio, 1982) and OCB (e.g. Bernerth, et al. 2007 ; Wat & Shaffer, 2005); this suggests that LMX quality does not always have strong positive effects on work outcomes. The current research argued that these inconsistent results may be partly due to the conceptualisation of LMX as a purely unidimensional concept (characterised by low vs. high quality). Considering the effects of relationships that are characterised by both positive and negative evaluations (i.e. low vs. high ambivalence) may further elucidate how and when LMX predicts performance. Specifically, the current research hypothesised that when leader-follower relationships are characterised by high levels of subjective ambivalence, they would be detrimental to employee performance.

The results supported this hypothesis, predicated on theories of cognitive consistency which argue that inconsistent cognitions, associated with ambivalence, are aversive and lead to negative emotional states (e.g. Heider, 1946; Festinger, 1957). Moreover, as predicted, it was found that the resulting negative affect negatively impacted employees performance in accordance with resource allocation theories (e.g. Conway & Giannopoulos, 1993; Seibert and Ellis, 1991) and the emotion-centred model of voluntary work behaviour (Spector & Fox, 2002). Furthermore the data showed that the adverse effects of LMX ambivalence can be ameliorated by the perception of high levels of organisational support. That is, organisations that are seen to value employees' contributions, act in their best interests, show genuine concern for their welfare, and help employees when they most need it, should be perceived as supportive (Rhoades & Eisenberger, 2002) and that this kind of support can tangibly help to buffer the detrimental effect of ambivalent leader-member exchanges.

The support in these data for the effect of LMX ambivalence lends credence to the theoretical rationale accounting for how relational ambivalence affects employee performance and represents an important contribution to both the LMX and workplace ambivalence literatures. Despite increasing interest in the concept of ambivalence within organisations, little is known about how such mixed feelings influence performance outcomes. By investigating ambivalence within the framework of LMX theory, the current research contributes to this workplace ambivalence literature by demonstrating that mixed feelings can be a negative force within organisations. Furthermore, in doing so, it highlights that considering only the overall quality of leader-member relationships fails to fully capture the types of dyadic relationships that may develop. Specifically, this thesis has shown that in addition to conceptualising leader-follower relationship in terms of being high or low in quality, such relationships can, in many instances, be characterised by *both* positive and negative exchanges.

The findings related to LMX ambivalence make a number of significant theoretical contributions. Firstly, it provides a novel view of the leader-member relationship that uniquely integrates theory from the attitude and relationship science literature, by considering ambivalence as a characteristic that is distinct from overall relationship quality. Given the interest in ambivalence within organisations generally (e.g. Ashforth et al. 2014; Fong 2006; Plambeck & Weber 2009; Pratt & Doucet 2000), the importance of interpersonal workplace relationships (e.g. Liden, Wayne, & Sparrowe, 2000) and the particularly influential role of leader-member relationships (e.g. Martin et al. 2015), it is prudent to consider the role of relational ambivalence in this context. Indeed, ambivalence is thought to exist in nearly all types of relationships (Cosser, 1966) but despite this it has not been recognised in the context of leader-follower relationships. Thus, this thesis has provided an initial attempt to include the concept of ambivalence within LMX relationships. In doing so, it has added to our

understanding of the relationship by utilising theories developed by close relationship and attitude scholars (e.g. Thompson et al. 1995; Fincham & Linfield, 1997). The current research has demonstrated that relational ambivalence is a distinct facet of the LMX relationship that carries unique outcomes above and beyond overall LMX quality. Specifically, the findings of both studies highlight the importance of considering relational ambivalence within organisations. Additionally, the findings contribute an important step in the development of LMX theory by providing a more nuanced view of leader-member relationships and one that can extend our knowledge of when and how LMX influences employee outcomes. In a broad sense, findings from these studies point to the need for research to rethink LMX as a complex relationship likely to be beset with difficulties even when it is generally positive. In fact, organisational research, in general, does not account for these complexities as noted by Fineman (2000, p. 13) “... the notion that our work lives are characterized by divisions of positive and negative feelings is a convenient social narrative. It permits the presentation of one’s messy or inchoate feelings in any easy linguistic ‘package,’ a format with which some social scientists are content to collude.”

A second contribution concerns the effect of LMX ambivalence. Ambivalent relationships, in general, have been shown to have a particularly negative effect on individuals (e.g. Fingerman et al. 2008). The current research provides the first conceptualisation and empirical test of LMX ambivalence, demonstrating that ambivalent leader-member relationships were associated with poorer performance and, importantly, that the effect was shown to exist when controlling for LMX quality. By using cognitive consistency theories to elucidate how LMX ambivalence might influence performance and providing empirical support by testing a related mediating mechanism; negative affect, the current research also provides a clear theoretical framework. Thus, it provides a theoretical

basis to explain the findings of the current research as well as a framework for future research to build on.

Another contribution concerns the role of POS in the LMX ambivalence-performance link. The LMX literature has been regularly criticised for paying limited attention to moderators (e.g. Erdogan & Liden, 2002; Schriesheim et al. 2000). This is a pertinent limitation given the inconsistent association between LMX and performance, described previously. The consideration of moderating variables is clearly highly relevant to the investigation of LMX. Given this fact, the current research sought to better understand when LMX ambivalence and the resulting negative effect, would have a less pronounced or even non-significant effect on performance outcomes. Indeed, in the present research, we found that reasonable variability in the LMX ambivalence- performance across both studies, ranging from low (-.13, Study 1) to moderate (-.25, Study 2). Moreover, it was demonstrated that POS mitigated the impact of LMX ambivalence, suggesting that feeling supported by the organisation can ameliorate the potential damaging effects of LMX ambivalence.

#### **6.4. LMX Importance: Discussion of Findings**

As discussed previously, attitude theory suggests that not all individuals possess similarly *strong* (i.e. consistent, crystallized, impactful; Krosnick & Petty, 1995) attitudes toward a target object, and the strength of an attitude is not indicated solely by the score obtained on a typical attitude measure. One particular feature related to attitude strength: attitude importance was investigated in relation to LMX. Specifically, the current research examined a novel concept, LMX importance, defined as the extent to which a person perceives their leader-follower relationship as personally important.

Researchers have repeatedly shown that LMX has positive outcomes, for example, influencing employees task performance, OCB and CPB (Dulebohn et al. 2012; Gerstner &

Day, 1997; Ilies et al. 2007; Martin et al. 2015; Rockstuhl et al, 2012). This thesis argued that LMX has a more potent affect on such behaviour when LMX importance is high rather than low, thus specifying a moderating pathway linking LMX with outcomes. This was predicated on attitude strength theory which has consistently shown that attitudes which are perceived as more important are more predictive of behaviour (Budd, 1986; Parker et al. 1974; Rokeach & Kliejunas, 1972; Jaccard & Becker, 1985; Krosnick, 1988b). In particular, both Study 1 and 2 focused on the influence of these variables on various aspects of performance (task, OCB and CPB). It was hypothesised that LMX importance would influence the relationship between LMX quality and felt obligations by influencing followers' perceptions, by elaborating on favourable treatment given by leaders and making such behaviours salient and easy to recall. According to the norm of reciprocity (Gouldner, 1960) felt obligations will develop in order to repay such favourable treatment. Thus, put simply, because important attitudes exert a more powerful influence on thinking and behaviour, it was suggested that higher levels of LMX importance will amplify the effects of LMX quality. In this way, felt obligations were predicted to mediate the interactive effect of LMX quality and LMX importance on performance outcomes.

Results provided mixed support for the aforementioned hypotheses. Firstly, both studies demonstrated that LMX importance was a distinct variable that demonstrated good reliability and discriminant validity. In Study 1 it was demonstrated that LMX importance did moderate the link between LMX quality and felt obligations. However, felt obligations did not mediate this affect as greater feelings of obligation did not predict subsequent performance outcomes. This was not the case in Study 2, which found evidence that felt obligations did mediate the LMX-performance link. However, in this study LMX importance was not found to significantly moderate the first stage of this mediation model. Only when the model was tested in the largest organisation (based in India) was evidence found for the full moderated

mediation model. In this case, LMX importance moderated the mediated relationship between LMX quality, felt obligations and OCB and task performance. In this context, it was therefore demonstrated that LMX importance, as predicted, strengthened the social exchange relationship that ultimately led to important work outcomes. Taken together, these findings provide some support for the utility of considering LMX important as a separate facet of the LMX attitude. Some evidence was found for the potential interaction effect between these two variables which certainly warrants further investigation. The results also appear to suggest that the affects may be somewhat context dependent.

The support for the hypothesised model in the Indian organisation, for example, suggests that the role of LMX importance may be particularly influential in this context. This context is particularly interesting as India is an understudied region in the leadership literature (Pellegrini, Scandura, & Jayaraman, 2010), despite several calls for more research to understand the leadership phenomenon in this region (Kirkman & Law, 2005; Pillai, Scandura, & Williams, 1999). Recently, Chhokar (2007) noted that, despite increased attention to global perspectives on leadership, there exists a dearth of rigorous academic research from the Indian business context. In the previous chapter, two reasons were posited to explain why support for the conceptual model was only found in the Indian context. Firstly was the issue of sample size, as the Indian organisation represented, by far, the largest single organisation of the three included in Study 2. This restricted range made it far less likely that significant moderated mediation results would be found in the UK organisations. Secondly, the cultural differences between India and the UK might also explain the disparate findings. As discussed, in the more collectivist culture (India), the obligations felt by employees may be more diffuse and related not only to the leader but more generally to co-workers and the collective interest. However, when LMX importance is perceived as high, it may interact and generate a greater sense of felt obligation specifically to one's supervisor.

As highlighted above, the current research involved the introduction of a novel concept; LMX importance. Of course, investigating a new concept does not by itself represent a significant contribution to the LMX literature. The empirical findings have demonstrated that LMX importance may, at least in certain contexts, significantly influence the effects of LMX on levels of performance. In particular, social-exchange theory (e.g. Altman & Taylor, 1973; Batson, 1993; Blau, 1964; Foa & Foa, 1974) and arguments pertaining to attitude strength (e.g. Krosnick & Petty, 1995) were drawn upon to explain how LMX and LMX importance may trigger employees to engage in OCB through the development of felt obligations. LMX researchers have recurrently emphasised the need to explore the factors that explain both *how* and *when* LMX influences various aspects of employee performance (e.g. Erdogan & Enders, 2007; Erdogan & Liden, 2002; Gerstner & Day, 1997; House & Aditya, 1997; Schriesheim, Castro, & Yammarino, 2000; Tangirala, Green, & Ramanujam, 2007; Martin et al. 2010). The current study thus makes an important contribution to the literature by capturing employee perceptions of the importance with which they hold their attitude towards their LMX relationship and examining the moderating effect of this cognition. Focusing on this attitudinal dimension allows not only the investigation of the degree to which LMX is contingent upon ascriptions of importance but does so within the framework of social cognition, recently highlighted as an important avenue for future research (Thomas et al. 2013).

## **6.5. Leadership and Attitudes: Overall Theoretical Contributions**

While there is a tradition of considering leadership within the context of attitude theory, it was the contention of this thesis that, to date, the application of attitude theory to the study of leadership has been limited. Specifically, it was argued that the leadership literature has failed to consider the complexities and nuances associated with attitudes. The current research attempted to address this gap by proposing ways in which theory and methodology

related to attitudes can inform the understanding of leadership perceptions. An additional aim was to offer an initial empirical test of this integration, focusing specifically on LMX and facets of attitude strength in an attempt to demonstrate the potential benefits that such a cross-fertilisation can have. Thus, presented in this thesis are the results of two studies that each investigated how the novel concepts of LMX importance and LMX ambivalence impacted the link between LMX and performance.

General speaking, people who have positive attitudes toward an attitude object should hold beliefs, feelings, and behaviours that are aligned in their favourability towards the object, whereas people with negative attitudes regarding an attitude object should have beliefs, feelings, and behaviours that unilaterally express unfavorability towards the object (see Eagly & Chaiken, 1993). However, research shows that attitudes are more complex than that. For example, people's beliefs, feelings, and behaviour towards an object can sometimes differ in their valence (direction) and, therefore, in their implications for their overall attitude (Haddock & Maio, 2004). Furthermore, it has long been realised by attitude scholars that not all attitudes exert substantial effects on thought and behaviour. Sometimes, attitudes appear to be largely inconsequential, bearing no obvious impact on thought or action. This has led to several decades' worth of research focusing on identifying the conditions under which attitudes do and do not have robust effects on cognition and behaviour. Indeed, in contrast to the organisational literature, attitude research has recognised that the sometimes modest attitude-behaviour relationships are often due to the nature of the attitude and in particular the strength of the attitude.

The sections above have highlighted the key findings of both the studies conducted as part of this thesis. In particular, the theoretical implications of both conceptual models have been discussed. In summation, the concepts introduced (LMX importance and LMX ambivalence) both make significant contributions to LMX theory. Specifically, across both

studies evidence was provided suggesting these previously unconsidered facets of the leader-follower relationship can further elucidate both how and when LMX will influence important work outcomes. In considering the concepts of importance and ambivalence in this context, this thesis does not contest or question the established theoretical arguments behind LMX theory. Rather, it seeks to increase our comprehension of this pivotal workplace relationship by further exploring its nuances. Indeed, the data extends the LMX literature by explicitly examining the social exchange relationship theorised to be at the heart of the LMX relationship. Despite the significance of social exchange to LMX theory, there is a notable lack of empirical research to support its central role in explaining both the development of the dyadic relationship and the link between LMX and key outcomes. This fact was highlighted by Liden, Sparrowe & Wayne (1997) who noted: “it is remarkable how few studies have directly examined exchange processes between leaders and members given the theoretical centrality of social exchange processes in the formation of LMX relationships” (pg. 75). In the years since, there remains little evidence for the role of social exchanges in the LMX literature. The current study addressed this limitation by focusing on the role of felt obligation as a mediator in the link between LMX and performance.

Additionally, the LMX ambivalence model tested an additional theoretically relevant mediator in order to explain the effects of relational ambivalence; negative affect. This represents an important theoretical contribution because, despite the widespread belief that supervisors are a key source of negative emotional states (i.e. moods) at work, there is little empirical research documenting these effects, especially in relation to LMX (Glasø, & Einarsen 2006). A recent study directly examined the link between mood and supervisory interactions (Miner et al. 2005). This research revealed that employees rated 80% of their interactions with their supervisors as positive and only 20% as negative; however, the effects of negative interactions on employee mood were, in general, far more pronounced than the

effects of positive interactions. The fact that evidence was found linking LMX ambivalence with state negative affect and subsequent performance, thus adds empirical support for the key role of emotions in leader-follower dyads. As well as providing a novel mechanism linking the LMX relationship to performance outcomes, the LMX ambivalence model provided a novel conceptualisation of the leader-follower relationship by focusing on the underlying structure of the positive and negative evaluations. This provided a bi-directional view of the relationship that showed unique effects on employee performance outcomes, over and above overall LMX quality.

While the aforementioned contributions have the potential to provide substantial contributions to the development of LMX theory, an overarching aim of this thesis was to provide a rationale for the cross-fertilisation of leadership and attitudes. Therefore, in some ways LMX theory was the vessel used to demonstrate how this integration could be applied in a substantive way. Accordingly, the most substantive contribution of this thesis is the incorporation of leadership and attitudes. The current research provides the first empirical test to demonstrate how the concept of attitude strength can be applied in order to examine the leadership process. However, this application is just the tip of the iceberg in terms of what attitude theory can tell us about leadership (Lee, et al. 2015).

As noted in previous sections, to date, the application of attitude theory to the study of leadership has been extremely limited. In particular, the leadership literature has failed to consider the complexities and nuances associated with attitudes. For example, concepts such as attitude strength, attitude function and attitude content have not been considered within this domain. In addition to attitude strength, investigated in the current study, there are many other aspects of attitudes that can be incorporated into the study of leadership. For instance, the functional approach to attitudes suggests that attitudes fulfill psychological needs for the individual (Olson & Zanna, 1993). This approach addresses the motivational bases of

people's attitudes, suggesting that some attitudes might reflect our underlying values, while others help us behave in ways appropriate to important reference groups. The social-adjustment function, for example, is served by attitudes that help us to identify with well-regarded individuals and distance ourselves from disliked individuals (Smith, Bruner, & White, 1956). The way in which these function relate to leadership attitudes, for example followers' leadership attitudes, can serve a variety of functions and add to the understanding of what motivates individuals to hold a particular attitude. Followers may, for example, develop a particular leadership attitude in order to fit into the work group, whereas others might base their attitude on whether the leader fits with their values.

Another aspect of attitude theory that can be incorporated into the study of leadership relates to implicit attitudes. Many scholars have recognized that values, attitudes, and goals operate at implicit levels (Bargh & Chartrand, 1999; Carver & Scheier, 1998; Greenwald & Banaji, 1995), occurring outside of people's awareness, intention, and control (De Houwer & Moors, 2007). Thus the more accessible one's attitude the more likely it will be automatically activated in the presence of the attitude object. In recent years a great deal of attention has been paid to the role of implicit attitudes. Implicit attitudes have been shown to have powerful effects on people's cognitions and behaviors (e.g., Greenwald, Smith, Sriram, Bar-Anan, & Nosek, 2009). Indeed, evidence has accumulated highlighting the fact that many behaviors are driven by nonconscious processes. These implicit processes are intuitive, spontaneous and unintentional (e.g., Bargh, 1994; Wilson, 2002) and therefore are not captured through traditional self-report attitude scales. Research has demonstrated that such attitudes, when activated, can have powerful effects on behavior, showing that human action can often be initiated automatically (e.g. Swanson, Swanson, & Greenwald, 2001). Examples of such automated action include, the fact that implicitly activated achievement goals elicit higher levels of job performance (Shantz & Latham, 2009), and implicitly activating imagery

related to business (e.g., briefcases) leads to diminished cooperation in economic games (Kay, Wheeler, Bargh, & Ross, 2004).

However, despite their potential application, implicit measures have received relatively modest attention within the organisational literatures, largely owing to the fact that they are more difficult to measure (Uhlmann et al., 2012). However, there has been a recent surge in the number of studies using implicit measures to understand a number of phenomenon, including traits (e.g., Johnson, Tolentino, Rodopman, & Cho, 2010; Johnson, & Saboe, 2011), attitudes (e.g., Johnson & Lord, 2010) and values (e.g., Reynolds, Leavitt, & Decelles, 2010). Leadership researchers have also realised the potential that implicit attitudes can have on the leadership process. Implicit measures may help determine a person's unconscious attitude towards their leader. Use of implicit measures may, in fact, be critical to our understanding of leadership as such measures are particularly informative when participants are unwilling to admit their attitudes to others, or even to themselves (Uhlmann et al., 2012). As such implicit measures have been shown to resist attempts at deliberate faking (e.g., LeBreton, Barksdale, Robin, & James, 2007). This makes implicit attitude especially useful in situations where evaluation apprehension is likely, such as measuring satisfaction with one's job or supervisor in a study sponsored by the organization (Leavitt, Fong, & Greenwald, 2011).

Leavitt et al. (2011) has demonstrated the use of implicit measures of various facets of job satisfaction, demonstrating that such methods can be applied to leadership. The study examined how implicit attitudes regarding the organization, supervisor, and coworkers combined with explicit job satisfaction measures to predict job performance. Interestingly the results showed that implicit satisfaction with one's organization and coworkers predicted both job performance and OCB, respectively, above and beyond explicit attitudes. However, contrary to the authors' predictions, implicit attitudes towards one's supervisor did not

predict these outcomes (Leavitt et al., 2011). These results are somewhat surprising given to strong links between leadership attitudes and performance outcomes. Whether or not this is indicative of a differential effect of implicit and explicit leadership attitudes is uncertain given this is the only study to measure leadership in this way. Future work should continue to consider implicit attitudes towards leadership, how they impact employee outcomes, and to what extent they differ from explicit measures of leadership attitude. Future research can also move beyond implicit measures of supervisor satisfaction to look at implicit attitudes towards different aspects of leadership. For example, future research could examine implicit attitudes towards one's leader-follower relationship and how this compares with explicit relationship attitude. Research in the interpersonal relationships area has developed ways of measuring implicit attitude specific to aspects of romantic relationships (e.g., Baccus, Baldwin, & Packer, 2004; Banse & Kowalick, 2007; LeBel & Gawronski, 2009; Zayas & Shoda, 2005). Such measures could be adapted to focus on capturing implicit attitudes towards the leader-follower relationship.

## **6.6. Practical Implications**

The findings related to the effects of both LMX importance and LMX ambivalence have numerous practical implications for organisations. Generally speaking, the current research has provided novel perspectives on leader-follower relationships that, when recognised, could influence the way in which managers think about and develop relationships with employees. These implications will be discussed separately, starting with LMX ambivalence.

### **6.6.1. LMX ambivalence: practical implications**

Knowledge of LMX ambivalence might offer leaders more control in the methods they use to develop and maintain relationships with their followers. Leaders who previously believed relationships with their employees were uniformly positive or negative would especially profit from understanding that relationally ambivalent employees may react in a negative way. Interestingly, research suggests that ambivalent attitudes can be highly malleable (e.g. Bassili, 1996) and consequently by altering their behaviour to be more consistent, managers might be able to shift employee perceptions of the relationship from an ambivalent state relatively easily. Leaders may be more inclined to engage in such action if they are aware of the detrimental consequences associated with LMX ambivalence. From an organisation's perspective, altering leader behaviour in the short-term is imperative, since the effects of LMX ambivalence seem to be disadvantageous for them (e.g. lower task performance, OCB and higher CPB).

Given the detrimental effects of LMX ambivalence, it is very important that leaders and human resource professionals understand how to mitigate the effects of such relational ambivalence. An important finding of the current research was the mitigating role that POS played in reducing the negative effects of ambivalence. From the results, it is clear that high levels of POS can buffer against the negative effects of ambivalent relationships. Leaders and Human Resource professionals need to ensure the provision of organisational support so as to mitigate the effects of LMX ambivalence. For example, human resource practices can be used to suggest investment in employees and show recognition of employee contributions and signal that the organisation is supportive and is seeking to establish or continue a social exchange relationship with employees (Allen, Shore, & Griffeth, 2003). Allen et al. (2003) demonstrate that supportive HR practices indicating investment in employees or recognition of employee contributions leads to higher levels of POS. In addition, as noted by Rothman & Wiesenfeld, (2007), leaders can reduce the negative impact of ambivalent feelings by training

employees to express their emotional ambivalence in ways that are more productive. For instance, helping employees articulate their feelings and the causes of their feelings is likely to reduce the negative implications of such complex emotions.

Relatedly, leaders can attempt to alter their own behaviour to be more consistent in their dealings with employees. While it may not always be possible to have positive interactions with subordinates, behavioural consistency is one way in which leaders can try to reduce the potential for ambivalence. Research has demonstrated that leaders who are perceived as inconsistent are evaluated as less procedurally fair and that this is associated with feelings of uncertainty about ongoing interpersonal interactions (De Cremer, 2003). Lian et al. (2012) have also demonstrated the negative effects of mixed relationships (characterised by both high quality LMX and abusive supervision). Leaders also need to appreciate that attitudes are influenced by the social context and ambivalence may be influenced by the attitudes of other members of the workgroup (e.g. Visser & Mirabile, 2004).

On a positive note, research suggests that ambivalent attitudes are more likely to be changeable than attitudes showing low levels of ambivalence. According to the Action-Based Model of Dissonance, cognitive inconsistency evokes a negative affective state that signals to the organism that something is wrong and motivates it engage in behaviour to correct the problem (Harmon-Jones & Harmon-Jones, 2007). Work by van Harreveld, van der Pligt & de Liver (2009) suggests that those with ambivalent attitudes may engage in similar strategies to reduce ambivalence. Such work has clear implications for those interested in promoting attitudinal and behavioural change. For example, followers with ambivalent LMX attitudes are likely to be good targets for persuasive messages to increase the value of their positive beliefs and / or decrease their negative beliefs towards the relationship. Because ambivalent attitudes may be held with less confidence than univalent attitudes (Jonas et al. 1997), people experiencing ambivalent attitudes (i.e. LMX ambivalence) are likely to be motivated to

closely attend to information, ultimately gaining a more solid basis for their attitudes. Interestingly, this also has important implications for followers with non-ambivalent, low-quality LMX who have only negative beliefs about the relationship. For such individuals, leaders could try to create relational ambivalence in order to eventually change such followers' beliefs about the relationship. This may require longer-term efforts, first creating ambivalent relationships and then converting them to positive at a later point. Taken together, our findings have clear implications for coping with LMX ambivalence and for managing employee-manager relationships.

#### **6.6.2. LMX importance: practical implications**

The findings related to LMX importance also have significant practical implications for organisations. Such implications are most apparent for leaders and concern the leader-follower relationship. As we know from the wealth of research on the topic, high quality LMX is associated with numerous outcomes such as performance and satisfaction. Such research clearly suggests the benefits of managers developing high quality relationships. However, the current research demonstrates that a such relationships may not be sufficient to ensure positive outcomes such as performance. The findings suggest that other facets of the relationship may influence whether or not followers will reciprocate favourable exchanges associated with high quality LMX. Leaders need to consider the fact that, if their followers do not perceive the relationship as important to them, they will be less likely to feel obligated to engage in positive behaviours such as task performance and OCB. Put differently, under these circumstances, the leader and, by extension, the organisation may forgo many positive consequences that result from high-quality LMX.

Therefore, if leaders want to influence followers, it is important that they not only try to develop a positive dyadic relationship with their followers but also make the utility of that relationship clear to followers. LMX importance may be a function of the power and influence that a leader is perceived to have and thus, from the organisation's perspective, it is vital that leaders have sufficient power over followers in order to be viewed as influential and for the relationship to be seen as important. The results of this study suggest that an important part of developing the leader-follower relationship should be to develop the followers' senses of importance attributed to their relationship attitude.

The consideration of attitude strength indices in this research has a more general significance for practice, when designing employee surveys (e.g. engagement surveys, Macey & Schneider, 2008). Assessing the strength of attitudes (which might include leadership) in these surveys would allow organisations to predict whether employee attitudes would be more likely to change over time and as a result of initiatives and / or relate to outcomes that employers care about (Harter, Schmidt, & Hayes, 2002). Given the prevalence with which such surveys are used, the practical implications of incorporating attitude strength indices, such as ambivalence and importance, in employee attitude measurement are substantial.

A wider practical implication that emerges from this research pertains to attitudes. Research has not previously considered perceptions of LMX to be an attitude. This may seem like a matter of semantics but actually conceiving of the dyadic relationship in this way affords an entirely new way of looking at and understanding LMX theory. Viewing follower perceptions of the leader-follower relationship as an attitude can alter the way we understand the process through which LMX has an effect. Attitude theory, for example, examines the link between attitude and behaviour in a unique way. Theories such as the theory of planned behaviour (TPB; Ajzen, 1988, 1991) have become influential in our understanding of when and how attitudes influence behaviour. Such a wealth of knowledge could be used by leaders

to better understand how and when followers' attitudes towards the dyadic relationship might influence subsequent performance.

The integration of attitude theory to the leadership domain also highlights more general, but important, implications for leader training and development. To date, the predominant approach to leadership development programmes has been to develop leaders' skills and meta-competencies based on the assumption that these will enhance leadership effectiveness (Day, 2001). Yet, the implications of this thesis suggest a note of caution is merited. It is argued in this thesis that the loci and mechanisms underlying effective leadership (and thus leadership development) reside in both followers and leaders. This is because any improvements in leadership style must have a corresponding impact upon the underlying structure of followers' attitudes and evaluations of the leader's style in order for leader development to be effective and shape followers' behaviour. In other words, leadership development is as much about follower attitude change as about behavioural change.

To complicate matters further, attitude research suggests that leaders need to be aware that followers are likely to detect and interpret behavioural information in a biased manner that helps maintain their current attitude (Maio & Thomas, 2007). Taken together, the current research implies that a better understanding of how to manage and change followers' attitudes, especially how to strengthen favourable attitudes and weaken unfavourable attitudes, should be important foci for leadership development programmes.

## **6.7. Strengths and Limitations of Study Design**

Two empirical studies have been presented in this thesis; both have noteworthy strengths and limitations. The use of longitudinal methods in Study 1 provided a strong test of the directional links between LMX and subsequent performance. This is a notable strength

due to the fact that the vast majority of LMX research has relied on purely cross-sectional data, as indicated in various recent meta-analyses and reviews (e.g. Dulebohn et al. 2012; Martin et al. 2010). In fact, in relation to LMX, the call for longitudinal research has become virtually a boilerplate for future research suggestions (Dulebohn et al. 2012). Relying on cross-sectional data to assess the LMX-performance link is limited as the direction of the effects is unclear. Performance can be viewed as both an antecedent and consequence of LMX and therefore longitudinal research is vital to get a better understanding of the causal relationship. However, it should be noted that even the longitudinal methods used in Study 1 are a strength; only well controlled intervention studies are able, in a strict sense, to demonstrate the causality of any given relationship. More in line with the design of the current study, a crossed-lagged panel design would allow for the examination of the bi-directional effects between LMX and outcome variables (see Fincham, Beach, Harold & Osborne, 1997; Fincham, Harold & Gano-Phillips, 2000).

Another strength of both studies was that, when testing the effects of LMX ambivalence and LMX importance, overall LMX quality was either controlled for (in the case of LMX ambivalence) or included in the conceptual model (in the case of LMX importance). By doing so, the studies were able to investigate the effects above and beyond overall LMX quality. In Study 1 previous performance levels were also controlled for, enabling the further isolation of the unique effects of LMX, by examining the effect on changes in performance levels over time. A further strength of the design of both studies was the collection of data from both leaders and followers; an aspect of the research design that eliminates the potential common method bias explanation for the reported results. A final strength of the current research was the fact that samples from a variety of contexts were utilised. This included organisational samples from multiple companies from both a Western

(UK) and non-Western (Indian) context. This increases the generalisability of our results by suggesting they are not culturally specific.

When interpreting the potential impact of the present findings for theory and practice it is also important to highlight the limitations associated with the research design. These limitations differ across the two studies. The primary concern with the first study relates to the sample used and the generalisability of the findings. Study 1 was based on student participants, working in designated project teams that were designed to function as organisations. Although the value of student samples for testing theoretical models has been discussed in previous chapters, it is important to reflect again on the concerns associated with this sample. The teams comprised 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 was designed to closely resemble activities enacted in real team-based organisations. Furthermore, the teams resembled those typically found within the workplace due to the interdependent nature of the work, whereby individuals work together for an extended time to accomplish a common goal (Webber, 2008).

Examining such student teams carries with it benefits such as the ability to have control over the wider organisational context. For instance, contextual issues, present in organisations such as human resource practices and systems as well as environmental instability, can serve to facilitate or hinder the develop and effects of LMX (e.g. Kaše, Paauwe & Zupan, 2009). Therefore, when investigating LMX, it is important that the features of the system in which the team is embedded can be controlled for. In Study 1, such factors remained constant and consistent across groups within the module.

As noted previously, there are no theoretical reasons to suspect significant differences between a student sample and an organisational sample. As highlighted by Brown and Lord

(1999), such concerns should be considered no greater than they would be if this study had been conducted within a specific organisation. Leadership research has previously demonstrated that, when the same hypotheses are tested with both student and organisational participants, the results replicate across samples (van Knippenberg & van Knippenberg, 2005). Furthermore, previous longitudinal investigation of LMX development has successfully utilised similar student project teams (Nahrgang, et al. 2009) and their use is not uncommon in the investigation of managerial and organisational research more generally (e.g. Avolio, Jung, Murry & Sivasubramaniam, 1996; Colquitt, 2004; Price, Harrison & Gavin, 2006) where empirical evidence from samples in academic contexts and work teams has been shown to be comparable (see Van Vianen & De Dreu, 2001). Therefore, although it can be assumed that student teams are not exactly the same as organisational teams, there is potential to utilise such samples. This is especially the case in the current study given that many of the results of the student sample were replicated in the subsequent organisational sample (Study 2). Nevertheless, future research should continue to be conducted in real-life work settings so that a broader basis for the conclusions drawn from Study 1 can be made.

While Study 1 may be limited by its used of student participants, Study 2 had limitations in terms of the design. The longitudinal nature of Study 1 was a design strength that was not possible in Study 2 due to constraints imposed by the organisations involved. This meant that Study 2 had to be conducted at one time, utilising a cross-sectional design, whereby both leaders and followers completed surveys concurrently. While this is common practice in LMX research, and indeed leadership research more generally, it raises an important concern. Specifically, the cross-sectional nature of Study 2 is a limitation as it precludes inferences of causality. Although there are strong theoretical reasons to suggest that LMX influences performance outcomes, it can also be argued that the reverse can occur (i.e. performance predicts LMX relationship quality). In fact, reverse causality has been examined

in a number of meta-analyses between performance and work reactions (Judge et al. 2001; Harrison et al. 2006; Riketta, 2008). Commonly, two arguments are made for the possibility of reverse causality. Firstly that performance often leads to internal and external rewards (e.g. pay, recognition, positive emotions at work) which in turn may foster positive job attitudes (e.g. Lawler & Porter, 1967). Secondly, that people regulate their attitudes based on their behaviour, in order to maintain cognitive consistency or as a rationalisation for their actions (e.g. as assumed by psychological theories of cognitive dissonance and of self-perception, Festinger, 1957; Bem, 1972). A recent meta-analysis investigated the relationship between LMX and performance; as part of this analysis the authors used longitudinal studies to examine the causal of this link (Martin et al. 2015). The results highlighted that LMX predicted task performance but not vice versa. While this finding provides clear support for the causal effects of LMX on performance, it should be noted that this analysis was based on a limited numbers of studies. In order to clarify this point, future prospective research designs should be conducted so that the direction of causality can be firmly established.

On a related note, a further potential limitation of the current research concerns the fact that ambivalence is most likely a dynamic process, accelerating and declining over time in response to changes in circumstances (Connidis & McMullin 2002). Thus measuring ambivalence at either one or two time points will fail to capture the dynamic process of the construct. Study 1 showed that over a three month time period the concept of LMX ambivalence was moderately stable. However, future studies could employ diary study methodology as this method provides the ability to make comparison of results within and across individuals (Singer & Willet, 2003), thereby enabling the exploration of the temporal nature of LMX ambivalence.

## **6.8. Future Research Directions**

As alluded to in previous chapters, the integration of leadership with attitude theory creates countless avenues for future research. The current research focused on a relatively narrow application by concentrating purely on LMX and two aspects of attitude strength. However, a central tenet of this thesis is that attitude theory can be integrated with many theories of leadership and that numerous aspects of attitudes can be harnessed that go beyond attitude strength. These more widespread avenues for future research will be discussed later in this section. First, future research directions related to LMX ambivalence and importance will be discussed.

To the best of my knowledge, these are the first studies to explicitly examine the notion of ambivalence within the leader-member relationship. It is hoped that the findings will stimulate future research to develop knowledge pertaining to the antecedents, consequences and boundary condition associated with LMX ambivalence. Further work, for example, is needed to provide clarity as to when and how LMX ambivalence influences key organisational outcomes. Other factors, aside from POS, are also likely to play a moderating role in determining when LMX ambivalence will be more or less impactful. Indeed, research highlights that some people are more likely to be able to deal with inconsistent cognitions better than others (e.g. Newby-Clark, et al. 2002). For example, individuals who have tendencies toward negativity and emotionality may be particularly sensitive to ambivalent relationship experiences (Rusbult & Van Lange, 2003) and neuroticism has been shown to moderate the effect of relational ambivalence on psychological well-being (Fingerman et al. 2008). Similarly, rumination is an individual difference construct which is likely to exacerbate the effects of ambivalence as constantly mulling over ambivalence thoughts is likely to chronically prime the negative component of an individual's ambivalence (Kachadourian et al. 2005).

Conversely, there are also likely to be individual differences that could attenuate the negative effects of LMX ambivalence. Emotion regulation skills, for example, modulate emotional experiences (e.g. Gross & John, 2003), and as relational ambivalence has been shown in Study 1 to be associated with negative emotions, such skills may moderate the impact of LMX ambivalence. For example, cognitive reappraisal reflects the tendency to regulate emotions by changing cognitive interpretations of events and has generally been linked to more adaptive functioning (Gross & John, 2003). The ability to cognitively reappraise situations may be particularly useful when individuals experience ambivalence and may lead to more effective coping.

The aforementioned individual differences are likely to influence the way in which individuals deal with ambivalence. This suggests that different people may deal with LMX ambivalence in different ways. Similarly, one avenue for future studies is to examine the cognitive and emotional mechanisms through which ambivalence influence outcomes. Recently Ashforth et al. (2014) developed a conceptual framework focusing on how individuals respond to ambivalence in organisations. While this framework is not specific to relationships it suggests that, generally, individuals may respond to ambivalence in different ways. This framework crosses two dimensions; one focusing on a positive orientation toward the object in question and the other focusing on a negative orientation. The authors then organised responses under the labels of avoidance (the focus on each is low), compromise (each is moderate), and domination (one is low and one is high) as well as holism (each orientation is high). The framework suggests that individuals (or groups) may respond to ambivalence in one of these ways and that each response has positive and negative outcomes and is most effective under certain conditions (Ashforth et al. 2014). So, for example, the avoidance response involves the nonconscious and / or conscious evasion of the ambivalence and such a response may reduce tension to a more tolerable level. However, avoidance may

also prevent recognition of ambivalence, inhibiting learning and problem-solving. This framework could be utilised and applied specifically to the study of LMX ambivalence in order to identify how individuals cope and respond to having an ambivalent relationship. Thus, there are a number of interesting avenues for further research on LMX ambivalence.

Future research would benefit from a detailed focus on both the antecedents and consequences of attitude importance in relation to the LMX relationship. As mentioned previously, a number of unique predictors of attitude importance have been uncovered. These include; the degree to which the attitude object impinges on one's material self-interest, identification with reference groups or individuals who deem the attitude important and finally the relevance of the attitude or attitude object for one's personal values (see Eaton & Visser 2008). All of these antecedents are relevant within the context of the LMX relationship. Future research can explore the effects of these predictors further. For example, it would be interesting to determine which of these factors is the most significant in predicting LMX importance and if there are variables that moderate the relationship. For example, the relative influence of the predictor variables may be contingent on individual differences. Those individuals who are highly equity sensitive may be particularly concerned with the degree to which the LMX relationship is beneficial to their own self interests. On the other hand, those high in self-monitoring may be particularly influenced by the attitudes of their reference group (e.g. co-workers). Future research could also focus on the consequences of attitude importance and how this might relate to subsequent behaviours. For instance, perceiving an attitude to be personally important leads people to protect it against attack and use it in processing information, making decisions, and choosing a course of action (see Krosnick & Abelson, 1992). Such mechanisms may help to shed light on the route through which LMX affects subsequent behaviour. Understanding this process is key to the development of LMX theory, which suffers from a lack of understanding of how the LMX

relationship impacts variables such as performance, organisational citizenship behaviour and CPB.

Furthermore, although the current study focused on attitude importance as a moderator of the LMX-performance link, further research could begin to look at other attitude strength indices. The focus could be other factors such as attitude certainty, or affective cognitive consistency. Attitude certainty refers to the sense of conviction with which one holds one's attitude (e.g. Abelson, 1988). It is a metacognitive attribute of individuals' attitudes (Petty, Briñol, Tormala, & Wegener, 2007; Rucker & Petty, 2006; Tormala & Petty, 2002) in that it is a secondary cognition (e.g. "I am certain of my evaluation of X") attached to a primary cognition (e.g. the evaluation of X; Petrocelli, Tormala & Rucker, 2007). As with attitude importance, certainty is particularly salient without the context of the LMX relationships. Previous research has demonstrated that interpersonal relationships can be a great source of uncertainty (e.g. Knobloch & Solomon, 1999). According to this theory, uncertainty exists as a function of both the amount of alternatives for behaviour and their likelihood of occurrence within a given situation (Berger & Gudykunst, 1991). Drawing on Uncertainty Reduction Theory, relational uncertainty is more narrowly focused on the doubts that address involvement in close relationships (Knobloch & Solomon, 2002). Such doubts may originate from three interrelated yet distinct sources: the self, the partner, and the relationship (Knobloch & Solomon, 1999, 2002). Prior research has demonstrated negative effects of relational uncertainty such as, decreased liking (Kellerman & Reynolds, 1990), heightened cognitive and emotional jealousy (Afifi & Reichert, 1996; Knobloch, Solomon, & Cruz, 2001), appraisals of irritations as more severe and relationally threatening (Solomon & Knobloch, 2004; Theiss & Solomon, 2006) and increased negative emotions (Planalp & Honeycutt, 1985).

As mentioned at the beginning of this section, the fusion of leadership and attitudes provides far reaching opportunities for future research. It is the contention of this thesis that many leadership theories (such as authentic, servant, transformational, ethical) measure followers' perception of leadership and can therefore be considered to be attitudes towards some aspect of leadership. The current research focused on LMX, viewing it as a leadership attitude. However, the same rationale can be applied to other leadership theories, providing vast potential for future research. In the same vein as the studies included in this thesis, scholars could investigate the strength of employees' attitudes towards other leadership styles. Such work could include other dimensions of attitude strength such as the aforementioned construct of certainty. Other key frameworks such as TPB (e.g. Ajzen, 1988, 1991) can also be applied in order to better understand leadership. This model attempts to understand how and when attitudes determine behaviour by acknowledging that human behaviours are also governed by social pressures and a sense of control. This perceived behavioural control depends on the degree to which individuals believe themselves to be sufficiently knowledgeable, skilful, disciplined and able to perform some act, called internal control (Kraft, Rise, Sutton, & Røysamb, 2005). Perceived behavioural control depends on the extent to which individuals feel that other factors, such as resources or time constraints, could inhibit or facilitate the behaviour, called external control (Kraft et al. 2005). The model also suggests that actual behaviour is ultimately determined by the intentions of individuals; their explicit plans or motivations to commit a specific act. Attitude, subjective norms and perceived behaviour control are determinants of such intentions. This model could easily be applied to the study of leadership, providing a new perspective by which to examine the leadership-performance link. Such a model would take into account the perspectives of important referents such as co-workers and how these impact on behaviour as well as considering their attitude towards the leader.

TPB, as described above, assumes that behaviour is reasoned, controlled or planned in the sense that it takes account of the behaviour's likely consequences, the normative expectations of important referents and factors that may inhibit performance. Thus, attitudes, subjective norms and perceptions of behavioural control are thought to produce a subsequent behavioural intention, and eventually result in a consistent behaviour. However, attitude scholars have also recognised that attitudes may guide an individual's behaviour in a more spontaneous manner, without the individual having actively considered the relevant attitudes and without the individual's necessary awareness of the influence of the attitude. This automatic influence can also shed light on the leadership process and how it might affect employee behaviour. Evidence for the automatic influence of attitudes on behaviour has been shown with research on racial prejudice. Unobtrusive measures of attitude toward African-Americans were shown to predict non-verbal expressive responses of which participants were not aware and over which they had little control (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Fazio, Jackson, Dunton, & Williams, 1995). Interestingly, when the behaviour can be controlled, and when people are motivated to do so, prejudicial attitudes are no longer found to have an effect and may even be overcompensated for (Fazio & Dunton, 1977). Models of automatic attitude influence such as MODE (Fazio, 1990) suggest that automatic activation occurs only for strong attitudes. Strong attitudes have been shown to be highly accessible in memory (e.g. Fazio, 1995) and therefore become active automatically. Under such circumstances, mere exposure to the attitude object leads to automatic activation of the attitude toward that object. Subsequently, approach or avoidance behaviour should follow depending on the nature of the attitude. Thus, the sequence from attitude activation through to performance of behaviour, can occur automatically, without conscious effort, and outside awareness (Fazio, 1990; Fazio & Towles-Schwein, 1999).

Furthermore, attitude theory highlights that attitudes can influence selective attention (e.g. Roskos-Ewoldsen & Fazio, 1992), selective processing (e.g. Lord, Ross & Lepper, 1979) and selective perception (e.g. Fazio, 2000). Therefore, as well as being activated automatically, attitudes may produce selective perception of the situation in an attitude-consistent manner. That is, the situation is defined in more favourable or attractive terms, when the activated attitude is positive and, in more negative terms, when the activated attitude is negative. Again, this can have important consequences of our understanding of leadership as it suggests that once a strong attitude has formed regarding a leader it may bias future information processing to fit in with this attitude. Such attitudes may then influence behaviour in different ways, either through conscious deliberate action, or automatic activation. As well as elucidating the mechanism through which leadership may influence behaviour, such theories also help with the understanding of attitude stability and resistance to change. For instance, a common finding in the attitude literature is that people find information supporting their attitudes easier to learn and remember than information contradicting their attitudes (for a review, see Eagly & Chaiken 1993). This preferential recall of attitude-consistent information would suggest that employees with favourable leadership attitudes would be more likely to remember leader behaviour that fits in with their attitude and thus be less likely to change their attitude towards the leader. For example, if a follower perceives their leader to be transformational, they may be more likely to recall leader behaviour that is transformational in nature such as, times when the leader has been inspirational and charismatic. Conversely, they may not recall occasions when the leader acted in a way that was not transformational. Interestingly, research also shows that selective memory of attitude-consistent information is more profound when the underlying attitude has a unipolar rather than bipolar structure (see Pratkanis & Greenwald 1989). In other words, ambivalent attitudes towards the leader should produce heightened recall of both consistent and inconsistent information. This is particularly interesting in light of the

findings related to LMX ambivalence in the current research. Future research could investigate whether such ambivalent relationships lead to more representative recall of leader behaviour. Such findings suggest that unipolar relationships may lead to selective information processing and this may be one potential mechanism linking such unipolar relationship with greater stability and attitude-performance consistency.

A final future research suggestion relates to the examination of the social context and how this can influence the development and effects of leadership attitudes. A major concern within the leadership literature is that the majority of research takes a hierarchical, leader-centric approach in which followers, context and group levels of analysis are typically ignored. Numerous reviews have called for future research to focus on these areas in order to advance leadership theory (e.g. Avolio, 2007; Johns, 2006; Meindl, 1995). This is a concern within LMX theory which, to date, is largely located at the dyadic level (Sparrowe & Liden, 1997), largely overlooking the fact that these dyads also exist alongside other formal and informal organisational relationships in which leaders and members are involved (Venkataramani, Green, & Schleicher, 2010). Only recently has research explored the effect of the network of relationships that leaders and followers have and how such networks may directly impact individual and group outcomes or how network variables may strengthen or weaken the effects of high quality relationships (see Sparrowe & Liden, 2006). Many scholars have called for the expansion of LMX research to consider examining such relationships within a broader social environment, reflecting more appropriately what exists in real world work settings (e.g. Balkundi & Kilduff, 2006; Erdogan & Liden, 2002; Gertsner & Day, 1997; Graen & Uhl-Bien, 1995). Given the call for increased focus at the group level of analysis in leadership research, future research can benefit from paying attention to attitude theory and what it has demonstrated in terms of the social influence on attitude formation, change, expression, and affects on behaviour.

In various ways, attitudes are shaped by the social context in which they are held. They are discussed with close others (e.g. Huckfeldt, Morehouse Mendez, & Osborn, 2004; Mutz, 2002; Visser & Mirabile, 2004) and have been shown to be adjusted in the presence of consensus information and on the basis of perceptions of in-group and out-group attitudes (e.g. Prislin, Brewer, & Wilson, 2002; Prislin, Limbert, & Bauer, 2000). This notion is based on seminal work from social psychological research on object and person perception (Asch, 1951, 1956), social influence (Festinger, 1957; Kelman, 1961), persuasive communication (Hovland, Janis, & Kelley, 1953), evaluation of risk (Myers & Lamm, 1976) and behaviour in groups (Hackman, 1976). More recent work has continued to suggest that attitudes are socially structured, reflecting not only an individual's thoughts and feelings but the preferences of important others as well. For example, Huckfeldt and Sprague (1991) found that the candidate preferences of a person's social network members accounted for variance in the person's voting behaviour, even after controlling for his or her political party identification and a host of demographic characteristics. Similarly, attitudes held by members of a person's social network have been shown to predict changes in his or her political attitudes over time, again consistent with social influence processes (e.g. Kenny, 1994; MacKuen & Brown, 1987). Analysing data from the US post-election survey of the 2000 National Election, Huckfeldt et al. (2004) showed that individuals embedded in heterogeneous political networks were more likely to hold ambivalent attitudes towards presidential candidates and were more likely to show a decrease in political interest. Attitude scholars have also explored the possibility that features of the social context may also regulate attitude strength (e.g. Levitan & Visser, 2009; Eaton et al. 2008; Huckfeldt et al. 2004; Huckfeldt & Sprague, 2000; Levitan & Visser, 2008; Visser & Mirabile, 2004). For example, Visser and Mirabile (2004) found that individuals rooted in attitudinally heterogeneous social networks (formed of individuals who hold a variety of attitudes toward a given issue) had weaker attitudes toward the issue than individuals embedded

in attitudinally congruent social networks (in which all members agree with the individual on the target issue). Such work can guide future research in leadership by aiding understanding of how the social context influences the formation and expression of leadership attitudes. Research, for example, has shown that an individual's level of job satisfaction is significantly influenced by the job satisfaction of others with whom the individual interacted (e.g. Pollock, Whitbred, & Contractor, 2000); the same may well be true of leadership attitudes. Similarly, the heterogeneity of leader attitudes within a work group may impact on the strength of the leadership attitudes held by employees.

## **CONCLUSION**

This thesis began with the claim that leadership perceptions are synonymous with attitudes and that integration between the two fields could extend our understanding of leadership. Given the size of both the attitude and leadership literatures, the focus of the thesis was narrowed to include two main aims; firstly to examine how the the nuances associated with the conceptualisation and measurement of attitudes could be utilised within one particular leadership theory; LMX. Secondly, to examine the role attitude strength might play in illuminating our understanding of when LMX will be more or less impactful.

With this clear focus, the empirical studies presented in this thesis provided the first test of two novel concepts; LMX ambivalence and LMX importance. These concepts, based on attitude strength dimensions, were theorised to provide additional understanding of the LMX relationship. Support was found for the usefulness of considering these concepts and for moving beyond focusing on leader-follower relationship as either high or low quality. Specifically, considering ambivalence and importance as distinct facets of the LMX relationship, provided knowledge regarding the underlying structure of this leadership attitude and the qualities attached to that attitude. As well as finding evidence for the distinctiveness of LMX importance and LMX ambivalence from overall LMX quality, the findings showed that these variables help to explain how and when LMX influences employee performance outcomes.

While the aforementioned findings are substantive, it is hoped that this initial test of the integration between LMX and attitudes will provide a basis for future research to consider how the study of leadership can be enhanced through the integration with attitude theory.

## REFERENCES

- Abelson, R. P. (1988). Conviction. *American Psychologist*, 43, 267–275.
- Abelson, R. P. (1995). Attitude extremity. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 25-41). Mahwah, NJ: Erlbaum.
- Aiken, L.S., & West, S.G. (1991). *Multiple Regression: Testing and interpreting interactions*. London: Sage.
- Ajzen, I. (1988). *Attitudes, personality and behaviour*. Milton Keynes, UK: Open University Press.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179–211
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27-58.
- Ajzen, I., & Fishbein, M. (1977). Attitude—Behaviour Relations: A Theoretical Analysis and Review of Empirical Research. *Psychological Bulletin*, 84(5), 888-918.
- Alabastro, A. B., Rast, III, D. E., Lac, A., Hogg, M. A., & Crano, W. D. (2013). Intergroup bias and perceived similarity: Effects of successes and failures on support for in- and outgroup political leaders. *Group Processes and Intergroup Relations*, 16(1), 58–67.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29, 99-118.
- Allport, G. W. (1935). Attitudes. In C Murchison (Ed.), *Handbook of social psychology* (pp. 798–844). Worcester, MA: Clark University Press.
- Allport, F. H., & Hartman, D. A. (1925). The measurement and motivation of atypical opinion in a certain group. *American Political Science Review*, 19, 735-760.
- Altman, L, & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart, & Winston.
- Antonakis, J., & House, R. J. (2002). An analysis of the full-range leadership theory: the way forward. In B. J. Avolio, & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: the road ahead* ( pp. 3 – 34). Amsterdam: JAI Press.
- Armitage, C. J., & Conner, M. (2000). Attitudinal ambivalence: A test of three key hypotheses. *Personality and Social Psychology Bulletin*, 26, 1421–1432.

- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471-499.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close Relationships as Including Other in the Self. *Journal of Personality and Social Psychology*, 60, 241-253.
- Arshadi, N. (2011). The relationships of perceived organizational support (POS) with organizational commitment, in-role performance, and turnover intention: Mediating role of felt obligation. *Procedia-Social and Behavioural Sciences*, 30, 1103-1108.
- Arvey, R. D., Rotundo, M., Johnson, W., Zhang, Z., & McGue, M. (2006). The determinants of leadership role occupancy: Genetic and personality factors. *Leadership Quarterly*, 17(1), 1-20.
- Arvey, R. D., Zhang, Z., Avolio, B. J., & Krueger, R. F. (2007). Developmental and Genetic Determinants of Leadership Role Occupancy Among Women. *Journal of Applied Psychology*, 92(3), 693-706.
- Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. *Appetite*, 50(2), 443-454.
- Asch, S. E. (1951) Effects of group pressure upon the modification and distortion of judgement. In H. Guetzkow (Ed.), *Groups, leadership, and men*. Pittsburgh: Carnegie Press.
- Asch, S. E. (1956). Studies of independence and conformity. A minority of one against a unanimous majority. *Psychological Monographs*, 70, 1 -79.
- Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behaviour*, 24, 491-509.
- Ashforth, B. E., Rogers, K. M., Pratt, M. G., & Pradies, C. (2014). Ambivalence in organizations: A multilevel approach. *Organization Science*, 25, 1453–1478.
- Avolio, B. J. (2007). Promoting More Integrative Strategies for Leadership Theory-Building. *American Psychologist*, 62(1), 25-33.
- Jung, D. I., Avolio, B. J., Murry, B. D., Sivasubramaniam, N., & Sosik, J. J. (1996). Leadership in work groups: An empirical investigation of leadership style, collective efficacy, collective identity, and group performance. In *56th annual meeting of the Academy of Management, Cincinnati, OH*.
- Avolio, B.J., Sosik, J.J., Jung, D.I., & Berson, Y. (2003). Leadership models, methods, and applications. In W.C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Handbook of*

- psychology*: Vol. 12. Industrial and organizational psychology (pp. 277–307). New York: Wiley.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421-449.
- Babad, E., Ariav, A., Rosen, I., & Salomon, G. (1987). Perseverance of bias as a function of debriefing conditions and subjects' confidence. *Social Behaviour*, 2, 185–193.
- Babakus, E., Cravens, D. W., Johnson, M., & Moncrief, W. C. (1996). Examining the role of organizational variables in the salesperson job satisfaction model. *Journal of Personal Selling and Sales Management*, 16, 33–46.
- Baek, Y. M. 2010. An integrative model of ambivalence. *The Social Science Journal*, 47, 609-629.
- Bal, P. M., Jansen, P. G., Van Der Velde, M. E., De Lange, A. H., & Rousseau, D. M. (2010). The role of future time perspective in psychological contracts: A study among older workers. *Journal of Vocational Behaviour*, 76, 474-486.
- Balkundi, P., & Kilduff, M. (2006). The ties that lead: A social network approach to leadership. *Leadership Quarterly*, 16, 941-961.
- Bales, R. F. (1950). *Interaction process analysis*. Cambridge, MA: Addison-Wesley.
- Balkundi, P., & Kilduff, M. (2006). The ties that lead: A social network approach to leadership. *Leadership Quarterly*, 16, 941-961.
- Balthazard, P. A., Waldman, D. A., Thatcher, R. W., & Hannah, S. T. (2012). Differentiating transformational and non-transformational leaders on the basis of neurological imaging. *Leadership Quarterly*, 23(2), 244-258.
- Balzer, W.K., Kihm, J.A., Smith, P.C., Irwin, J.L., Bachiochi, P.D., Robie, C., Sinar, E.F., & Parra, L.F. (1997). *Users' manual for the job descriptive index (JDI; 1997 Revision) and the job in general (JIG) scales*. Bowling Green, OH: Bowling Green State University.
- Bandura A (1977) *Social Learning Theory*. Ehglewood Cliffs, Prentice-Hall, N-J
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barsade, S. G., & Gibson, D. E. (2007). Why does affect matter in organizations? *The Academy of Management Perspectives*, 21, 36-59.

- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press; Collier Macmillan.
- Bass, B. M. & Avolio, B. J. (1990). *Transformational leadership development: Manual for the Multifactor Leadership Questionnaire*. Palo Alto, CA: Consulting Psychologist Press.
- Bass, B. M., & Bass, R. (2008). *The Bass handbook of leadership: Theory, research, and managerial applications* (4th ed.). New York: Free Press.
- Bassili, J. N. (1996). Meta-judgemental versus operative indexes of psychological attributes: The case of measures of attitude strength. *Journal of Personality and Social Psychology*, 71, 637–653.
- Batson, C. D. (1993). Communal and exchange relationships: What is the difference? *Personality and Social Psychology Bulletin*, 19, 677-683.
- Bauer, T. N., Erdogan, B., Liden, R. C., & Wayne, S. J. (2006). A longitudinal study of the moderating role of extraversion: leader-member exchange, performance, and turnover during new executive development. *Journal of Applied Psychology*, 91, 298-310.
- Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: new procedures and recommendations. *Psychological Methods*, 11, 142-163.
- Beal, D. J., Weiss, H. M., Barros, E., & MacDermid, S. M. (2005). An Episodic Process Model of Affective Influences on Performance. *Journal of Applied Psychology*, 90(6), 1054-1068.
- Bem, D. J. (1972), Self-perception Theory, In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6). New York: Academic Press.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349-360.
- Bentler, P M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246.
- Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, 112, 400-404.
- Berger, I. E. (1992). The nature of attitude accessibility and attitude confidence: A triangulated experiment. *Journal of Consumer Psychology*, 1, 103–123.
- Berger, C. R., & Gudykunst, W. B. (1991). Uncertainty and communication. *Progress in Communication Sciences*, 10, 21-66.

- Bergeron, D. M. (2007). The potential paradox of organizational citizenship behaviour: Good citizens at what cost? *Academy of Management Review*, 4, 1078-1095.
- Berlyne, D. E. 1960. *Conflict, arousal, and curiosity*. New York: McGraw-Hill.
- Bernerth, J. B., Armenakis, A. A., Feild, H. S., Giles, W. F., & Walker, H. J. (2007). Leader-member social exchange (LMSX): Development and validation of a scale. *Journal of Organizational Behaviour*, 28, 979-1003.
- Bies, R. J., Tripp, T. M., & Kramer, R. M. (1997). At the breaking point: cognitive and social dynamics of revenge in organizations. In R. A. Giacalone, & J. Greenberg (Eds.), *Antisocial behaviour in organizations* ( pp. 18 – 36). Thousand Oaks, CA: Sage
- Blaker, N. M., Rompa, I., Dessing, I. H., Vriend, A. F., Herschberg, C. & van Vugt, M. (2013). The height leadership advantage in men and women: Testing evolutionary psychology predictions about the perception of tall leaders. *Group Processes and Intergroup Relations*, 16(1), 17–27.
- Blau, P. M. 1964. *Exchange and power in social life*. Transaction Publishers.
- Bliese, P. D. (1998). Group size, ICC values, and group-level correlations: A simulation. *Organizational Research Methods*, 1, 355–373.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein and S. W. J. Kozlowski Eds., *Multilevel theory, research, and methods in organizations*, pp. 349–381. San Francisco: Jossey Bass.
- Boies, K., & Howell, J. M. (2006). Leader-member exchange in teams: An examination of the interaction between relationship differentiation and mean LMX in explaining team-level outcomes. *Leadership Quarterly*, 17(3), 246-257.
- Bollen, K. A., & Long, J. S. (1993). *Testing structural equation models*: Vol. 154. Sage focus editions. Thousand Oaks, CA: Sage Publications, Inc.
- Boninger, D., Krosnick, J. A., & Berent, M. K., (1995a). The Causes and consequences of Attitude Importance, in R. E. Petty and J. A. Krosnick (eds.) *Attitude Strength: Antecedents and Consequences*, , Mahwah, NJ: Lawrence Erlbaum Associates, pp. 159-189.
- Boninger, D. S., Krosnick, J. A., & Berent, M. K. (1995b). Origins of attitude importance: self-interest, social identification, and value relevance. *Journal of Personality and Social Psychology*, 68, 61-80.

- Bono, J. E., Hooper, A. C., & Yoon, D. J. (2012). Impact of rater personality on transformational and transactional leadership ratings. *Leadership Quarterly*, 23(1), 132-145.
- Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46, 554-571.
- Borgatta, E. F., Bales, R. F., & Couch, A. S. (1954). Some findings relevant to the great man theory of leadership. *American Sociological Review*, 755-759.
- Bosco, F. A., Aguinis, H., Singh, K., Field, J. G., & Pierce, C. A. (2015). Correlational effect size benchmarks. *Journal of Applied Psychology*, 100, 431-449.
- Bowlby, J. (1973). *Attachment and loss*, Vol. 2: Separation. London: The Hogarth Press.
- Bowlby, J. (1982). Attachment and loss: retrospect and prospect. *The American Journal of Orthopsychiatry*, 52(4), 664-678.
- Bowling, N. A., & Hammond, G. D. (2008). A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale. *Journal of Vocational Behaviour*, 73(1), 63-77.
- Bradburn, N. M., & Caplovitz, D. (1965). *Reports on happiness*. Aldine Publishing Company.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35(5), 307.-318.
- Breckler, S. J. (1994). A comparison of numerical indexes for measuring attitude ambivalence. *Educational and Psychological Measurement*, 54(2), 350-365.
- Breckler, S. J., & Wiggins, E. C. (1989). Affect versus evaluation in the structure of attitudes. *Journal of Experimental Social Psychology*, 25, 253-271.
- Breckler, S. J., & Wiggins, E. C. (1991). Cognitive responses in persuasion: Affective and evaluative determinants. *Journal of Experimental Social Psychology*, 27(2), 180-200.
- Brent, E., & Granberg, D. (1982). Subjective agreement and the presidential candidates of 1976 and 1980. *Journal of Personality and Social Psychology*, 42, 393-403.
- Brömer, P. 1998. Ambivalent attitudes and information processing. *Swiss Journal of Psychology*, 57, 225–234.
- Brooks, M. E., & Highhouse, S. (2006). Familiarity breeds ambivalence. *Corporate Reputation Review*, 9, 105-113.
- Brown, D. J., & Lord, R. G. (1999). The utility of experimental research in the study of transformational/charismatic leadership. *Leadership Quarterly*, 10, 531–539

- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behaviour and Human Decision Processes*, 97, 117-134.
- Browne, M. W., MacCallum, R. C., Kim, C. T., Andersen, B. L., & Glaser, R. (2002). When fit indices and residuals are incompatible. *Psychological Methods*, 7, 403- 421.
- Bruk-Lee, V., & Spector, P. E. (2006). The Social Stressors–Counterproductive Work Behaviours Link: Are Conflicts With Supervisors and Coworkers the Same? *Journal of Occupational Health Psychology*, 11(2), 145-156.
- Budd, R. J. (1986). Predicting cigarette use: The need to incorporate measures of salience in the Theory of Reasoned Action. *Journal of Applied Social Psychology*, 16, 663-685
- Byers, E. S. (2005). Relationship satisfaction and sexual satisfaction: A longitudinal study of individuals in long-term relationships. *Journal of Sex Research*, 42(2), 113-118.
- Byrne, B. M., (2012). *Structural equation modelling with Mplus. Basic concepts, applications and programming*. Routledge; Taylor & Francis Group: New York, NY
- Calder, B. J. (1977). *An attribution theory of leadership*. In J. Salancik & B. Staw (Eds.), *New directions in organizational behaviour* (pp. 47- 62). New York: St. Clair Press.
- Campbell, J.P., McCloy, R.A., Oppler, S.H., Sager, C.E., 1993. A theory of performance. In: Schmitt, J.,Borman, W.C. Associates. *Personnel Selection in Organizations*. Jossey-Bass, San Francisco, CA, pp. 35-69
- Cantril, H. (1946). The intensity of an attitude. *Journal of Abnormal and Social Psychology*, 41(2), 129-135.
- Cacioppo, J. T., & Berntson, G. G. (1994). Relationship Between Attitudes and Evaluative Space: A Critical Review, With Emphasis on the Separability of Positive and Negative Substrates. *Psychological Bulletin*, 115(3), 401-423.
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, 59, 538-54.
- Carlyle, T. (1907). *Heroes and hero worship*. Boston: Adams.
- Celsi, R. L., & Olson, J. C. (1988). The Role of Involvement in Attention and comprehension Processes. *Journal of Consumer Research*, 15, 210-24.
- Celuch, K., Black, G., & Warthan, B. (2009). Student self-Identity as a critical thinker: The influence of attitudes, attitude strength, and normative beliefs. *Journal of Marketing Education*, 31, 31-39.
- Cha, S. E., & Edmondson, A. C. (2006). When values backfire: Leadership, attribution, and disenchantment in a values-driven organization. *Leadership Quarterly*, 17(1), 57-78.

- Chaiken, S., & Baldwin, M. W. (1981). Affective-cognitive consistency and the effect of salient behavioural information on the self-perception of attitudes. *Journal of Personality and Social Psychology*, 41, 1-12.
- Chaiken, S., Pomerantz, E.M., & Giner-Sorolla, R. (1995). Structural consistency and attitude strength. In R.E. Petty & J.A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 387– 412). Mahwah, NJ: Erlbaum.
- Chaiken, S., & Yates, S. (1985). Affective-cognitive consistency and thought-induced attitude polarization. *Journal of Personality and Social Psychology*. 49, 1470-1481.
- Chhokar, J. S. (2007). India: Diversity and complexity in action. In J. S. Chhokar, F. C. Brodbeck, & R. J. House (Eds.), *Culture and leadership across the world* (pp. 971-1020). New York, NY: Lawrence Erlbaum
- Cogliser, C.C., Schriesheim, C.A. (2000). Exploring work unit context and leader- member exchange: A multi-level perspective. *Journal of Organizational Behaviour*, 21, 487-511.
- Cole, M. S., Schaninger, W. S., & Harris, S. G. (2002). The workplace social exchange network a multilevel, conceptual examination. *Group & Organization Management*, 27, 142-167.
- Colquitt, J. A. (2004). Does the justice of the one interact with the justice of the many? Reactions to procedural justice in teams. *Journal of Applied Psychology*, 89, 633-646.
- Conner, M., Sparks, P., Povey, R., James, R., Shepherd, R., & Armitage, C. J. (2002). Moderator effects of attitudinal ambivalence on attitude behaviour relationships. *European Journal of Social Psychology*, 32, 705–718.
- Connidis, I. A., & McMullin, J. A. (2002). Sociological ambivalence and family ties: A critical perspective. *Journal of Marriage and Family*, 64, 558-567.
- Conway, M., & Giannopoulos, C. (1993). Self-esteem and specificity in self-focused attention. *Journal of Social Psychology*, 133, 121-123.
- Cornil, Y., Ordabayeva, N., Kaiser, U., Weber, B., & Chandon, P. (2014). The acuity of vice: Attitude ambivalence improves visual sensitivity to increasing portion sizes. *Journal of Consumer Psychology*, 24(2), 177-187.
- Coser, R. L. (1966). Role Distance, Sociological Ambivalence, and Transitional Status Systems. *American Journal of Sociology*, 72, 173-187.
- Costarelli, S., & Colloca, P. (2007). The moderation of ambivalence on attitude–intention relations as mediated by attitude importance. *European Journal of Social Psychology*, 37(5), 923-933.

- Craig, S. C., Martinez, M. D., Kane, J. G., & Gainous, J. (2002). *Core values, value conflict, and citizens ambivalence about gay rights*. Paper presented at the Annual Meetings of the American Political Science Association. Boston, MA, August 29–September 1
- Crites, S. L., Fabrigar, L. R., & Petty, R. E. (1994). Measuring the affective and cognitive properties of attitudes: Conceptual and methodological issues. *Personality and Social Psychology Bulletin*, 20, 619-634.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31, 874-900.
- Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behaviour and Human Performance*, 13, 46-78.
- Dansereau, F., Seitz, S. R., Chiu, C. Y., Shaughnessy, B., & Yammarino, F. J. (2013). What makes leadership, leadership? Using self-expansion theory to integrate traditional and contemporary approaches. *Leadership Quarterly*, 24(6), 798-821.
- Davidovitz, R., Mikulincer, M., Shaver, P. R., Izsak, R., & Popper, M. (2007). Leaders as attachment figures: leaders' attachment orientations predict leadership-related mental representations and followers' performance and mental health. *Journal of Personality and Social Psychology*, 93(4), 632-650.
- Day, D. V. (2001). Leadership development: A review in context. *Leadership Quarterly*, 11, 581-613.
- Day, D. V., & Antonakis, J. (2012). *The nature of leadership*. Sage.
- Day, D. V., Schleicher, D. J., Unckless, A. L., & Hiller, N. J. (2002). Self-monitoring personality at work: A meta-analytic investigation of construct validity. *Journal of Applied Psychology*, 87, 390–401.
- De Cremer, D. (2003). Why inconsistent leadership is regarded as procedurally unfair: The importance of social self-esteem concerns, *European Journal of Social Psychology*, 33, 535-550.
- Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work–home interference and exhaustion: Reciprocal relations in a three-wave study. *Journal of Vocational Behaviour*, 64, 131-149.
- Derue, D. S., Nahrgang, J. D., Wellman, N. E. D., & Humphrey, S. E. (2011). Trait and behavioural theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64(1), 7-52.

- De Wit, R., Victoir, A., & Van den Bergh, O. (1997). 'My mind's made up by the way that I feel': affect, cognition and intention in the structure of attitudes toward condom use. *Health Education Research*, 12, 15-24.
- Dienesch, R. M., & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review*, 11(3), 618-634.
- Dijksterhuis, A., & Bargh, J. A. (2001). The perception-behaviour expressway: Automatic effects of social perception on social behaviour. *Advances in Experimental Social Psychology*, 33, 1-40.
- Dovidio, J. F., Kawakami, K., Johnson, C., Johnson, B., & Howard, A. (1997). On the nature of prejudice: Automatic and controlled processes. *Journal of Experimental Social Psychology*, 33(5), 510-540.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange integrating the past with an eye toward the future. *Journal of Management*, 38, 1715-1759.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the Effectiveness of Leaders: A Meta-Analysis. *Psychological Bulletin*, 117(1), 125-145.
- Eagly, A. H., Mladinic, A., & Otto, S. (1994). Cognitive and affective bases of attitudes toward social groups and social policies. *Journal of Experimental Social Psychology*, 30, 113-137.
- Eaton, A. A., Majka, E. A., & Visser, P. S. (2008). Emerging perspectives on the structure and function of attitude strength. *European Review of Social Psychology*, 19, 165-201.
- Eaton, A. A., & Visser, P. S. (2008). Attitude importance: Understanding the causes and consequences of passionately held views. *Social and Personality Psychology Compass*, 2, 1719-1736.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86, 42-51.
- Eisenberger, R., Aselage, J., Sucharski, I. L., & Jones, J. R. (2004). Perceived organizational support. In J. Coyle-Shapiro, L. Shore, S. Taylor, and L. Tetrick Eds., *The employment relationship: Examining psychological and contextual perspectives*, pp. 207–225. New York, NY: Oxford University Press.

- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Emerson, R. M. (1976). Social Exchange Theory. *Annual Review of Sociology*, 2, 335-362.
- Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*, 90, 659–676.
- Erdogan, B., & Enders, J. (2007). Support from the top: supervisors' perceived organizational support as a moderator of leader-member exchange to satisfaction and performance relationships. *Journal of Applied Psychology*, 92, 321-330.
- Erdogan, B., & Liden, R.C. (2002). Social exchanges in the workplace: A review of recent developments and future research directions in Leader-Member Exchange theory. In L.L. Neider & C.A. Schriesheim eds., *Leadership*, pp. 65-114. Greenwich, CT: Information Age Publishing.
- Farc, M. & Sagarin, B. J. (2009). Using attitude strength to predict registration and voting behaviour in the 2004 U. S. presidential elections. *Basic and Applied Social Psychology*, 31, 160-173.
- Fazio, R. H. (1986). How do attitudes guide behaviour?. In R. M. Sorrentino, & E. T. Higgins, *Handbook of Motivation and Cognition: Foundations of Social Behaviour* (pp. 204–243). New York: Guilford Press.
- Fazio, R. H. (1990). Multiple processes by which attitudes guide behaviour: The MODE model as an integrative framework. *Advances in experimental social psychology*, 23, 75-109.
- Fazio, R. H. (1995). Attitudes as object-evaluation associations: Determinants, consequences, and correlates of attitude accessibility. In R. E. Petty J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 247-282). Hillsdale, NJ: Erlbaum.
- Fazio, R. H. (2000). Accessible attitudes as tools for object appraisal: Their costs and benefits. In G. R. Maio & J. M. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 1–36). Mahwah, NJ: Erlbaum.
- Fazio, R.H., & Dunton, B.C. (1997). Categorization by race: The impact of automatic and controlled components of racial prejudice. *Journal of Experimental Social Psychology*, 33, 451– 470.

- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Attitudes and social cognition. *Journal of Personality and Social Psychology*, 69(6), 1013-1027.
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology*, 54(1), 297-327.
- Fazio, R. H., & Towles-Schwen, T. (1999). The MODE model of attitude-behaviour processes. In S. Chaiken, & Y. Trope (Eds.), *Dual-process theories in social psychology*. (pp. 97-116). New York: Guilford Press.
- Fazio, R. H., & Williams, C. J. (1986). Attitude accessibility as a moderator of the attitude-perception and attitude-behaviour relations: An investigation of the 1984 presidential election. *Journal of Personality and Social Psychology*, 51, 505-514.
- Fazio, R. H., & Zanna, M. P. (1978a). Attitudinal qualities relating to the strength of the attitude-behaviour relationship. *Journal of Experimental Social Psychology*, 14, 398-408.
- Fazio, R. H., & Zanna, M. P. (1978b). On the predictive validity of attitudes: The role of direct experience and confidence. *Journal of Personality*, 46, 228-243.
- Feldner, M., Leen-Feldner, E., Zvolensky, M., & Lejuez, C. (2006). Examining the association between rumination, negative affectivity, and negative affect induced by a paced auditory serial addition task. *Journal of Behaviour Therapy and Experimental Psychiatry*, 37, 171-187.
- Fernando, D. M., & Hulse-Killacky, D. (2005). The Relationship of Supervisory Styles to Satisfaction With Supervision and the Perceived Self-Efficacy of Master's-Level Counseling Students. *Counselor Education and Supervision*, 44(4), 293-304.
- Ferris, G. R., Liden, R. C., Munyon, T. P., Summer, J. K., Baslik, K. J., & Buckley, M. R. (2009). Relationships at work: Toward a multidimensional conceptualization of dyadic work relationships. *Journal of Management*, 35: 1379-1403.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fiedler, F. E., & Garcia, J. E. (1987). *New approaches to effective leadership: Cognitive resources and organizational performance*. John Wiley & Sons.
- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 1, pp. 149-190). New York, NY: Academic Press.

- Fiedler, F. E. (1978). The contingency model and the dynamics of the leadership process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 11, pp. 59–96). New York, NY: Academic Press.
- Fiedler, F.E. & House, R.J. Leadership theory and research: A report of progress. In C.L. Cooper and I.T. Robertson (Eds), *Key reviews in managerial psychology*. New York: John Wiley & Sons, 1994, pp. 97–116.
- Fincham, F. D., Beach, S. R. H., Harold, G. T., & Osborne, L. N. (1997). Marital satisfaction and depression: Different causal relationships for men and women? *Psychological Science*, 8, 351-357.
- Fincham, F. D., Harold, G. T., & Gano-Phillips, S. (2000). The longitudinal association between attributions and marital satisfaction: Direction of effects and role of efficacy expectations. *Journal of Family Psychology*, 14(2), 267-285.
- Fincham, F. D., & Linfield, K. J. (1997). A New Look at Marital Quality: Can Spouses Feel Positive and Negative About Their Marriage? *Journal of Family Psychology*, 11(4), 489-502.
- Fine, B. J. (1957). Conclusion-drawing, communicator credibility, and anxiety as factors in opinion change. *Journal of Abnormal and Social Psychology*, 54, 369-374.
- Fineman, S. (2000). Emotional arenas revisited. In S. Fineman (Ed.), *Emotion in organizations*, 2nd edn. London: SAGE, pp. 1–24.
- Fingerman, K. L., Pitzer, L., Lefkowitz, E. S., Birditt, K. S., & Mroczek, D. (2008). Ambivalent relationship qualities between adults and their parents: Implications for the well-being of both parties. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 63, 362-371.
- Fiol, C. M., & O'Connor, E. J. (2003). Waking up! Mindfulness in the face of bandwagons. *Academy of Management Review*, 28(1), 54-70.
- Firth, R. (1967). *Themes in economic anthropology*. London: Tavistock.
- Firth, R., Hubert, J. & Forge, A. (1970). *Families and Their Relatives: Kinship in a Middle-Class Sector of London*. London: Routledge and Kegan Paul
- Fisher, C. D. (2000). Mood and emotion while working: missing pieces of job satisfaction? *Journal of Organizational Behaviour*, 21, 185–202.
- Fleishman, E. A., Mumford, M. D., Zaccaro, S. J., Levin, K. Y., Korotkin, A. L., & Hein, M. B. (1991). Taxonomic efforts in the description of leader behaviour: A synthesis and functional interpretation. *Leadership Quarterly*, 2, 245–287.

- Fletcher, G., Overall, N., & Friesen, M. (2006). Social cognition in intimate relationships. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 353–368). New York, NY: Cambridge University Press.
- Flood, P. C., Turner, T., Ramamoorthy, N., & Pearson, J. (2001). Causes and consequences of psychological contracts among knowledge workers in the high technology and financial services industries. *International Journal of Human Resource Management*, 12, 1152-1165.
- Foa, E. B., & Foa, U. G. (1974). *Societal structures of the mind*. Springfield, IL: Charles C. Thomas.
- Fong, C. T. (2006). The effects of emotional ambivalence on creativity. *Academy of Management Journal*, 49(5), 1016-1030.
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behaviour (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behaviour*, 59(3), 291-309.
- Freud S (1918). From the history on an infantile neurosis. SE 17:1–122.
- Gawronski, B., Peters, K. R., & Strack, F. (2008). Cross-cultural differences vs. universality in cognitive dissonance: A conceptual reanalysis. In R. M. Sorrentino & S. Yamaguchi Eds., *Handbook of motivation and cognition across cultures* pp. 297- 314. New York: Elsevier.
- George, J. M., & Brief, A. P. (1992). Feeling good—doing good: A conceptual analysis of the mood at work—organizational spontaneity relationship. *Psychological Bulletin*, 112, 310–329.
- George, J. M., & Brief, A. P. (1996). Motivational agendas in the workplace: The effects of feelings on focus of attention and work motivation. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behaviour: An annual series of analytical essays and critical reviews* (Vol. 18, pp. 75–109). Greenwich, CT: JAI Press.
- George, J. M., Reed, T. F., Ballard, K. A., Colin, J., & Fielding, J. (1993). Contact with AIDS patients as a source of work-related distress: Effects of organizational and social support. *Academy of Management Journal*, 36, 157–171.
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader–member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, 827-844.
- Gillet, N., Vallerand, R. J., Lafrenière, M. A. K., & Bureau, J. S. (2013). The mediating role of positive and negative affect in the situational motivation-performance relationship. *Motivation and Emotion*, 37, 465-479.

- Glaser, J., & Salovey, P. (1998). Affect in electoral politics. *Personality and Social Psychology Review*, 2, 156-172.
- Glasø, L., & Einarsen, S. (2006). Experienced affects in leader–subordinate relationships. *Scandinavian Journal of Management*, 22, 49-73.
- Glasman, L. R., & Albarracín, D. (2006). Forming attitudes that predict future behaviour: A meta-analysis of the attitude–behaviour relation. *Psychological Bulletin*, 132, 778-822.
- Goethals, G. R., Sorensen, G. J., & Burns, J. M. (2004). *Encyclopedia of leadership*. Thousand Oaks, CA: Sage.
- Gorn, G. J. (1975). The effects of personal involvement, communication discrepancy, and source prestige on reactions to communications on separatism. *Canadian Journal of Behavioural Science*, 7, 369- 386.
- Gouldner, A. (1960). The Norm of Reciprocity: A Preliminary Statement. *American Sociological Review*, 25, 161-167.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6, 219-247.
- Graumann, C. F., & Moscovici, S. (Eds.) (1987). *Changing conceptions of conspiracy*. New York: Springer-Verlag
- Greenleaf, R.K. (1977). *Servant leadership*. New York: Paulist Press.
- Gregory, J. R. (1975). Images of a limited good or expectations of reciprocity? *Current Anthropology*, 16, 73–92.
- Greguras, G. J., & Ford, J. M. (2006). An examination of the multidimensionality of supervisor and subordinate perceptions of leader-member exchange. *Journal of Occupational and Organizational Psychology*, 79, 433-465.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348-362.
- Guillaume, Y. R., van Knippenberg, D., & Brodbeck, F. C. (2014). Nothing succeeds like moderation: A social self-regulation perspective on cultural dissimilarity and performance. *Academy of Management Journal*, 57(5), 1284-1308.
- Guzzo, R. A., Noonan, K. A., & Elron, E. (1994). Expatriate Managers and the Psychological Contract. *Journal of Applied Psychology*, 79(4), 617-626.

- Hackman, J. R. (1976). Group influences on individuals. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1455-1525). Chicago: Rand McNally.
- Haddock, G., & Maio, G. R. (Eds.). (2004). *Contemporary perspectives on the psychology of attitudes*. Philadelphia: Psychology Press.
- Hannah, S. T., Balthazard, P. A., Waldman, D. A., Jennings, P. L., & Thatcher, R. W. (2013). The psychological and neurological bases of leader self-complexity and effects on adaptive decision-making. *Journal of Applied Psychology*, 98(3), 393.
- Hansbrough, K., Lord, R.G., & Schyns, B. (2014). Reconsidering the accuracy of follower leadership ratings. *Leadership Quarterly*, 26, 220–237.
- Harding, J., Kutner, B., Proshansky, H., & Chein, I. (1954). Prejudice and ethnic relations. In G. Lindzey (Ed.), *Handbook of social psychology* (Vol. 2, pp. 1021-1061). Cambridge, MA: Addison-Wesley.
- Harmon-Jones, E., & Harmon-Jones, C. (2007). Cognitive dissonance theory after 50 years of development. *Zeitschrift für Sozialpsychologie*, 38, 7-16.
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioural outcomes and time sequences. *Academy of Management Journal*, 49, 305-325.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2011). *The new psychology of leadership: Identity, influence and power*. New York, NY and Hove: Psychology Press.
- Hass, R. G., Katz, I., Rizzo, N., Bailey, J., & Moore, L. (1992). When racial ambivalence evokes negative affect, using a disguised measure. *Personality and Social Psychology Bulletin*, 18, 786-797.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408-420.
- Heider, F. (1946). Attitudes and cognitive organization. *Journal of Psychology*, 21, 107–112.
- Hemphill, J.K. and Coons, A.E. (1957) 'Development of the Leader Behaviour Description Questionnaire'. In Stogdill, R.M. and Coons, A.E. (eds) *Leadership Behaviour: Its Description and Measurement*. Columbus, OH: The Ohio State University, Bureau of Business Research.

- Henderson, D. J., Liden, R. C., Glibkowski, B. G., & Chaudhry, A. (2009). Within-group LMX differentiation: A multilevel review and examination of its construct definition, antecedents and outcomes. *Leadership Quarterly*, 20 (4), 517-534.
- Henderson, D. J., Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2008). Leader--member exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology*, 93, 1208-1219.
- Hersey, P., & Blanchard, K. H. (1972). *Management of organizational behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Hirschman, A. O., (1970). *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- Hockey, G. R. J. (1997). Compensatory control in the regulation of human performance under stress and high workload: A cognitive-energetical framework. *Biological Psychology*, 45, 73-93
- Hogan, R., & Kaiser, R. B. (2005). What we know about leadership. *Review of General Psychology*, 9, 169-180.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184-200.
- Hogg, M. A., Abrams, D. (1988). *Social Identification*. London: Routledge
- Hogg, M. A., Martin, R., Epitropaki, O., Mankad, A., Svensson, A., & Weeden, K. (2005). Effective leadership in salient groups: Revisiting leader– member exchange theory from the perspective of the social identity theory of leadership. *Personality and Social Psychology Bulletin*, 31, 991–1004.
- Hogg, M. A., & van Knippenberg, D. (2003). Social identity and leadership processes in groups. *Advances in Experimental Social Psychology*, 35, 1-52.
- Holbrook, A. L., Berent, M. K., Krosnick, J. A., Visser, P. S., & Boninger, D. S. (2005). Attitude importance and the accumulation of attitude-relevant knowledge in memory. *Journal of Personality and Social Psychology*, 88, 749-769.
- Holland, R. W., Verplanken, B., & Van Knippenberg, A. (2002). On the nature of attitude– behaviour relations: The strong guide, the weak follow. *European Journal of Social Psychology*, 32, 869-876.
- Hollander, E. P. (1958). Conformity, status, and idiosyncrasy credit. *Psychological Review*, 65, 117–127.
- Hollander, E. P. (1985). Leadership and power. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 2, pp. 485- 537). New York: Random House.

- Holt-Lunstad, J., Uchino, B. N., Smith, T. W., & Hicks, A. (2007). On the importance of relationship quality: The impact of ambivalence in friendships on cardiovascular functioning. *Annals of Behavioural Medicine*, 33, 278-290.
- Homan, A. C., & Greer, L. L. (2013). Considering diversity: The positive effects of considerate leadership in diverse teams. *Group Processes & Intergroup Relations*, 16(1), 105-125.
- Homans, G. C. (1958). Social behaviour as exchange. *American Journal of Sociology*, 63, 597-606.
- Hoobler, J. M., & Hu, J. (2013). A model of injustice, abusive supervision, and negative affect. *The Leadership Quarterly*, 24, 256-269.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 16 (3), 321-339.
- House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis? *Journal of Management*, 23, 409-473.
- House, R. J., & Javidan, M. (2004). Overview of GLOBE. In R. J. House P. J. Hanges M. Javidan P. W. Dorfman & V. Gupta (Eds.), *Culture, leadership, and organizations: The GLOBE study of 62 societies* (pp. 9–28). Thousand Oaks: Sage Publications.
- Hovland, C. I., Janis, I. L., & Kelly, H. H. (1953). *Communication and persuasion*. New Haven, CN: Yale Univ. Press.
- Howard-Pitney, B., Borigida, E., & Omoto, A. M. (1986). Personal involvement: An examination of processing differences. *Social Cognition*, 4, 39–57.
- Howell, J. M., & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30(1), 96-112.
- Hu, J., & Liden, R. C. (2013). Relative leader–member exchange within team contexts: how and when social comparison impacts individual effectiveness. *Personnel Psychology*, 66, 127-172.
- Hu, L.T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Eds.), *Structural equation modeling: Concepts, issues and applications* (pp. 76-99). Newbury Park, Ca: Sage
- Huang, Y. M., & Lin, S. C. (2013). The effects of transformational leadership on the distinct aspects of social identity. *Group Processes and Intergroup Relations*, 16(1), 87–104.

- Huckfeldt, R., Morehouse Mendez, J., & Osborn, T. (2004). Disagreement, ambivalence, and engagement: The political consequences of heterogeneous networks. *Political Psychology, 25*, 65–95.
- Huckfeldt, R., & Sprague, J. (1991). Discussant effects on vote choice: Intimacy, structure, and interdependence. *Journal of Politics 53*, 122–158.
- Hufford, M. R. (2007). Special methodological challenges and opportunities in ecological momentary assessment. In A. A. Stone, S. Shiffman, A. A. Atienza & L. Nebeling (Eds.), *The science of real-time data capture: Self-reports in health research* (pp. 54-75).
- Hunter, S. T., Bedell-Avers, K. E., & Mumford, M. D. (2007). The typical leadership study: Assumptions, implications, and potential remedies. *Leadership Quarterly, 18*(5), 435-446.
- Ilies, R., & Judge, T. A. (2002). Understanding the dynamic relationships among personality, mood, and job satisfaction: A field experience sampling study. *Organizational Behaviour and Human Decision Processes, 89*(2), 1119-1139.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader–Member Exchange and citizenship behaviours: A meta-analysis. *Journal of Applied Psychology, 92*, 269-277.
- Ilies, R., Scott, B. A., & Judge, T. A. (2006). The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behaviour. *Academy of Management Journal, 49*(3), 561-575.
- Isen, A. M., & Baron, R. A. (1991). Positive affect as a factor in organizational-behaviour. *Research in Organizational Behaviour, 13*, 1-53.
- Jaccard, J., & Becker, M. A. (1985). Attitudes and behaviour: An information integration perspective. *Journal of Experimental Social Psychology, 21*, 440–465.
- Jacks, J. Z., Devine, P.G., (2000). Attitude importance, forewarning of message content, and resistance to persuasion. *Basic and Applied Social Psychology, 22*, 19–29.
- Jamieson, D. W. (1993). The attitude ambivalence construct: Validity, utility, and measurement. Paper presented at the annual meeting of the American Psychological Association, Toronto.
- Johns, G. (2006). The essential impact of context on organizational behaviour. *Academy of Management Review, 31*, 386-408.

- Johnson, R. E., Tolentino, A. L., Rodopman, O. B., & Cho, E. (2010). We (sometimes) know not how we feel: Predicting job performance with an implicit measure of trait affectivity. *Personnel Psychology*, 63, 197-219.
- Jonas, K., Diehl, M., & Brömer, P. (1997). Effects of attitudinal ambivalence on information processing and attitude-intention consistency. *Journal of Experimental Social Psychology*, 33, 190-210.
- Jonas, K., Broemer, P., & Diehl, M. (2000a). Attitudinal ambivalence. *European Review of Social Psychology*, 11, 35–74.
- Jonas, K., Broemer, P., & Diehl, M. (2000b). Experienced ambivalence as a moderator of the consistency between attitudes and behaviours. *Zeitschrift für Sozialpsychologie*, 31, 153–165.
- Judd, C. M., Drake, R. A., Downing, J. W., & Krosnick, J. A. (1991). Some dynamic properties of attitude structures: Context-induced response facilitation and polarization. *Journal of Personality and Social Psychology*, 60, 193-202.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core Self-Evaluations and Job and Life Satisfaction: The Role of Self-Concordance and Goal Attainment. *Journal of Applied Psychology*, 90(2), 257-268.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and Leadership: A Qualitative and Quantitative Review. *Journal of Applied Psychology*, 87(4), 765-780.
- Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. *Annual Review of Psychology*, 63, 341-367.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89(1), 36-51.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review. *Psychological Bulletin*, 127(3), 376-407.
- Kachadourian, L. K., Fincham, F., & Davila, J. (2005). Attitudinal ambivalence, rumination, and forgiveness of partner transgressions in marriage. *Personality and Social Psychology Bulletin*, 31, 334-342.

- Kacmar, K. M., Witt, L. A., Zivnuska, S., & Gully, S. M. (2003). The interactive effect of leader-member exchange and communication frequency on performance ratings. *Journal of Applied Psychology, 88*, 764-772.
- Kammeyer-Mueller, J. D., Wanberg, C. R., Glomb, T. M., & Ahlburg, D. (2005). The Role of Temporal Shifts in Turnover Processes: It's About Time. *Journal of Applied Psychology, 90*(4), 644-658.
- Kanfer, R., & Ackerman, P. L. (1989). Motivation and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. *Journal of Applied Psychology, 74*, 657-690.
- Kaplan, K. J. (1972). On the ambivalence–indifference problem in attitude theory and measurement: A suggested modification of the semantic differential technique. *Psychological Bulletin, 77*, 361–372.
- Kaplan, S., Bradley, J. C., Luchman, J. N., & Haynes, D. (2009). On the role of positive and negative affectivity in job performance: A meta-analytic investigation. *Journal of Applied Psychology, 94*, 162-170.
- Kaše, R., Paauwe, J., & Zupan, N. (2009). HR practices, interpersonal relations, and intrafirm knowledge transfer in knowledge-intensive firms: a social network perspective. *Human Resource Management, 48*(4), 615-639.
- Katz, D., & Stotland, E. (1959). A preliminary statement to a theory of attitude structure and change. In S. Koch (Ed.), *Psychology: A study of a science* (Vol. 3, pp. 423-475). New York: McGraw-Hill.
- Keller, T., & Danserean, F. (1995). Leadership and empowerment: A social exchange perspective. *Human Relations, 48*, 127-145.
- Kellermann, K., & Reynolds, R. (1990). When ignorance is bliss: The role of motivation to reduce uncertainty in uncertainty reduction theory. *Human Communication Research, 17*, 5–75.
- Kelley, H. H., Berscheid, E., Christensen, A., Harvey, J. H., Huston, T. L., Levinger, G., McClintock, E., Peplau, L. A., & Peterson, D. R. (1983). *Close relationships*. New York: Freeman.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley.
- Kelman, H. C. (1961). Processes of opinion change. *Public Opinion Quarterly, 25*, 57-78.

- Kendall, P. (1954). *Conflict and mood: Factors affecting stability of response*. Glencoe, IL: The Free Press.
- Kenny, C. B. (1994). The microenvironment of attitude change. *Journal of Politics*, 56, 715–728.
- Kenny, D. A. (2012,). Mediation. Retrieved June, 2014, from <http://www.ehow.com/mediation>
- Kiger, G. (1997). The structure of attitudes toward persons who are deaf: Emotions, values, and stereotypes. *Journal of Psychology*, 131, 554-560.
- Kinicki, A.J., McKee-Ryan, F.M., Schriesheim, C.A., & Carson, K.P. (2002). Assessing the construct validity of the Job Descriptive Index: A review and meta-analysis. *Journal of Applied Psychology*, 87, 14–32.
- Kirkman, B., & Law, K. (2005). International management research in AMJ: Our past, present, and future. *Academy of Management Journal*, 48(3), 377-386.
- Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment style, gender, and relationship stability: a longitudinal analysis. *Journal of Personality and Social Psychology*, 66, 502-512.
- Kirkpatrick, L.A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships*, 1, 123-142.
- Knobloch, L. K., & Solomon, D. H. (1999). Measuring the sources and content of relational uncertainty. *Communication Studies*, 50, 261-278.
- Knobloch, L. K., & Solomon, D. H. (2002). Information Seeking Beyond Initial Interaction. *Human Communication Research*, 28, 243-257.
- Knobloch, L. K., Solomon, D. H., & Cruz, M. G. (2001). The role of relationship development and attachment in the experience of romantic jealousy. *Personal Relationships*, 8, 205-224
- Koy, A., & Yeo, G. (2008). BIS sensitivity, negative affect and performance: Dynamic and multilevel relationships. *Human Performance*, 21, 198-225.
- Kraft, P., Rise, J., Sutton, S., & Røysamb, E. (2005). Perceived difficulty in the theory of planned behaviour: Perceived behavioural control or affective attitude? *British Journal of Social Psychology*, 44, 479-496.
- Kraus, S. J. (1995). Attitudes and the prediction of behaviour: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, 21, 58–75.
- Krech, D., & Crutchfield, R.S. (1948). *Theory and problems of social psychology*. New York: McGraw-Hill.

- Kreiner, G. E., & Ashforth, B. E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behaviour*, 25, 1-27.
- Krosnick, J. A. (1988a). Attitude importance and attitude change. *Journal of Experimental Social Psychology*, 24, 240–255.
- Krosnick, J. A. (1988b). The role of attitude importance in social evaluation: a study of policy preferences, presidential candidate evaluations, and voting behaviour. *Journal of Personality and Social Psychology*, 55, 196-210.
- Krosnick, J. A. (1989). Attitude importance and attitude accessibility. *Personality and Social Psychology Bulletin*, 15, 297–308.
- Krosnick, J. A. (1990). American's perceptions of presidential candidates: A test of the projection hypothesis. *Journal of Social Issues*, 46, 159 –182.
- Krosnick, J. A., & Abelson, R. P. (1992). The case for measuring attitude strength in surveys. In J. Tanur (Ed.), *Questions about questions* (pp. 177-203). New York: Russell Sage.
- Krosnick, J. A., Boninger, D. S., Chuang, Y. C., Berent, M. K., & Carnot, C. G. (1993). Attitude strength: One construct or many related constructs? *Journal of Personality and Social Psychology*, 65, 1132-1151.
- Krosnick, J. A., & Cornet, P. J. (1993). *Attitude importance and attitude change revisited: Shifts in attitude stability and measurement reliability across a presidential election campaign*. Unpublished manuscript, Ohio State University, Columbus.
- Krosnick, J. A., Jarvis, B., Strathman, A., & Petty, R. E. (1994). Relations among dimensions of attitude strength: Insights from induced variable models. *Columbus: Ohio State University Unpublished Manuscript*.
- Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences*. (pp. 1-24) Mahwah, NJ: Lawrence Erlbaum Associates.
- LaPiere, R. T. (1934). Attitudes vs. actions. *Social Forces*, 13, 230–237.
- Larsen, J., McGraw, A. P., & Cacioppo, J. (2001). Can people feel happy and sad at the same time? *Journal of Personality and Social Psychology*, 81, 684-696.
- Lavine, H., Huff, J. W., Wagner, S. H., & Sweeney, D. (1998). The moderating influence of attitude strength on the susceptibility to context effects in attitude surveys. *Journal of Personality and Social Psychology*, 75, 359–373.

- Lawler, E. E., & Porter, L. W. (1967). The effect of performance on job satisfaction. *Industrial relations: A journal of Economy and Society*, 7(1), 20-28.
- Lawton, R., Conner, M., & McEachan, R. (2009). Desire or reason: predicting health behaviours from affective and cognitive attitudes. *Health Psychology*, 28(1), 56-65.
- Lazarus, R. S. (1995). Psychological stress in the workplace. In R. Crandall, & P. L. Perrewe' (Eds.), *Occupational stress* ( pp. 3 – 14). Washington, DC:
- Leavitt, K., Fong, C. T., & Greenwald, A. G. (2011). Asking about well-being gets you half an answer: Intra-individual processes of implicit and explicit job attitudes. *Journal of Organizational Behaviour*, 32, 672-687.
- Lee, K.L. (2008) An Examination between the Relationships of Conflict Management Styles and Employees' Satisfaction, *International Journal of Business and Management*, 3(9), 11-25
- Lee, A., Martin, R., Thomas, G., Guillaume, Y., & Maio, G. R. (2015). Conceptualizing leadership perceptions as attitudes: Using attitude theory to further understand the leadership process. *The Leadership Quarterly*, 26(6), 910-934.
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behaviour and workplace deviance: the role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131-142.
- Leippe, M. R., & Elkin, R. A. (1987). When motives clash: Issue involvement and response involvement as determinants of persuasion. *Journal of Personality and Social Psychology*, 52, 269 - 278.
- Leiter, M. P., & Durup, M. J. (1996). Work, home, and in-between: A longitudinal study of spillover. *Journal of Applied Behavioural Science*, 32, 29-47.
- Levinthal, D., & Rerup, C. (2006). Crossing an apparent chasm: Bridging mindful and less-mindful perspectives on organizational learning. *Organization Science*, 17(4), 502-513.
- Levitan, L. C., & Visser, P. S. (2008). The impact of the social context on resistance to persuasion: Effortful versus effortless responses to counter-attitudinal information. *Journal of Experimental Social Psychology*, 44, 640-649.
- Levitan, L. C., & Visser, P. S. (2009). Social Network Composition and Attitude Strength: Exploring the Dynamics within Newly Formed Social Networks. *Journal of Experimental Social Psychology*, 45, 1057-1067.
- Lew, T. Y. (2009). The relationships between perceived organizational support, felt obligation, affective organizational commitment and turnover intention of academics

- working with private higher educational institutions in Malaysia. *European Journal of Social Sciences*, 9(1), 72-87.
- Lewandowski, G. W., & Ackerman, R. A. (2006). Something's missing: Need fulfillment and self-expansion as predictors of susceptibility to infidelity. *The Journal of Social Psychology*, 146, 389-403.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behaviour in experimentally created social climates. *Journal of Social Psychology*, 10, 271-301.
- Lian, H., Ferris, L. D., & Brown, D. J. (2012). Does taking the good with the bad make things worse? How abusive supervision and leader-member exchange interact to impact need satisfaction and organizational deviance. *Organizational Behaviour and Human Decision Processes*, 117, 41-52.
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. (2006). Leader-Member Exchange, Differentiation, and Task Interdependence: Implications for Individual and Group Performance. *Journal of Organizational Behaviour*, 27(6), 723-746.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: an empirical assessment through scale development. *Journal of Management*, 24, 43-72.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management*, 15, 47-120.
- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85, 407-416.
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, 78, 662-674.
- Lin, X., & Leung, K. (2010). Differing effects of coping strategies on mental health during prolonged unemployment: A longitudinal analysis. *Human Relations*, 63, 637-665.
- Lind, E. A., & Van den Bos, K. (2002). When fairness works: Toward a general theory of uncertainty management. *Research in Organizational Behaviour*, 24, 181-223.
- Loi, R., & Ngo, H. Y. (2009). Work outcomes of relational demography in Chinese vertical dyads. *The International Journal of Human Resource Management*, 20, 1704-1719.
- Lord, R. G., Brown, D. J., & Harvey, J. L. (2001). System constraints on leadership perceptions, behaviour and influence: An example of connectionist level processes. In M. Hogg & R. Tinsdale (Eds.), *Blackwell handbook of social psychology*, Vol. 3: Group processes (pp. 283-310). Oxford, England: Blackwell.

- Lord, R. G., & Brown, D. J. (2001). Leadership, values, and subordinate self-concepts. *Leadership Quarterly*, 12(2), 133-152.
- Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behaviour and Human Performance*, 34(3), 343-378.
- Lord, R. G., & Maher, K. J. (1990). Alternative information-processing models and their implications for theory, research, and practice. *Academy of Management Review*, 15(1), 9-28.
- Lord, R. G., & Maher, K. J. (1991). *Leadership and information processing*. Boston, MA: Routledge.
- Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence. *Journal of Personality and Social Psychology*, 37(11), 2098-2109.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly*, 7(3), 385-425.
- Macewen, K. E., & Barling, J. (1988). Interrole conflict, family support and marital adjustment of employed mothers: A short term, longitudinal study. *Journal of Organizational Behaviour*, 9(3), 241-250.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30.
- MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. Mahwah, NJ: Lawrence Erlbaum Associates.
- MacKuen, M., & Brown, C. (1987). Political context and attitude change. *The American Political Science Review*, 81, 471-490.
- Maio, G. R., Bell, D. W., & Esses, V. M. (1996). Ambivalence and persuasion: The processing of messages about immigrant groups. *Journal of Experimental Social Psychology*, 32, 513-536.
- Maio, G. R., Fincham, F. D., & Lycett, E. J. (2000). Attitudinal ambivalence toward parents and attachment style. *Personality and Social Psychology Bulletin*, 26, 1451-1464.
- Maio, G. R., & Haddock, G. (2009). *The Psychology of Attitudes and Attitude Change*. SAGE Publications.
- Maio, G. R., & Thomas, G. (2007). The epistemic-teleologic model of deliberate self-persuasion. *Personality and Social Psychology Review*, 11(1), 46-67.

- Malinowski, B. (1922). *Argonauts of the western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*. London: Routledge.
- Mardanov, I., Sterrett, J., & Baker, J. (2007). Satisfaction with supervision and member job satisfaction in leader-member exchange: An empirical study in the restaurant industry. *Journal of Applied Management and Entrepreneurship*, 12(3), 37-55
- Martin, R., Epitropaki, O., Thomas, G., & Topakas, A. (2010). A critical review of leader-member relationship (LMX) research: Future prospects and directions. *International Review of Industrial and Organizational Psychology*, 25, 61–91.
- Martin, R., Guillaume, Y. R. F., Thomas, G., Lee, A., & Epitropaki, O. (2015). Leader-member Exchange (LMX) and performance: A Meta-analytic review. *Personnel Psychology*. Advance online publication.
- Maslyn, J., & Uhl-Bien, M. (2001). Leader–Member Exchange and Its Dimensions: Effects of Self-Effort and Other’s Effort on Relationship Quality. *Journal of Applied Psychology*, 86, 697-708.
- Mathieu, J. E., and Rapp, T. L. (2009). Laying the foundation for successful team performance trajectories: The roles of team charters and performance strategies. *Journal of Applied Psychology*, 94, 90-103.
- Mauss, M. (1925). *The gift: Forms and functions of exchange in archaic societies*. New York: The Norton Library.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114(2), 376-390.
- McCroskey, J. C., Prichard, S. V. O., & Arnold, W. E. (1967). Attitude intensity and the neutral point on semantic differential scales. *Public Opinion Quarterly*, 31, 642-645.
- McNichols, C. W., Stahl, M. J., & Manley, T. R. (1978). A validation of Hoppock's job satisfaction measure. *Academy of Management Journal*, 21(4), 737-742.
- Meindl, J. R. (1995). The romance of leadership as a followercentric theory: A social constructionist approach. *Leadership Quarterly*, 6, 329-341.
- Mikulincer, M., Shaver, P. R., Bar-On, N., & Ein-Dor, T. (2010). The pushes and pulls of close relationships: attachment insecurities and relational ambivalence. *Journal of Personality and Social Psychology*, 98, 450-468.
- Miller, J. M., & Peterson, D. A. (2004). Theoretical and empirical implications of attitude strength. *Journal of Politics*, 66, 847-867

- Miner, A. G., Glomb, T. M., & Hulin, C. L. (2005). Experience sampling mood and its correlates at work. *Journal of Occupational and Organizational Psychology*, 78, 171–193.
- Mitchell, T. R., & James, L. R. (2001). Building better theory: Time and the specification of when things happen. *Academy of Management Review*, 26(4), 530-547.
- Moorman, R. H. (1993). The influence of cognitive and affective based job satisfaction measures on the relationship between satisfaction and organizational citizenship behaviour. *Human Relations*, 46(6), 759-776.
- Mor, N., & Winquist, J. (2002). Self-focused attention and negative affect: A meta-analysis. *Psychological Bulletin*, 128, 638–662.
- Morrison, E. W. (1993). Longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology*, 78, 173-183
- Murphy, K. R. (1989). Dimensions of job performance. In R. Dillon & J. Pellingrino (Eds.), *Testing: Applied and theoretical perspectives* (pp. 218–247). New York: Praeger.
- Murphy, S.E., & Ensher, E.A. (1999). The effects of leader and subordinate characteristics in the development of leader-member exchange quality. *Journal of Applied Social Psychology*, 29, 1371-1394.
- Mutz, D. C. (2002). Cross-cutting social networks: Testing democratic theory in practice. *American Political Science Review*, 96, 111–126.
- Myers, D. G., & Lamm, H. (1976). The group polarization phenomenon. *Psychological Bulletin*, 83, 602-627.
- Nahrgang, J. D., Morgeson, F. P., & Ilies, R. (2009). The development of leader–member exchanges: Exploring how personality and performance influence leader and member relationships over time. *Organizational Behaviour and Human Decision Processes*, 108, 256-266.
- Newby-Clark, I. R., McGregor, I., & Zanna, M. P. (2002). Thinking and caring about cognitive inconsistency: When and for whom does attitudinal ambivalence feel uncomfortable? *Journal of Personality and Social Psychology*, 82, 157-166.
- Nielsen, T. M., Bachrach, D. G., Sundstrom, E., & Halfhill, T. R. (2012). Utility of OCB organizational citizenship behaviour and group performance in a resource allocation framework. *Journal of Management*, 38(2), 668-694.
- Noelker, L. S., Ejaz, F. K., & Menne, H. L. (2009). Factors affecting frontline workers' satisfaction with supervision. *Journal of Aging and Health*, 21(1), 85-101.

- Noelker, L. S., Ejaz, F. K., Menne, H. L., & Jones, J. A. (2006). The impact of stress and support on nursing assistant satisfaction with supervision. *Journal of Applied Gerontology*, 25(4), 307-323.
- Nordgren, L. F., van Harreveld, F., & van der Pligt, J. (2006). Ambivalence, discomfort, and motivated information processing. *Journal of Experimental Social Psychology*, 42, 252-258.
- Norman, R. (1975). Affective-cognitive consistency, attitudes, conformity, and behaviour. *Journal of Personality and Social Psychology*, 32 83-91.
- Northouse, P. G. (2007). *Leadership: Theory and practice* (4th ed.). Thousand Oaks, CA: Sage.
- Offermann, L. R., Hanges, P. J., & Day, D. V. (2001). Leaders, followers, and values: Progress and prospects for theory and research. *Leadership Quarterly*, 12(2), 129-131.
- Oglensky, B. D. (2008). The ambivalent dynamics of loyalty in mentorship. *Human Relations*, 61(3), 419-448.
- Olsen, S. O., Wilcox, J., & Olsson, U. (2005). Consequences of ambivalence on satisfaction and loyalty. *Psychology & Marketing*, 22(3), 247-269.
- Olson, J. M., & Zanna, M. P. (1993). Attitudes and attitude change. *Annual Review of Psychology*, 44,117–154.
- Oreg, S., & Sverdlik, N. (2011). Ambivalence toward imposed change: the conflict between dispositional resistance to change and the orientation toward the change agent. *Journal of Applied Psychology*, 96, 337-349.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behaviour. *Personnel psychology*, 48(4), 775-802.
- Otnes, C., Lowrey, T. M., & Shrum, L. J. (1997). Toward an understanding of consumer ambivalence. *Journal of Consumer Research*, 24, 80-93.
- Palanski, M. E., & Yammarino, F. J. (2011). Impact of behavioural integrity on follower job performance: A three-study examination. *Leadership Quarterly*, 22, 765-786.
- Parker, H. A., Perry, R. W. & Gillespie, D. F. (1974). Prolegomenon to a theory of attitude-behaviour relationships. *Pakistan Journal of Psychology*, 7, 21–39.
- Pearce, C. L., Sims Jr, H. P., Cox, J. F., Ball, G., Schnell, E., Smith, K. A., & Trevino, L. (2003). Transactors, transformers and beyond: A multi-method development of a theoretical typology of leadership. *Journal of Management Development*, 22(4), 273-307.

- Pelham, B. W. (1991). On confidence and consequence: The certainty and importance of self-knowledge. *Journal of Personality and Social Psychology*, 60, 518-530.
- Pellegrini, E. K., Scandura, T. A., & Jayaraman, V. (2010). Cross-cultural generalizability of paternalistic leadership: An expansion of leader-member exchange theory. *Group & Organization Management*, 35(4), 391-420.
- Penney, L. M., & Spector, P. E. (2005). Job stress, incivility, and counterproductive work behaviour (CWB): The moderating role of negative affectivity. *Journal of Organizational Behaviour*, 26(7), 777-796.
- Petrocelli, J. V., Tormala, Z. L., & Rucker, D. D. (2007). Unpacking attitude certainty: attitude clarity and attitude correctness. *Journal of Personality and Social Psychology*, 92, 30-41
- Petty, R. E., Briñol, P., Tormala, Z. L., & Wegener, D. T. (2007). The role of meta-cognition in social psychology. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: A handbook of basic principles* (2nd ed., pp. 254-284). New York: Guilford.
- Petty, R. E., & Cacioppo, J. T. (1996). Addressing disturbing and disturbed consumer behaviour: Is it necessary to change the way we conduct behavioural science? *Journal of Marketing Research*, 33, 1-8.
- Petty, R. E., Haugtvedt, C. P., & Smith, S. M. (1995). Elaboration as a determinant of attitude strength: Creating attitudes that are persistent, resistant, and predictive of behaviour. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 93–130). Mahwah, NJ: Erlbaum
- Petty R. E, Krosnick J. A., (Eds.). (1995). *Attitude Strength: Antecedents and Consequences*. Mahwah, NJ: Erlbaum.
- Petty, R. E., & Krosnick, J. A. (Eds.). (2014). *Attitude strength: Antecedents and consequences*. Psychology Press.
- Petty, R. E., Wegener, D. T., & Fabrigar, L. R. (1997). Attitudes and attitude change. *Annual Review of Psychology*, 48(1), 609-647.
- Phillips, J. M., Douthitt, E. A., & Hyland, M. M. (2001). The role of justice in team member satisfaction with the leader and attachment to the team. *The Journal of Applied Psychology*, 86(2), 316-325.
- Phillips, J. S., & Lord, R. G. (1981). Causal attributions and perceptions of leadership. *Organizational Behaviour and Human Performance*, 28(2), 143-163.

- Piderit, S. K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review*, 25, 783-794.
- Pillai, R., Scandura, T. A., & Williams, E. A. (1999). Leadership and organizational justice: Similarities and differences across cultures. *Journal of International Business Studies*, 763-779.
- Plambeck, N., & Weber, K. (2010). When the glass is half full and half empty: CEOs' ambivalent interpretations of strategic issues. *Strategic Management Journal*, 31, 689-710.
- Planalp, S., & Honeycutt, J. M. (1985). Events that increase uncertainty in personal relationships. *Human Communication Research*, 21, 593-604.
- Plutchik, R. (1989). Measuring emotions and their derivatives. In R. Plutchik, & H. Kellerman (Eds.), *Emotion: theory, research, and experience: the measurement of emotions*, vol. 4. San Diego: Academic Press.
- Pollock, T. G, Whitbred, R. C, Contractor, N. (2000) Social information processing and job characteristics: a simultaneous test of two theories with implications for job satisfaction. *Human Communication Research*; 26, 292–330.
- Porac, J., & Rosa, J. A. (1996). In praise of managerial narrow-mindedness. *Journal of Management Inquiry*, 5(1), 35-42.
- Povey, R., Wellens, B., & Conner, M. (2001). Attitudes towards following meat, vegetarian and vegan diets: an examination of the role of ambivalence. *Appetite*, 37(1), 15-26.
- Pratkanis, A. R., & Greenwald, A. G. (1989). A sociocognitive model of attitude structure and function. *Advances in Experimental Social Psychology*, 22, 245-285.
- Pratt, M. G. (2000). The good, the bad, and the ambivalent: Managing identification among Amway distributors. *Administrative Science Quarterly*, 45, 456-493.
- Pratt, M. G., & Doucet, L. (2000). Ambivalent feelings in organizational relationships. In S. Fineman Ed., *Emotion in organizations*, 2nd ed., pp. 204-226. London: Sage.
- Pratt, M. G., & Rosa, J. A. (2003). Transforming work-family conflict into commitment in network marketing organizations. *Academy of Management Journal*, 46(4), 395-418.
- Price, K. H., Harrison, D. A., & Gavin, J. H. (2006). Withholding inputs in team contexts: member composition, interaction processes, evaluation structure, and social loafing. *The Journal of Applied Psychology*, 91(6), 1375-1384.

- Priester, J. M., & Petty, R. E. (1996). The gradual threshold model of ambivalence: relating the positive and negative bases of attitudes to subjective ambivalence. *Journal of Personality and Social Psychology*, 71, 431-449.
- Prislin, R., Brewer, M., & Wilson, D. J. (2002). Changing majority and minority positions within a group vs. an aggregate. *Personality and Social Psychology Bulletin*, 28, 640–647.
- Prislin, R., Limbert, W. M., & Bauer, E. (2000). From majority to minority and vice versa: The asymmetrical effects of losing and gaining majority position within a group. *Journal of Personality and Social Psychology*, 79, 385–397.
- Raden, D. (1983). *The interrelationships between the dimensions of social attitudes*. Paper presented at the annual meeting of the Southern Sociological Association, Atlanta, GA.
- Regan, D. T., & Fazio, R. (1977). On the consistency between attitudes and behaviour: Look to the method of attitude formation. *Journal of Experimental Social Psychology*, 13(1), 28-45.
- Rhoades, L., & Eisenberger, R. (2002). Perceived Organizational Support: A Review of the Literature. *Journal of Applied Psychology*, 87, 698-714.
- Richards, D. A., & Hackett, R. D. (2012). Attachment and emotion regulation: Compensatory interactions and leader–member exchange. *Leadership Quarterly*, 23(4), 686-701.
- Riggio, R. E., Chaleff, I., & Lipman-Blumen, J. (Eds.). (2008). *The art of followership: How great followers create great leaders and organizations* (Vol. 146). John Wiley & Sons.
- Ricketta, M. (2008). The causal relation between job attitudes and performance: a meta-analysis of panel studies. *Journal of Applied Psychology*, 93(2), 472-481.
- Roberts, L.M. (2007), From Proving to Becoming: How Positive Relationships Create a Context for Self-discovery and Self-actualization. In J.E. Dutton, B.R. Ragins (eds.), *Exploring Positive Relationships at Work: Building a Theoretical and Research Foundation* (pp. 29-46). New York: Lawrence Erlbaum.
- Rockstuhl, T., Dulebohn, J. H., Ang, S., & Shore, L. M. (2012). Leader-member exchange (LMX) and culture: a meta-analysis of correlates of LMX across 23 countries. *Journal of Applied Psychology*, 97, 1097-1130.
- Rokeach, M., & Kliejunas, P. (1972). Behaviour as a function of attitude-toward-object and attitude-toward-situation. *Journal of Personality and Social Psychology*, 22, 194–201.
- Rosen, C. C., Harris, K. J., & Kacmar, K. M. (2011). LMX, context perceptions, and performance: An uncertainty management perspective. *Journal of Management*, 37(3), 819-838.

- Rosenberg, M. J. A. (1960). A structural theory of attitude dynamics. *Public Opinion Quarterly*, 24, 319–341.
- Rosenberg, M. J. (1968). Hedonism, inauthenticity, and other goods toward expansion of a consistency theory. In R. P. Abelson, E. Aronson, W. J. McGuire, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 73–111). Chicago: Rand McNally.
- Rosenberg, M. J., & Hovland, C. I. 1960. Cognitive, affective, and behavioural components of attitudes. In M. J. Rosenberg (Ed.), *Attitude organization and change: 1-14*. New Haven, CT: Yale University Press.
- Roskos-Ewoldsen, D. R., & Fazio, R. H. (1992). On the orienting value of attitudes: attitude accessibility as a determinant of an object's attraction of visual attention. *Journal of Personality and Social Psychology*, 63(2), 198-211.
- Rosse, J. G., & Kraut, A. L. (1983). Reconsidering the Vertical Dyad Linkage Model of Leadership. *Journal of Occupational Psychology*, 56 (1), 63-71.
- Rothman, N. B., & Wiesenfeld, B. M. (2007). The social consequences of expressing emotional ambivalence in groups and teams. *Research on Managing Groups and Teams*, 10, 275-308.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, 87, 66-80.
- Rucker, D. D., & Petty, R. E. (2006). Increasing the effectiveness of communications to consumers: Recommendations based on elaboration likelihood and attitude certainty perspectives. *Journal of Public Policy & Marketing*, 25, 39-52.
- Rusbult, C. E., & Van Lange, P. A. (2003). Interdependence, interaction, and relationships. *Annual Review of Psychology*, 54, 351-375.
- Rush, M. C., Thomas, J. C., & Lord, R. G. (1977). Implicit leadership theory: A potential threat to the internal validity of leader behaviour questionnaires. *Organizational Behaviour and Human Performance*, 20(1), 93-110.
- Sahlins, M. (1972). *Stone age economics*. New York: Aldine.
- Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Social support: An interactional view*. John Wiley & Sons.
- Scandura, T. A., & Graen, G. B. (1984). Moderating Effects of Initial Leader-Member Exchange Status on the Effects of a Leadership Intervention. *Journal of Applied Psychology*, 69(3), 428-436.

- Schachter, S., & Singer, J. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review*, 69(5), 379.
- Schleicher, D. J., Watt, J. D., & Greguras, G. J. (2004). Reexamining the job satisfaction–performance relationship: The complexity of attitudes. *Journal of Applied Psychology*, 89, 165-177.
- Schleicher, D. J., Smith, T. A., Casper, W. J., Watt, J. D., & Greguras, G. J. (In Press). It's All in the Attitude: The Role of Job Attitude Strength in Job Attitude-Outcome Relationships. *Journal of Applied Psychology*.
- Schriesheim, C. A., Castro, S. L., & Yammarino, F. J. (2000). Investigating contingencies: An examination of the impact of span of supervision and upward controllingness on leader–member exchange using traditional and multivariate within-and between-entities analysis. *Journal of Applied Psychology*, 85, 659-677.
- Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management Journal*, 41, 289–318.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. Psychology Press.
- Schuman, H., Presser, S., (1981). *Questions and Answers in Attitude Surveys*. Academic Press, Orlando.
- Schyns, B., & Meindl, J. R. (Eds.). (2005). *Implicit leadership theories: Essays and explorations*. Greenwich, CT: Information Age Publishers.
- Schwartz, S. H. (1978). Temporal instability as a moderator of the attitude-behaviour relationship. *Journal of Personality and Social Psychology*, 36, 715-724.
- Scott, J., Craven, A. E., & Green, C. (2011). A meta-analysis of organizational citizenship behaviour and leader-member exchange. *Journal of Business & Economics Research (JBER)*, 4(11).
- Seibert, P. S., & Ellis, H. C. (1991). Irrelevant thoughts, emotional mood states, and cognitive task performance. *Memory and Cognition*, 19, 507-513.
- Senior, C., Lee, N., & Butler, M. (2011). Perspective-Organizational Cognitive Neuroscience. *Organization Science*, 22(3), 804-815.
- Shore, L. M., Bommer, W. H., Rao, A. N., & Seo, J. (2009). Social and economic exchange in the employee-organization relationship: the moderating role of reciprocation wariness. *Journal of Managerial Psychology*, 24, 701-721.

- Simpson, J. A., & Rholes, W. S. (2012). Adult attachment orientations, stress, and romantic relationships. In P. G. Devine, A. Plant, J. Olson, & M. Zanna (Eds.), *Advances in Experimental Social Psychology*, 45, 279-328.
- Shantz, A., & Latham, G. P. (2009). An exploratory field experiment of the effect of subconscious and conscious goals on employee performance. *Organizational Behaviour and Human Decision Processes*, 109(1), 9-17.
- Sheeran, P. (2002). Intention-behaviour relations: A conceptual and empirical review. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 12, pp. 1-36). Chichester, UK: Wiley.
- Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu, C., ... & Sun, Z. (2004). Self-concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology*, 35(2), 209-223.
- Sherif, M. (1966). *In common predicament: Social psychology of intergroup conflict and cooperation*. Boston, MA: Houghton-Mifflin.
- Sherif, M., & Hovland, C. I. (1961). *Social judgement: Assimilation and contrast effects in communication*. New Haven, C'12. Yale University Press.
- Sherif, C. W., Sherif, M., & Nebergall, R. E. (1965). *Attitude and attitude change: The social judgement involvement approach*. Philadelphia: W. B. Saunders.
- Shore, L. M., Coyle-Shapiro, J. A. M., Chen, X. P., & Tetrick, L. E. (2009). Social exchange in work settings: Content, process, and mixed models. *Management and Organization Review*, 5, 289-302.
- Simons, J., & Carey, K. B. (1998). A structural analysis of attitudes toward alcohol and marijuana use. *Personality and Social Psychology Bulletin*, 24, 727-735.
- Singer J.D, & Willett J.B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. London: Oxford University Press.
- Smelser, N. J. (1998). The Rational and the Ambivalent in the Social Sciences. *American Sociological Review* 63,1-16.
- Smith, M. B., Bruner, J. S., & White, R. W. (1956). *Opinions and personality*. New York, NY: John Wiley & Sons.
- Smith, J. A., & Foti, R. J. (1998). A pattern approach to the study of leader emergence. *The Leadership Quarterly*, 9(2), 147-160.
- Smith, P. C., Kendall, L. M., & Hulin, C.L. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand-McNally.

- Smith, R. E., & Swinyard, W. R. (1983). Attitude-behaviour consistency: The impact of product trial versus advertising. *Journal of Marketing Research*, 20, 257-267.
- Smith, J. R., Terry, D. J., Crosier, T. R., & Duck, J. M. (2005). The importance of the relevance of the issue to the group in voting intentions: The case of the Australian republic referendum. *Basic and Applied Social Psychology*, 27(2), 163-170.
- Solomon, D. H., & Knobloch, L. K. (2004). A model of relational turbulence: The role of intimacy, relational uncertainty, and interference from partners in appraisals of irritations. *Journal of Social and Personal Relationships*, 21, 795-816.
- Sonnentag, S. & Frese, M. (2002). Performance concepts and performance theory, in S. Sonnentag (ed.), *Psychological Management of Individual Performance*. Chichester: Wiley, pp. 3-25.
- Sparks, P., Conner, M., James, R., Shepherd, R., & Povey, R. (2001). Ambivalence about health-related behaviors: An exploration in the domain of food choice. *British Journal of Health Psychology*, 6, 53–68.
- Sparks, P., Hedderley, D., & Shepherd, R. (1992). An investigation into the relationship between perceived control, attitude variability and the consumption of two common foods. *European Journal of Social Psychology*, 22(1), 55-71.
- Sparrowe, R. T., & Liden, R. C. (1997). Process and structure in leader-member exchange. *Academy of Management Review*, 22(2), 522-552.
- Sparrowe, R. T., & Liden, R. C. (2006). Two routes to influence: Integrating leader–member exchange and social network perspectives. *Administrative Science Quarterly*, 50, 505–535.
- Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behaviour: Some parallels between counterproductive work behaviour and organizational citizenship behaviour. *Human Resource Management Review*, 12, 269 –292.
- Stamper, C. L., & Johlke, M. C. (2003). The impact of perceived organizational support on the relationship between boundary spanner role stress and work outcomes. *Journal of Management*, 29: 569-588.
- Staw, B.M., & Cohen-Charash, Y. (2005). The dispositional approach to job satisfaction: More than a mirage, but not yet an oasis. *Journal of Organizational Behaviour*, 26, 59-78.
- Steiger, J. H., & Lind, J. C. (1980). Statistically based tests for the number of common factors. *Psychometric Society Annual Meeting*. Iowa City, IA

- Stinglhamber, F., & Vandenberghe, C. (2003). Organizations and supervisors as sources of support and targets of commitment: A longitudinal study. *Journal of Organizational Behaviour*, 24(3), 251-270.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *The Journal of Psychology*, 25(1), 35-71.
- Stogdill, R. M. (1963). *Manual for the leader behaviour description questionnaire-Form XII: An experimental revision*. Bureau of Business Research, College of Commerce and Administration, Ohio State University.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of the literature*. New York: Free Press.
- Stouffer, S. A., Guttman, L., Suchman, E. A., Lazarsfeld, P. F., Star, S. A., & Clausen, J. A. (1950). *Measurement and Prediction*. Princeton, NJ: Princeton University Press.
- Swann, W. B., Jr., Pelham, B. W., & Chidester, T. R. (1988). Change through paradox: Using self-verification to alter beliefs. *Journal of Personality and Social Psychology*, 54, 268–273.
- Takeuchi, R., Yun, S., & Wong, K. F. E. (2011). Social influence of a coworker: A test of the effect of employee and coworker exchange ideologies on employees' exchange qualities. *Organizational Behaviour and Human Decision Processes*, 115, 226-237.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago, IL: Nelson-Hall.
- Tangirala, S., Green, S. G., & Ramanujam, R. (2007). In the shadow of the boss's boss: effects of supervisors' upward exchange relationships on employees. *Journal of Applied Psychology*, 92, 309-320.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43(2), 178-190.
- Tesser, A., & Conlee, M. C. (1975). Some effects of time and thought on attitude polarization. *Journal of Personality and Social Psychology*, 31, 262–270.
- Theiss, J. A., & Solomon, D. H. (2006). A relational turbulence model of communication about irritations in romantic relationships. *Communication Research*, 33, 391-418.
- Theodorakis, Y. (1994). Planned behaviour, attitude strength, role identity, and the prediction of exercise behaviour. *The Sport Psychologist*, 8, 149–165.
- Thibault, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: John Wiley.

- Thomas, G., Martin, R., Epitropaki, O., Guillaume, Y., & Lee, A. (2013). Social cognition in leader–follower relationships: Applying insights from relationship science to understanding relationship-based approaches to leadership. *Journal of Organizational Behaviour*, 34, S63-S81.
- Thomas, G., Martin, R., & Riggio, R. E. (2013). Leading groups: Leadership as a group process. *Group Processes & Intergroup Relations*, 16, 3-16.
- Thompson, M. M., & Holmes, J. G. (1996). Ambivalence in close relationships: Conflicted cognitions as a catalyst for change. In R. M. Sorrentino & E. T. Higgins Eds., *Handbook of motivation and cognition* Vol. 3, pp. 497-530. New York: Guilford Press.
- Thompson, M. M., Zanna, M. P., & Griffin, D. W. (1995). Let's not be indifferent about (attitudinal) ambivalence. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 361–386). Mahwah, NJ: Erlbaum.
- Tormala, Z. L., & Petty, R. E. (2002). What Doesn't Kill Me Makes Me Stronger: The Effects of Resisting Persuasion on Attitude Certainty. *Journal of Personality and Social Psychology*, 83, 1298-1313
- Townsend, J., Phillips, J. S., & Elkins, T. J. (2000). Employee retaliation: The neglected consequence of poor leader-member exchange relations. *Journal of Occupational Health Psychology*, 5, 457–463.
- Trafimow, D., & Sheeran, P. (1998). Some tests of the distinction between cognitive and affective beliefs. *Journal of Experimental Social Psychology*, 34, 378-397.
- Triandis, H. C. (1971). *Attitude and Attitude Change*, John Wiley, New York.
- Tsai, W. C., Chen, H. W., & Cheng, J. W. (2009). Employee positive moods as a mediator linking transformational leadership and employee work outcomes. *The International Journal of Human Resource Management*, 20, 206-219.
- Tucker, L. R., & Lewis, C. (1973). Reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38, 1-10.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. (2003). The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviours. *Journal of Management*, 29, 187-206.
- Uchino, B. N., Cawthon, R. M., Smith, T. W., Light, K. C., McKenzie, J., Carlisle, M., & Bowen, K. (2012). Social relationships and health: Is feeling positive, negative, or both ambivalent about your social ties related to telomeres? *Health Psychology*, 31, 789- 796.

- Uchino, B. N., Holt-Lunstad, J., Uno, D., & Flinders, J. B. (2001). Heterogeneity in the social networks of young and older adults: Prediction of mental health and cardiovascular reactivity during acute stress. *Journal of Behavioural Medicine*, 24, 361-382.
- Uchino, B. N., Smith, T. W., & Berg, C. A. (2014). Spousal relationship quality and cardiovascular risk dyadic perceptions of relationship ambivalence are associated with coronary-artery calcification. *Psychological Science*, 25, 1037-1042.
- Uchino, B. N., Holt-Lunstad, J., Smith, T. W., & Bloor, L. (2004). Heterogeneity in social networks: A comparison of different models linking relationships to psychological outcomes. *Journal of Social and Clinical Psychology*, 23, 123-139.
- Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *Leadership Quarterly*, 17(6), 654-676.
- Uhl-Bien, M., & Maslyn, J. (2003). Reciprocity in manager–subordinate relationships: Components, configurations, and outcomes. *Journal of Management*, 29, 511–532.
- Uhlmann, E. L., Leavitt, K., Menges, J. I., Koopman, J., Howe, M., & Johnson, R. E. (2012). Getting explicit about the implicit: A taxonomy of implicit measures and guide for their use in organizational research. *Organizational Research Methods*, 15, 553-601.
- Vadera, A. K., & Pratt, M. G. (2013). Love, hate, ambivalence, or indifference? A conceptual examination of workplace crimes and organizational identification. *Organization Science*, 24, 172-188.
- van Dierendonck, D., Le Blanc, P. M., & van Breukelen, W. (2002). Supervisory behaviour, reciprocity and subordinate absenteeism. *Leadership & Organization Development*, 23(2), 84-93.
- van Harreveld, F., Pligt, J., Vries, N. K., Wenneker, C., & Verhue, D. (2004). Ambivalence and information integration in attitudinal judgment. *British Journal of Social Psychology*, 43(3), 431-447.
- van Harreveld, F., Rutjens, B. T., Schneider, I. K., Nohlen, H. U., & Keskinis, K. (2014). In doubt and disorderly: Ambivalence promotes compensatory perceptions of order. *Journal of Experimental Psychology*. 143(4), 1666-1676.
- van Harreveld, F., Rutjens, B. T., Rotteveel, M., Nordgren, L. F., & Van Der Pligt, J. (2009). Ambivalence and decisional conflict as a cause of psychological discomfort: Feeling tense before jumping off the fence. *Journal of Experimental Social Psychology*, 45, 167-173.

- van Harreveld, F., van der Pligt, J., & de Liver, Y. N. (2009). The agony of ambivalence and ways to resolve it: Introducing the MAID model. *Personality and Social Psychology Review*, 13, 45–61.
- van Knippenberg, D., & Sitkin, S. B. (2013). A critical assessment of charismatic-transformational leadership research: Back to the drawing board? *Academy of Management Annals*, 7, 1-60.
- Van Knippenberg, B., & Van Knippenberg, D. 2005. Leader self-sacrifice and leadership effectiveness: the moderating role of leader prototypicality. *Journal of Applied Psychology*, 90, 25-37.
- Van Knippenberg, D., Van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *Leadership Quarterly*, 15(6), 825-856.
- Van Quaquebeke, N., & Eckloff, T. (2013). Why follow? The interplay of leader categorization, identification, and feeling respected. *Group Processes and Intergroup Relations*, 16(1), 68–86.
- Van Vianen, A. E., & De Dreu, C. K. (2001). Personality in teams: Its relationship to social cohesion, task cohesion, and team performance. *European Journal of Work and Organizational Psychology*, 10, 97-120.
- Vecchio, R.P. (1982). A further test of leadership effects due to between-group and within-group variation. *Journal of Applied Psychology*, 67, 200-208.
- Venkatachalam, M. (1995). Personal hardiness and perceived organizational support as links in the role stress-outcome relationship: A person-environment fit model. Unpublished doctoral dissertation, University of Alabama.
- Venkataramani, V., Green, S. G., & Schleicher, D. J. (2010). Well-connected leaders: The impact of leaders' social network ties on LMX and members' work attitudes. *Journal of Applied Psychology*, 95(6), 1071-1084.
- Verbeke, W., & Viaene, J. (1999). Beliefs, attitude and behaviour towards fresh meat consumption in Belgium: empirical evidence from a consumer survey. *Food Quality and Preference*, 10, 437-445.
- Vidyarthi, P. R., Liden, R. C., Anand, S., Erdogan, B., & Ghosh, S. 2010. Where do I stand? Examining the effects of leader-member exchange social comparison on employee work behaviours. *Journal of Applied Psychology*, 95, 849-861.

- Visser, P. S. (1998). Assessing the structure and function of attitude strength: Insights from a new approach. Unpublished doctoral dissertation, Ohio State University.
- Visser, P. S., Bizer, G. Y., & Krosnick, J. A. (2006). Exploring the Latent Structure of Strength-related Attitude Attributes. *Advances in Experimental Social Psychology*, 38, 1-67.
- Visser, P. S., Krosnick, J. A., & Simmons, J. P. (2003). Distinguishing the cognitive and behavioural consequences of attitude importance and certainty: A new approach to testing the common-factor hypothesis. *Journal of Experimental Social Psychology*, 39, 118-141.
- Visser, P. S., & Mirabile, R. R. (2004). Attitudes in the social context: the impact of social network composition on individual-level attitude strength. *Journal of Personality and Social Psychology*, 8, 779-795.
- Viswesvaran, C., & Ones, D. S. (2002). Examining the construct of organizational justice: A meta-analytic evaluation of relations with work attitudes and behaviours. *Journal of Business Ethics*, 38(3), 193-203.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making* (Vol. 110). University of Pittsburgh Press.
- Waldman, D. A., Balthazard, P. A., & Peterson, S. J. (2011). Leadership and neuroscience: can we revolutionize the way that inspirational leaders are identified and developed? *The Academy of Management Perspectives*, 25(1), 60-74.
- Wallbott, H. G., & Scherer, K. R. (1989). Assessing emotion by questionnaire. In R. Plutchik, & H. Kellerman (Eds.), *Emotion: theory, research, and experience: the measurement of emotions*, vol. 4. San Diego: Academic Press.
- Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behaviour. *Academy of Management Journal*, 48, 420-432
- Wanous, J. P., & Reichers, A. E. (1997). Overall Job Satisfaction: How Good Are Single-Item Measures?. *Journal of Applied Psychology*, 82(2), 247-252.
- Wat, D., & Shaffer, M. A. van (2005). Equity and relationship quality influences on organizational citizenship behaviours: The mediating role of trust in the supervisor and empowerment. *Personnel Review*, 34, 406-422.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, 96(3), 465-490.

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219–235.
- Wayne, S. J., Liden, R. C., Kraimer, M. L., & Graf, I. K. (1999). The role of human capital, motivation and supervisor sponsorship in predicting career success. *Journal of Organizational Behaviour*, 20, 577-595.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82–111.
- Webb, T. L., & Sheeran, P. (2005). Integrating concepts from goal theories to understand the achievement of personal goals. *European Journal of Social Psychology*, 35, 69-96.
- Weick, K. E., K. M. Sutcliffe, D. Obstfeld. (1999). Organizing for high reliability: Processes of collective mindfulness. R. I. Sutton, B. M. Staw, eds. *Research in Organizational Behavior*. JAI Press, Stamford, CT, 81–123
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12(2), 173-194.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory. *Research in Organizational Behaviour*, 18, 1-74.
- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis: University of Minnesota
- Weiss, H. M., Nicholas, J. P., & Daus, C. S. (1999). An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organizational Behaviour and Human Decision Processes*, 78, 1–24.
- Whitman, D. S., Van Rooy, D. L., & Viswesvaran, C. (2010). Satisfaction, Citizenship Behaviours, And Performance In Work Units: A Meta-Analysis Of Collective Construct Relations. *Personnel Psychology*, 63(1), 41-81.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviours. *Journal of Management*, 17, 601-617.

- Willson, A. E., Shuey, K. M., Elder, G. H., & Wickrama, K. A. S. 2006. Ambivalence in mother-adult child relations: A dyadic analysis. *Social Psychology Quarterly*, 69, 235-252.
- Wilson, T. D., & Hodges, S. D. (1992). Attitudes as temporary constructions. In L. L. Martin, & A. Tesser (Eds.), *The construction of social judgements* (pp. 37–65). Hillsdale, NJ: Erlbaum.
- Wilson, T. D., Hodges, S. D., & Pollack, S. E. (1991). *Effects of explaining attitudes on survey responses*. Unpublished Manuscript, University of Virginia, Charlottesville.
- Wood, W. (1982). Retrieval of attitude-relevant information from memory: Effects on susceptibility to persuasion and on intrinsic motivation. *Journal of Personality and Social Psychology*, 42, 798-810.
- Wood, J. V. (1989). Theory and Research Concerning Social Comparisons of Personal Attributes. *Psychological Bulletin*, 106(2), 231-248.
- Wood W, Rhodes N, Biek M. (1995). Working knowledge and attitude strength: an information processing analysis. In *Attitude Strength: Antecedents and Consequences*, ed. R Petty, J Krosnick, pp. 283–313. Hillsdale, NJ: Erlbaum.
- Wright, T. A., Cropanzano, R., & Meyer, D. G. (2004). State and trait correlates of job performance: A tale of two perspectives. *Journal of Business and Psychology*, 18, 365-383.
- Wu, C, & Shaffer, D. R. (1987). Susceptibility to persuasive appeals as a function of source credibility and prior experience with the attitude object. *Journal of Personality and Social Psychology*, 52, 677-688.
- Yammarino, F.J., Dionne, S.D., Chun, J.U., & Dansereau, F. (2005). Leadership and levels of analysis: A state-of-the-science review. *Leadership Quarterly*, 16, 879-919.
- Yeow, J., & Martin, R. (2013). The role of self-regulation in developing leaders: A longitudinal field experiment. *Leadership Quarterly*, 24, 625-637.
- Yukl, G., & Van Fleet, D. D. (1992). Theory and research on leadership in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, vol 3: 147-197. Palo Alto, CA: Consulting Psychologists Press.
- Weiss, D. J, Dawis, R. V, England, G. W, Lofquist, L. H (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis: University of Minnesota, Industrial Relations Center.
- Yuki, G. (1981). *Leadership in organisations*. Engelwood Cliffs, NJ: Prentice Hall.
- Yukl, G. (2006). *Leadership in organizations*, 6th ed. Upper Saddle River, NJ: Prentice Hall.

- Zanna, M. P., & Rempel, J. K. (June 1984). Attitudes: A new look at an old concept. Paper presented at the Conference on the Social Psychology of Knowledge, Tel Aviv, Israel.
- Zanna, M. P., & Rempel, J. K. (1988). Attitudes: A new look at an old concept. In Bartal, D. & Kruglanski, A. W. (Eds.), *The social psychology of knowledge* (pp. 315–334). Cambridge, UK: Cambridge University Press.
- Zhang, Z., Ilies, R., & Arvey, R. D. (2009). Beyond genetic explanations for leadership: The moderating role of the social environment. *Organizational Behaviour and Human Decision Processes*, 110(2), 118-128.
- Zhang, F., & Labouvie-Vief, G. (2004). Stability and fluctuation in adult attachment style over a 6-year period. *Attachment & Human Development*, 6, 419-437.
- Ziegler, R., Schlett, C., Casel, K., & Diehl, M. (2012). The role of job satisfaction, job ambivalence, and emotions at work in predicting organizational citizenship behaviour. *Journal of Personnel Psychology*, 11, 176 - 190.
- Zuwerink, J., & Devine, P. (1996). Attitude importance and resistance to persuasion: It's not just the thought that counts. *Journal of Personality and Social Psychology*, 70, 931-944.

## APPENDICES

### Appendix 1 – Member Questionnaire – Study 1

This is the first of two surveys you will receive during the Business Game module. The survey should take approximately 15 minutes to complete.

It is important you complete all surveys during the course of the year so that we can provide meaningful group feedback which can be used for your individual assignment.

If you agree to participate in this research please proceed to the next page.

1. What is your role in the team: \_\_\_\_\_

2. Please tick your gender: Male  Female

3. How often did your team meet in the last 2 weeks? \_\_\_\_\_

4. Do you think your Managing Director is the real Managing Director in your team?  Yes  No

5. If not, who is/are the real Managing Director(s) in your team? Please select his/her functional role:

- Finance Director                       Marketing Director                       HR Director
- Operations Director                       Other (please state) \_\_\_\_\_

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel I know where I stand with my Managing Director (MD)...I know how satisfied my MD is with me.	1	2	3	4	5
I feel that my MD understands my problems and needs.	1	2	3	4	5
My MD recognises my potential	1	2	3	4	5
Regardless of how much formal authority he/she has built in his/her position, my MD 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 MD has, he/she would "bail me out," at his/her expense.	1	2	3	4	5
I have enough confidence in my MD 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 MD as very good	1	2	3	4	5
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I have conflicting thoughts; Sometimes I think that my working relationship with my MD is very good, while at other times I don't	1	2	3	4	5
I have conflicting thoughts; Sometimes I think I know where I stand with my MD, while at other times I don't	1	2	3	4	5
I have conflicting thoughts; Sometimes I think my MD understands my problems and needs, while at other times I don't	1	2	3	4	5
I have conflicting thoughts; Sometimes I think my MD recognises my potential, while at other times I don't	1	2	3	4	5

I have conflicting thoughts; Sometimes I think my MD would use his/her power to help to solve problems in my work, while at other times I don't	1	2	3	4	5
I have conflicting thoughts; Sometimes I think my MD would "bail me out," at his/her expense, while at other times I don't	1	2	3	4	5
I have conflicting thoughts; Sometimes I think that I would defend and justify my MD's decision if he/she were not present to do so, while at other times I don't	1	2	3	4	5
It is important to me that my working relationship with my MD is very good	1	2	3	4	5
It is important to me that I know where I stand with my MD	1	2	3	4	5
It is important to me that my MD understands my problems and needs	1	2	3	4	5
	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
It is important to me that my MD recognises my potential	1	2	3	4	5
It is important to me that my MD would use his/her power to help to solve problems in my work	1	2	3	4	5
It is important to me that my MD would "bail me out," at his/her expense	1	2	3	4	5
It is important to me that have enough confidence in my MD that I would defend and justify his/her decision if he/she were not present to do so	1	2	3	4	5
	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
I feel a personal obligation to do whatever I can to help the MD achieve his/her goals within the business game.	1	2	3	4	5
I owe it to the MD to give 100% of my energy to the MD 's goals during the business game	1	2	3	4	5
I have an obligation to the MD to ensure that I produce high-quality work.	1	2	3	4	5
I would feel an obligation to take time from my personal schedule to help the MD if he/she needed my help.	1	2	3	4	5
I would feel guilty if I did not meet the MD's performance standards.	1	2	3	4	5
I feel that the only obligation I have to the MD is to fulfil the minimum requirements of the business game	1	2	3	4	5
In all, I am satisfied with my MD	1	2	3	4	5
I am satisfied that the methods used by my MD are the right ones to ensure that we do well in the Business Game	1	2	3	4	5

The following scale consists of a number of words that describe different feelings and emotions that you may have felt when interacting with your MD during your time on the business game. Read each item and then write the appropriate answer in the space next to that word.

1	2	3	4	5
Very Slightly or Not at All	A little	Moderately	Quite a Bit	Extremely
Enthusiastic _____		Inspired _____		Proud _____
Determined _____		Alert _____		Cheerful _____
Afraid _____		Irritable _____		Sad _____
Interested _____		Distressed _____		Calm _____
Nervous _____		Jittery _____		Upset _____
Happy _____		Scared _____		Worried _____
Confident _____		Timid _____		

## Appendix 2 – Leader Questionnaire – Study 1

This is the first of two surveys you will receive during the Business Game module. The survey should take approximately 15 minutes to complete.

It is important you complete all surveys during the course of the year so that we can provide meaningful group feedback which can be used for your individual assignment.

Use of this feedback can be exchanged for an engagement point.

If you agree to participate in this research please proceed to the next page.

1. What is your role in the team: \_\_\_\_\_
2. How often did your team meet in the last 2 weeks? \_\_\_\_\_
3. Please tick your gender: Male  Female
4. Do you think your Managing Director is the **real leader** in your team?  Yes  No
5. If not, who is/are the real leader(s) in your team? Please select his/her functional role:
  - Finance Director  Marketing Director  HR Director
  - Operations Director  Other (please state) \_\_\_\_\_

*In this section we would like you to rate every person in your team. Please put the initial of the person who occupies the role in the boxes underneath the roles listed below.*

**For example.... If a member of your group is called John Smith and he is the Finance director you would put**

**JS in the finance director (FD) box below.**

\_\_\_\_\_

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

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:	MD	MktD	OD	HRD	FD	Other
This team member's performance is very high						

This team member is very effective						
This team member performs very well						
This team member's overall effectiveness is excellent						
This team member helps other group members who have been absent						
This team member helps other group members who have heavy work loads						
This team member assists me with my duties as MD even when not asked to do so						
This team member takes to time to listen to other group members' problems and worries						
This team member goes out of his/her way to help other members of the group						
This team member takes a personal interest in other group members						
This team member's attendance at business game meetings, tutorials, practical's (etc) is above the norm						
This team member gives advanced notice when he/she can't attend a business game meeting, tutorial or practical						
This team member takes undeserved breaks during business game meetings, practical's or tutorials						
This team member spends a great deal of time on personal phone conversations when he/she should be spending time on the business game.						
<b>Person to be rated:</b>	<b>MD</b>	<b>MktD</b>	<b>OD</b>	<b>HRD</b>	<b>FD</b>	<b>Other</b>
This team member complains about insignificant things during the business game.						
This team member adheres to the groups rules						
There is a match between this team member's words and actions.						
This team member delivers on promises.						
This team member practices what he/she preaches.						
This team member does what he/she says he/she will do.						
This team member conducts himself/herself by the same values he/she talks about.						
When this team member promises something, I can be certain that it will happen.						

If this team member says he/she is going to do something, he/she will						
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### Appendix 3 – Member Questionnaire – Study 2



# Aston Business School

#### 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?

Participants (on average) have taken approximately 10 minutes to complete this questionnaire.

### 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. In any reports of the findings the individual responses or identity of the participants will not be identifiable and the reports will simply summarise key trends in the data, thus protecting *your anonymity and confidentiality*. We do this because we want you to be completely honest in your answers and so we can get an accurate picture of employee's attitudes towards their work.

If you require any further information please do not hesitate to contact Allan Lee (lead researcher at Aston Business School), on LEEAJR@ASTON.AC.UK

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/team leader?	_____ Years	_____ Months
Do you work full time or part time?	Full Time <input type="checkbox"/>	Part Time <input type="checkbox"/>
Which department do you work in?	_____	

The following questions relate to your perceptions of the working relationship that you have with your current team leader.

Please circle the relevant answer which best describes how you feel.

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

I have conflicting thoughts; Sometimes I think my Team leader recognises my potential, while at other times I don't	1	2	3	4	5
---	---	---	---	---	---

I have conflicting thoughts; Sometimes I think that my team leader would "bail me out" at his/her expense, while at other times I don't	1	2	3	4	5
---	---	---	---	---	---

I have conflicting thoughts; Sometimes I think that I would defend and justify my Team leader's decisions if he/she were not present to do so, while at other times I don't	1	2	3	4	5
---	---	---	---	---	---

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
It is important to me that my Team leader would use his/her power to help to solve problems in my work	1	2	3	4	5

It is important to me that I have enough confidence in my Team leader that I would defend and justify his/her decision if he/she were not present to do so	1	2	3	4	5
--	---	---	---	---	---

It is important to me that my working relationship with my Team leader is very good	1	2	3	4	5
---	---	---	---	---	---

It is important to me that I know where I stand with my Team leader	1	2	3	4	5
---	---	---	---	---	---

It is important to me that my Team leader recognises my potential	1	2	3	4	5
---	---	---	---	---	---

It is important to me that my Team leader understands my problems and needs	1	2	3	4	5
---	---	---	---	---	---

It is important to me that my Team leader would "bail me out," at his/her expense	1	2	3	4	5
---	---	---	---	---	---

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel a personal obligation to do whatever I can to help my team leader achieve his/her goals within the workplace	1	2	3	4	5

I owe it to my team leader to give 100% of my energy to the Team leader's goals at work	1	2	3	4	5
---	---	---	---	---	---

I have an obligation to the team leader to ensure that I produce high-quality work	1	2	3	4	5
--	---	---	---	---	---

I would feel an obligation to take time from my personal schedule to help my team leader if he/she needed my help	1	2	3	4	5
I would feel guilty if I did not meet my team leader's performance standards	1	2	3	4	5
I feel that the only obligation I have to my team leader is to fulfil the minimum requirements of my job	1	2	3	4	5

#### Appendix 4 – Leader Questionnaire – Study 2



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?**

Participants (on average) have taken approximately 10 minutes to complete this questionnaire.

**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. In any reports of the findings the individual responses or identity of the participants will not be identifiable and the reports will simply summarise key trends in the data, thus protecting *your anonymity and confidentiality*. We do this because we want you to be completely honest in your answers and so we can get an accurate picture of employee’s attitudes towards their work.

If you require any further information please do not hesitate to contact Allan Lee (lead researcher at Aston Business School), on LEEAJR@ASTON.AC.UK

**Ratings of team member performance and discretionary effort**

1. Please provide the full names of all the team members who you are responsible for supervising.

For example: 1 - Joe Bloggs

2 – Jane Bloggs

1.	2.
3.	4.
5.	6.
7.	8.
9.	10.

The questions on the next page require you to rate the team member s you supervise on a number of performance related items.

Please rate EACH of the team member s you listed above on EACH of the questions below in the boxes provided.

Each box has a number from 1-10 assigned to it. Please rate each team member based on the number you assigned them above. So for example in box number 1 please rate the team member you listed as number 1 above (e.g. Joe Bloggs).

Please answer the question by putting a number between 1 and 5 in the box. This number should be based on the following scale:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither Agree nor Disagree
- 4 = Agree
- 5 = Strongly Agree

So in the example below, you would strongly agree with the statement regarding Joe Bloggs, but strongly disagree with the statement with regards to Jane Bloggs.

**EXAMPLE:**

	1	2	3	4	5	6	7	8	9	10
This team member adequately completes assigned duties	5	1								

	1	2	3	4	5	6	7	8	9	10
This team member adequately completes assigned duties										
This team member fulfils responsibilities specified in job description										
This team member performs tasks that are expected of him/her										

This team member meets formal performance requirements of the job										
This team member helps others who have been absent										
This team member helps others who have heavy work loads										
This team member assists you with your work (when not asked)										
This team member takes time to listen to co-workers' problems and worries										
This team member goes out of way to help new team members										
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
This team member takes a personal interest in other team members										
This team member passes along information to co-workers										
This team member 's attendance at work is above the norm										
This team member gives advance notice when unable to come to work										
This team member takes undeserved work breaks										
This team member spends a great deal of time with personal phone conversations										
This team member complains about insignificant things at work										
This team member conserves and protects company property										
This team member adheres to informal rules devised to maintain order										

