Leaders’ and Followers’ Information-Processing Styles, Constructive Thinking and their Relationship to Implicit Followership and Leadership Theories and Leader-Member Exchange

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This thesis is presented in fulfilment of the requirements for the degree of Doctor of Philosophy - Psychology

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2016
I declare that this thesis is my own account of my research and contains, as its main
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Matthew Walford
Abstract

Leadership theory and research has traditionally focused on leaders at the expense of followers. However, followers are highly active in the leadership process. Adopting a relationship based conceptualisation of leadership, four studies are presented that assess elements of a holistic leadership model incorporating Cognitive-Experiential Self Theory (CEST), Implicit Leadership Theory, Implicit Followership Theory, and Leader-Member Exchange (LMX). Using data from 352 followers, study one found that followers develop implicit ideal leadership theories (IILTs) that are congruent with their information processing style and constructive thinking as defined in CEST. Using data from 133 leaders, study two found that leaders develop implicit ideal followership theories (IIFTs) that are congruent with their information processing style and constructive thinking. Studies three and four are multi-level research designs, which assess whether leaders’ and followers’ information processing style and constructive thinking relate to followers’ and leaders’ LMX respectively. They also assess whether leaders’ IIFTs and followers’ IILTs moderate these relationships. Based on data from 106 followers and 26 direct-line managers, study three found that leaders’ information processing style and constructive thinking predict followers’ LMX ratings and that these relationships are moderated by followers’ IILTs. Using data from 77 followers and 18 direct-line managers, study four demonstrates that followers’ information processing style and constructive thinking relates to leaders’ LMX ratings. However, the evidence that these relationships are moderated by leaders’ IIFTs is not as strong as study three. This is likely due to a low sample size. Generally, the proposed model is supported. The findings have important implications for leadership theory and practice.
including training/development, employee selection and team composition decisions. These are discussed in the relevant sections of the dissertation.
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CHAPTER 1

Introduction and Thesis Overview

Leadership is a feature inherent in all facets of society including businesses, politics and sports teams (Brown, 1991; van Vugt, Hogan, & Kaiser, 2008) and has important consequences for individuals, teams, organisations, countries, economies, and the world community (Dionne, Yammarino, Atwater, & Spangler, 2004; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Ikenberry, 1996; Lowe, Kroeck, & Sivasubramaniam, 1996). For example, leadership can affect an individual’s satisfaction, an organisation’s financial performance, or even if a country goes to war. Leadership, however, has traditionally been confused with the leader themselves rather than as a process which is co-created by both leaders and followers through their relationship (Lord & Brown, 2001; Shamir, 2007). Accordingly, the traditional focus of leadership research has been on the leader while the follower is seen a passive receptacle to the effects of the “heroic” leader (Goffee & Jones, 2001; Lord & Maher, 1993). Followers, however, are not passive individuals (Lord & Brown, 2001; Oc & Bashshur, 2013). Like the leader, they play active roles in team, group and organisational successes and failures (Bennis, 2008; Chaleff, 1995; 2008; 2009; Kelley, 1988; 2008). Consequently, there have been calls for research to take a more holistic or integrated approach to understanding leadership that incorporates both the leader and the follower (e.g. Shamir, 2007; Uhl-Bien, Riggio, Lowe, & Carsten, 2014).

By adopting an integrated/holistic model of leadership, which draws and expands upon existing relational perspectives of leadership, it was recognised that two research gaps in the leadership/followership literature could be addressed
concurrently. The first gap addressed was the lack of theory and research on the antecedents of leaders and followers’ implicit leadership and followership theories. These essentially are the beliefs held in regards to leaders and followers respectively, such as what they look, sound, and act like (see Lord & Maher, 1990; 1993; Sy, 2010). Second, this research sought to address the relative lack of research on the antecedents of leaders and followers’ working relationship perceptions (Mahsud, Yukl, & Prussia, 2010) as conceptualised in leader-member exchange theory (Dansereau, Graen, & Haga, 1975; Graen, Dansereau, Minami, & Cashman, 1973; Graen & Uhl-Bien, 1995; Hollander, 1971; 1992; Shamir, 2007). Specifically, do leaders and followers’ cognitive preferences or tendencies in the form of information processing styles and constructive thinking relate to their dyadic partners perceptions of the leader-follower relationship.

Practically, taking a holistic outlook could provide new ways to understand and approach organisational leadership and its development, in addition to informing team composition and employee selection/recruitment. In particular, leadership development programs could benefit by recognising and incorporating the active role of the follower. Specifically, the predominant approach in most current mainstream leadership programs is to focus on the leader with the goal of increasing their knowledge, skills and abilities (Day, 2001; Velsor & McCauley, 2010). Such programs have traditionally been marketed as leadership development programs but could be more accurately considered as leader development programs (Day, 2001). Consequently, mainstream leadership development approaches tend to fail to capture the followers’ active and dynamic impact on the leadership process. A holistic approach though, which incorporates the personal preferences and beliefs of the individuals involved (i.e. the leader and follower), could provide new insights and
avenues to improving leadership outcomes. For example, instead of seeking to mould a leader to a particular model like current mainstream approaches tend to do, a holistic approach would look to develop both the leader and follower to be more aware of each other’s tendencies and beliefs and how these influence the leadership process. By consequence, this approach would not only seek to improve leaders’ knowledge, skills and abilities but also followers with the goal to bring about more effective leadership and followership.

Positioning the Research’s Theoretical Approach

Conceptualisations that focus on the leader-follower relationship appear best aligned addressing the research requirement to take a more holistic or integrated approach to leadership. This is because leadership is typically defined in this sub-area of leadership research as a dynamic process, which is mutually influenced by both leaders and followers (e.g. see Dansereau et al., 1975; Graen et al., 1973; Graen & Uhl-Bien, 1995; Hollander, 1971; 1992; Shamir, 2007). In particular, leader-member exchange (Dansereau et al., 1975; Graen et al., 1973; Graen & Uhl-Bien, 1995) is a social exchange perspective of leadership as it assumes a give-and-take of valued emotional and tangible resources between a leader and follower (Blau, 1964; Graen & Scandura, 1987; Liden, Sparrowe, & Wayne, 1997; Sparrowe & Liden, 1997). Importantly, it explicitly recognises that followers are a heterogeneous group who can perceive, interpret and react in very different ways to the same things and that leaders can act in different ways with each follower (Dansereau et al., 1975; Graen et al., 1973; Northouse, 2007). This understanding appears to be well suited to conceptualising followers as active in the leadership process (see Shamir, 2007).
Consequently, the view of leadership throughout this dissertation is relationship based.

There are, however, issues with some elements of LMX theory and how it is typically operationalised in research. Specifically, we cannot assume that both leaders and followers will perceive the nature of the relationship in the same way as research demonstrates low correlations between leader and follower ratings of the relationship (see Gerstner & Day, 1997; Sin, Nahrgang, & Morgeson, 2009; van Gils, van Quaquebeke, & van Knippenberg, 2010). Yet, research has typically only measured the relationship from the perspective of the follower on the assumption that it will be experienced by the leader in a similar way (Wilson, Sin, & Conlon, 2010; van Gils et al., 2010). Consequently, we need to reconceptualise this assumption of LMX to better understand what may be contributing to these differences in ratings. The internal worlds of leaders and followers were theorised to be important for this.

Like their respective roles in the observable world, leaders and followers have just as active and dynamic internal worlds (e.g. see Oglensky, 1995; Stech, 2007). These internal worlds exist within all humans and influence our perceptions, evaluations, feelings and behaviours (Epstein, 1994; 1998; 2003; 2014; Norris & Epstein, 2011; Pacini & Epstein, 1999a; 1999b). Indeed, psychodynamic theories of leadership (e.g. see Bornstein, 2003; Stech, 2007) and followership (e.g. see Oglensky, 1995; Zaleznik, 1965) are focused on understanding the consistent patterns in the way leaders and followers think, feel and act towards the world and others and how these patterns impact on relationships at work (Kets de Vries, 2004; Kroeger, Thuesen, & Rutledge, 2002; Shamir, 1991; Stech, 2007). There is,
therefore, precedence to believe that the internal world of leaders and followers will influence the nature of the leader-follower relationship.

The ideas within the psychodynamic literature (e.g. see Bornstein, 2003; Oglensky, 1995; Stech, 2007) appear to be quite useful for understanding leader-follower relationship dynamics (Stech, 2007). However, they are limited in terms of their scientific defensibility (Epstein, 2003) and their useability when engaging in leadership training and development (Stech, 2007). Consequently, there existed a need in the development of the current research to identify a model that would conceptualise the internal worlds of leaders and followers in a more scientifically defensible way while still being compatible with the ideas in the psychodynamic literature. Dual processing theories seemed to provide an avenue for this.

**Conceptualising the Internal World of Leaders and Followers: Dual-Processing Models**

There has been a long recognition in psychology of a “duality” in the ways human process information (Moskowitz, Skurnik, & Galinsky, 1999). Indeed William James over 120 years ago was amongst the first to propose that humans’ process information via two different systems, which he called *associative thought* and *true reasoning* (Sloman, 1996). Since this time, there have been a significant number of dual-system and dual-processing models described in the literature (e.g. Epstein, 1994; 2003; Kahneman & Frederick 2002; Sloman, 1996; Smith & DeCoster, 2000; Strack & Deutsch 2004). Earlier models tended to be used to explain a variety of processes including persuasion (e.g. see elaboration likelihood model; Petty & Cacioppo, 1986), social cognition, judgement and behaviour (e.g. see
Bargh, 2006; Epstein, 1994; Strack & Deutsch, 2004), attitude-behaviour relations (e.g. Fazio, 1990) and stereotyping/prejudice (e.g. Devine, 1989).

Each of these models generally propose that cognitive processes have two major information processing systems, each of which have different capacities and ways of processing information (Evans, 2008; Evans & Over, 1996; Gawronski & Creighton, 2013; Kahneman, 2011; Kahneman & Frederick, 2002). The first system is typically seen as having a high capacity and processes information implicitly or automatically at the unconscious level. In contrast, the second system is lower in its capacity and is engaged in more explicit or controlled processes. These systems have been labelled differently (e.g. Epstein, 2003; Nisbett, Peng, Choi, & Norenzayan, 2001; Schneider & Schiffrin, 1977). For example, Hammond (1996) labels these two system as Intuitive and Analytic whilst Strack and Deutsch (2004) refer to them as Impulsive and Reflective. Kahneman (2011) refers to them simply as System 1 and System 2.

Detailed reviews and critiques of specific dual-processing and dual-systems models have been presented elsewhere (e.g. see Chaiken & Trope 1999; Frankish & Evans, 2009; Gawronski & Creighton, 2013; Smith & DeCoster, 2000). Consequently, a more general review of the key dual-processing theories is presented here, which focuses on the generalised dual-processing theories as opposed to the more formalised dual-processing theories (see Gawronski & Creighton, 2013 for more detail about this distinction). Given the complex nature of leader-follower relationships, generalised models seemed more relevant as they explain a large variety of phenomenon (Gawronski & Creighton, 2013). Dual-process models reviewed include Smith and DeCoster’s (2000) Associative vs. Rule based processing, Kahneman’s (2003) System 1 and System 2 processing, Strack and
Deutsch’s (2004) reflective and impulsive model, and Epstein’s (Epstein, 1987; 1994; 2003) Cognitive-Experiential Self-Theory. An in-depth focus though is provided on the latter as it was ultimately integrated into the four studies presented in this dissertation due to its fundamental and explicit links with psychodynamic theories, its integration with affect (of which is a key area of study within the leadership literature), and the availability of reliable and valid measurement tools specifically aligned with the CEST theory (see Epstein, 2001; Norris & Epstein, 2011).

Smith and DeCoster’s (2000) Associative vs. Rule Based Processing

Combining elements of Sloman’s (1996) associative vs. rule based processing with theory on fast vs. slow learning memory systems (see McClelland, McNaughton, & O’Reilly, 1995), Smith and DeCoster (2000) developed a dual-process model to explain how people make judgments and decisions. They argued that humans’ have two distinct processing modes: associative processing, which is aligned with the properties of a slow-learning memory system; and rule-based processing, which is aligned with a fast-learning memory system.

According to Smith and DeCoster (2000) associative processing consists of a pattern-completion or similarity-based retrieval mechanism. Specifically, prevalent cues from a current object or event are drawn upon to retrieve representations from memory that contained similar cues. These representations in memory exist through simple associations, which have been slowly learned over time via multiple experiences (Gawronski & Creighton, 2013). Such processing is automatic and outside of conscious awareness (Smith & DeCoster, 2000). Through this processing,
stored information from previous experiences can be used to fill in missing information regarding the current object or event both quickly and automatically.

Rule-based processing, in contrast, uses “symbolically represented and intentionally accessed knowledge as rules to guide processing” (Smith & DeCoster, 2000, p.111). These rules are quickly learnt, requiring only one or a few experiences. Unlike associative processing, which occurs in parallel, rule-based processing is sequential as only one rule can be applied to processing at a time. As a consequence, rule-based processing is effortful and will be undertaken only where capacity and motivation exist (Smith & DeCoster, 2000). However, individuals will be conscious of the processes and outcomes via rule-based processing. A summary of the theoretical properties of these two modes of processing are shown in Table 1.1.

<table>
<thead>
<tr>
<th><strong>Associative Processing</strong></th>
<th><strong>Rule-Based Processing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Draws on associations</td>
<td>Draws on symbolically represented rules</td>
</tr>
<tr>
<td>Associations are based upon similarity and contiguity</td>
<td>Rules are based upon language and logic</td>
</tr>
<tr>
<td>Associations take a long-time to develop and requires significant amounts of experience</td>
<td>Symbolic knowledge is quickly learned, requiring only a single or few experiences</td>
</tr>
<tr>
<td>Processing occurs automatically</td>
<td>Processing are controlled, if both capacity and motivation are present.</td>
</tr>
<tr>
<td>Preconscious; aware only of outcome of processing</td>
<td>Processing is slow and sequential</td>
</tr>
<tr>
<td></td>
<td>Conscious; aware of steps of processing as well at its outcomes</td>
</tr>
</tbody>
</table>

Adapted from Smith and DeCoster (2000)

**Kahneman’s (2003) System 1 and System 2 processing**

In an attempt to integrate earlier findings around heuristics and bias, Kahneman (2003) conceptualised two systems labelled System 1 and System 2 in recognition of their neutrality (see Stanovich & West, 2000). System 1 is “fast, automatic, effortless, associative, and often emotionally charged” (Kahneman, 2003, p.1451). However, information in this system is slow to change. In contrast, System 2 is significantly slower, controlled, effortful rule-governed, but flexible and quick to
change. Kahneman (2003) distinguishes a perceptual system as well, which shares similar processes to that of System 1. Where it differs though is in terms of content that is processed; specifically that System 1 and 2 are “not restricted to the processing of current stimulation” (Kahneman, 2002, p.450-451). Within Kahneman’s (2002; 2003) model, intuitive impressions of objects are the output of System 1. In contrast, explicit and intentional judgments are the product of System 2. An important consequence of this distinction is that System 2 monitors all judgments, even if they are the result of the impressions and processes occurring in System 1. Consequently, System 2 has important implications for mental responses (e.g. allowing System 1 response to occur; moderating the system 1 response; correcting the System 1 response; or negating the response (Gawronski & Creighton, 2013). Accessibility (which incorporates stimulus salience, selective attention, and cognitive priming) of mental content is important for the response generation of System 1, whereas in contrast, system 2 applies logical rules to guide itself to an outcome (Higgins, 1996; Kahneman, 2002). What is most accessible at any one moment is determined primarily by the properties of the objective currently being attended to.

**Strack and Deutsch’s (2004) Reflective-Impulsive Model (RIM)**

Stack and Deutsch (2004) proposed the Reflective-Impulsive Model (RIM) of social behaviour. In this model, social behaviour is assumed to be jointly influenced by two systems referred to as the Reflective System (RS) and the Impulsive System (IS). Both systems operate simultaneously and interact with each other, although the IS assumes the primary role due to the RS being limited in
capacity (Gawronski & Creighton, 2013). The IS system is seen as a simple, associative learning system, which contains all ones implicit knowledge (Stack & Deutsch, 2004). Links between knowledge, or elements, in the IS system are formed and activated according to similarity and contiguity principles in addition to one motivations (Gawronski & Creighton, 2013). Behavioural outcomes in this system are due to a process of spreading activation (via either input from the environment or through rumination) of elements via their linkages (Stack & Deutsch, 2004). In contrast, the relationships between the elements in the RS differ. Specifically, the IS connects elements via propositional representations, through the use of truth of false flags (Gawronski & Creighton, 2013; Stack & Deutsch, 2004). This facilitates thinking about future possibilities and comprehends when something is not the case, both of which are something that IS system cannot undertake (Gawronski & Creighton, 2013; Stack & Deutsch, 2004). Behaviour in the RS is a consequence of the values and probabilities associated with various outcomes (Stack & Deutsch,2004). These outcomes are evaluated and a decision for behavioural action is made.

RIM states that behaviour is influenced by both the RS and IS via a common pathway whereby behavioural schemata are activated (Stack & Deutsch, 2004). These are activated via either a direct process (i.e. spreading activation through the IS system) or by an indirect process (i.e. via behavioural intentions through the RS). However, given these divergent pathways, it is possible that the behavioural schemata that are activated will not be compatible. According to RIM, it is the strongest activated scheme that will be activated. In this regards, RIM is a parallel-competitive dual-processing model (see Evans 2007; 2008).
**Epstein’s Cognitive Experiential Self-theory**

Similar to the other dual-processing models described above, CEST proposes that humans process information through two independent information-processing systems: 1) a conscious *rational* system; and 2) a preconscious *experiential* system (Epstein, 1994; 2003; 2014). However, where CEST differs is that the dual-processing model is placed in the wider context of a global theory of personality (Epstein, 2003; Pacini & Epstein, 1999a). Consequently, the nature of dual processing is not seen in isolation from other individual factors and a more holistic understanding of individuals can be provided. In addition, compared to other dual processing theories, it has been explicitly influenced by psychodynamic concepts, but with the goal of overcoming their scientific indefensibility (Epstein, 1994; Frankish & Evans, 2009). Indeed, Frankish and Evans (2009) referred to this integration of the Freudian ideas with the cognitive unconscious “a landmark development” (p.19).

As a result of this integration, emotions also are explicitly recognised as vital in human processing, a feature that is not typical in other dual processing theories (Evans, 2008). Emotions have been increasingly recognised as important in the workplace (e.g. Bono, Foldes, Vinson, & Muros, 2007; Brief & Weiss, 2002). Consequently, their explicit recognition in CEST would mean that, as a theory, it would be aligned with this emerging direction in the leadership field. Finally, from an operationalisation perspective, a number of reliable and valid measurement tools aligned with the CEST theory have been developed (see Epstein, 2001; Norris & Epstein, 2011). Given these fundamental strengths, it appeared that CEST may be well suited as a theoretical framework for understanding the internal worlds of leaders and followers for the current research.
**The Rational System.** According to CEST, each the rational and experiential systems operate by a set of different rules. The rational system is analytical, logical, deliberate, process oriented, is slow to process, but updates quickly when new information is made available, encodes in abstract symbols, words, and numbers, and demands high levels of cognitive resources (Epstein, 2003). Unlike the experiential system, the rational system operates mostly as the conscious level (Epstein, Pacini, Denes-Raj, & Heier, 1996). However, as the processing in the rational system is effortful and demands high levels of cognitive resources, it is not well suited for processing large amounts of information in an effective manner (Sadler-Smith & Shefy, 2004). Indeed, Epstein (2003) states, “Even mundane activities such as crossing the street would be excessively burdensome if you had to rely exclusively on conscious reasoning” (p. 161). In such activities or situations, humans mostly rely on the experiential system.

**The Experiential System.** The experiential system is holistic, rapid, outcome oriented, automatic, changes slowly despite evidence to the contrary, encodes in concrete images, metaphors and narratives, and demands little in terms of cognitive resources (Epstein, 2003; Epstein, et al., 1996). It learns from experience, especially those that are emotionally arousing, as opposed to the rational system, which learns by logical inference (Epstein, 2003; Epstein, et al., 1996). Importantly, unlike the rational system, the experiential system is closely linked with affect. Affect drives the learning and schema development in the experiential system and is what underpins an individual’s subsequent motivations and behaviours (e.g. to maximise pleasure and avoid or minimise pain; Epstein, 2003). As noted above, the
experiential system though is a preconscious system as this processing mostly occurs outside of an individual’s awareness (Epstein et al., 1996).

The Interactive Nature of the Rational and Experiential Systems. While the rational and experiential systems are considered to be independent, they operate in parallel and interact with each other (Epstein, 1998; 2014; Epstein et al., 1996). It is the amalgamation of the processes between the two systems that influences an individual’s behaviour. However, CEST goes further to argue that most human behaviour is influenced by the experiential system (Epstein, 1994; 2003). Certainly, the experiential system, unlike other theories of the unconscious, is seen as a largely adaptive system rather than a source only for non-adaptive schemas (Epstein, 2003). Specifically, CEST stipulates that the experiential system automatically encodes experiences, organises them, and directs behaviour, all of which occurs continuously outside of the individual’s awareness (Epstein, 1998; 2003). Most individuals would be aware of their own rational system as it operates at the conscious level. However, due to the predominately-unconscious nature of the experiential system, many individuals are unaware of its influence on cognitive processing and behaviours. Indeed, CEST assumes that the experiential system will come to influence the processing that subsequently occurs at the conscious level (Epstein, 1998). Therefore, the rational system can operate without knowing the influence of the experiential system on its processing. Recognising that most of our behaviours are influenced by the experiential system, therefore, places the cognitive unconscious at an important level of helping to understand human behaviour (Epstein, 1994) including the interactions that occur between leaders and followers.
**Basic Needs and Beliefs of the Experiential System.** Learning over time influences the general properties of schemas within the experiential system (Epstein, 1994; 1998; 2003). The experiences throughout life, especially those that occur in early childhood, serve to lay down core beliefs about the self, the world and one’s place within it. Specifically, all individuals will automatically construct an overall implicit theory of reality that includes a self-theory, a world-theory and connecting propositions (Epstein, 1994; 2003). This implicit theory of reality results in a vast conceptual structure of interrelated schemas with general, abstract schemas at the broadest level that then funnels down to situation specific schemas at the other end (Epstein, 2003).

At the top of this hierarchy, humans hold four basic beliefs: 1) the world as benign vs. malevolent; 2) the world as meaningful vs. non-meaningful; 3) people as helpful and trustworthy vs. dangerous and untrustworthy; and 4) the self as worthy vs. unworthy. Individuals will vary on these beliefs due to differences in life experiences and thus influence how they tend to respond to and act in the world. These basic beliefs correspond to four basic needs as shown in Table 1.2 (Epstein, 2003). These needs are similar to other personality theories (e.g. psychodynamic, object-relations, phenomenological perspectives, and self-enhancement) but in the context of CEST, each of these needs is equally important (Epstein, 1994; 2003).

<table>
<thead>
<tr>
<th>Basic Need</th>
<th>Associated Basic Belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximise pleasure, minimise pain</td>
<td>Benign vs. malevolent world</td>
</tr>
<tr>
<td>Stability</td>
<td>World as meaningful vs. non-meaningful</td>
</tr>
<tr>
<td>Relatedness</td>
<td>People as helpful &amp; trustworthy vs.</td>
</tr>
<tr>
<td></td>
<td>dangerous and untrustworthy</td>
</tr>
<tr>
<td>Self-enhancement</td>
<td>Self as worthy vs. unworthy.</td>
</tr>
</tbody>
</table>
As the basic beliefs are atop of an individual’s implicit theory of reality, it results in them being very stable and difficult to invalidate (Epstein, 1998). Any changes at this level would cause immense repercussions throughout an individual’s implicit theory of reality. In contrast, specific situational schemas are easier to change due to highly specific content. Changes at this level, therefore, do not invalidate other parts of the system. Such schemas come to influence how we attend, interpret, and interact with the world – “the schemas in the experiential system are the ‘scaffolding’ of a person’s personality” (Epstein, 2001, p.1). Therefore, they serve to influence the ways in which all individuals attend to the world and assimilate information in a given moment. This, therefore, would include those occurring in both leaders and followers during their interactions.

**Rational vs. Experiential Information Processing Styles.** The degree to which either the rational or the experiential system is deployed depends on situational demands, emotional involvement, and experience (Epstein, 2003; Epstein et al., 1996). For current purposes, the more important aspect to recognise is that individuals vary in the degree to which they use either the rational or the experiential processing system (i.e. they have different preferences; Epstein 2003; Norris & Epstein, 2011). These differences influence an individual’s perceptions, judgements and subsequent decisions (Epstein et al., 1996). This would include those occurring for both leaders and followers. Measures focused on differences in intuition have typically captured at least part of individual differences in the processing occurring in the experiential system. However, emotionality and imagination are also part of experiential processing (Norris & Epstein, 2011). Individuals who are high in emotionality favour the use of their emotions and experience them with greater
frequency and intensity. Individuals who possess high imagination scores are appreciative of, and engage in, imagination, aesthetic productions, and imagery. Each component of information processing has advantages and disadvantages associated with it (Epstein, 2003) as demonstrated by links with a range of theoretically relevant variables (e.g. see Epstein et al., 1996; Norris & Epstein, 2011; Pacini & Epstein, 1999a). These are discussed in more detail in the pertinent sections of this dissertation. For current purposes, it is important to recognise that these differences are theorised to influence how leaders and followers process information.

Constructive Thinking. CEST also contends that the rational and experiential systems have different natures of intelligence that correspond to the processing rules of each (Epstein, 1992; 2001; 2003; 2014). The nature of intelligence in the rational system is logical and analytical and can be assessed by current intelligence measures (e.g. Wechsler Adult Intelligence Scale; Wechsler, 2008). The intelligence of the experiential system though is focused on the adaptiveness of individual’s spontaneous thoughts referred to as constructive thinking (Epstein, 1994; 2001). Specifically, constructive thinking refers to the degree to which a person’s automatic thinking facilitates solving problems in everyday life at a minimum cost in stress (Epstein, 1998; 2001). As operationalized in the Constructive Thinking Inventory (CTI; Epstein, 2001), the constructive components of the experiential system include global constructive thinking, emotional coping, and behavioural coping. The destructive components are personal superstitious thinking, categorical thinking, esoteric thinking, and naïve-optimism (Epstein, 2001). With the exception of personal superstitious thinking, each of these
components is derived from other sub-scales. These are listed along with their definitions in Table 1.3.

There is a chain of events underpinning constructive thinking as shown in Figure 1.1 (see Epstein, 1998). As can be observed, an initial interpretation of an event or situation occurs which subsequently influences the individual’s initial emotional reaction. These initial interpretations and emotions cognitively frame and influence secondary interpretations and emotional reactions to the event. The final step in this are the resulting behaviours aligned to these preceding thoughts and emotions. Importantly, this chain of events and the resultant behaviours can be either destructive or constructive in terms of its pathway and all individuals have tendencies to adopt one of these (Epstein, 1994; 1998). For example, the tendency to perceive problems as challenges to be overcome rather than as threats and/or to view issues positively, but not to an unrealistic degree, could be considered as moving along the constructive pathway (Epstein, 2001). This chain occurs across all events, including those involving followers’ interactions with leaders.

A variety of relationships between the different constructive thinking factors and a variety of outcome variables exist including positive relationships to success in work, love, social relationships, and negative relationships to emotional and physical
<table>
<thead>
<tr>
<th>Constructive Thinking Inventory Scales and Sub-Scales</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Constructive Thinking</strong></td>
<td>Overall composite score of other main scales except Esoteric Thinking. Good constructive thinkers tend to score high on the emotional and behavioural main scales and low on the other scales. It is assumed that higher scores indicate flexible thinkers who can adjust their behaviour appropriately depending on the situation.</td>
</tr>
<tr>
<td><strong>Emotional Coping</strong></td>
<td>Degree to which an individual’s automatic thoughts allow them to deal with frustration, failure and disappointment without undue distress.</td>
</tr>
<tr>
<td><strong>Self-Acceptance</strong></td>
<td>Degree to which an individual has positive self-esteem and an overall favourable attitude to oneself.</td>
</tr>
<tr>
<td><strong>Absence of Negative Overgeneralisation</strong></td>
<td>Degree to which an individual avoids overgeneralizing unfavourable experiences.</td>
</tr>
<tr>
<td><strong>Non-sensitivity</strong></td>
<td>Degree to which an individual is able to tolerate disappointment, rejection, criticism and disapproval; the degree to which they are thick-skinned.</td>
</tr>
<tr>
<td><strong>Absence of Dwelling</strong></td>
<td>Degree to which an individual does not obsess over negative events.</td>
</tr>
<tr>
<td><strong>Behavioural Coping</strong></td>
<td>Degree to which an individual thinks in terms of engaging in effective action.</td>
</tr>
<tr>
<td><strong>Positive Thinking</strong></td>
<td>Degree to which an individual sees ‘the silver lining’ in things; the degree to which they see the positive in events.</td>
</tr>
<tr>
<td><strong>Action Orientation</strong></td>
<td>Degree to which an individual thinks in terms of ways to facilitate effective action.</td>
</tr>
<tr>
<td><strong>Conscientiousness</strong></td>
<td>Degree to which an individual thinks in terms of hard work, planning, and doing one’s best.</td>
</tr>
<tr>
<td>Constructive Thinking Inventory Scales and Sub-Scales</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Personal Superstitious Thinking</td>
<td>Degree to which an individual has developed private superstitions. For example, if something good occurs, something bad will also occur to balance it out.</td>
</tr>
<tr>
<td>Categorical Thinking</td>
<td>Degree to which an individual sees the world in categorical terms; that the world is black and white without any grey. Degree also to which an individual does not trust and is intolerant of non-similar others.</td>
</tr>
<tr>
<td>Polarised Thinking</td>
<td>Degree to which an individual will make extreme judgements, ignoring the middle ground.</td>
</tr>
<tr>
<td>Distrust of Others</td>
<td>Degree to which an individual regards others as untrustworthy and a potential threat.</td>
</tr>
<tr>
<td>Intolerance</td>
<td>Degree to which an individual is intolerant, judgmental, and unforgiving.</td>
</tr>
<tr>
<td>Esoteric Thinking</td>
<td>Degree to which an individual holds beliefs in the unusual and scientifically questionable phenomena e.g. conventional superstitions, ghosts, and astrology.</td>
</tr>
<tr>
<td>Belief in the Unusual</td>
<td>Degree to which an individual holds beliefs in the usual e.g. ghosts, mind reading, and clairvoyance.</td>
</tr>
<tr>
<td>Formal Superstitious Thinking</td>
<td>Degree to which an individual holds beliefs in conventional superstitions e.g. astrology and good/bad omens.</td>
</tr>
<tr>
<td>Naïve-Optimism</td>
<td>Degree to which an individual thinks in simplistic, stereotyped ways and are unrealistically optimistic.</td>
</tr>
<tr>
<td>Over-Optimism</td>
<td>Degree to which an individual thinks in naively positive ways and overgeneralize following favourable outcomes.</td>
</tr>
<tr>
<td>Stereotypical Thinking</td>
<td>Degree to which an individual thinks in stereotyped ways e.g. everyone should love their parents.</td>
</tr>
<tr>
<td>Pollyanna-ish Thinking</td>
<td>Degree to which an individual thinks in simplistically favourable ways e.g. everyone is basically good at heart.</td>
</tr>
</tbody>
</table>
wellbeing, self-discipline problems, alcohol and drug problems (Epstein, 1992; 2001; Epstein & Katz, 1992; Epstein & Meier, 1989). Importantly, constructive thinking is also associated with a variety of leadership and workplace outcomes. For example, emotional and behaviour coping are positively related to self-reported ratings of transformational leadership (Cerni, Curtis, & Colmar, 2008). High constructive thinking in nurses has been found to be related to lower occupational stress and higher job satisfaction and performance (Judge & Bono, 2001; Stacciarini & Tróccoli, 2004). Green (as cited in Epstein, 2001) also found that good constructive thinkers demonstrate less job-related stress and greater happiness.

Figure 1.1. Destructive and Constructive Pathways of Automatic Thinking (adapted from Epstein, 1998).
despite voluntarily taking on more workloads. Furthermore, Nadeau (as cited in Epstein, 2001) found that behavioural coping was related to supervisory ratings of work quantity while emotional coping was negatively associated with absenteeism and externally produced stress impacts on work performance.

It is clear from the above that information processing style and constructive thinking have significant influences on individuals’ behaviours across a wide range of contexts and situations. Consequently, the stability of these personality constructs should have a strong influence on the general behaviours that are manifested in leader-follower relationships by both leaders and followers. This served as part of the rationale for looking at how these elements may influence each other’s perspective of the relationship on the assumption that these would affect a wide range of leader and follower behaviours which would be observed and evaluated by their dyadic partner (i.e. follower and leader respectively).

**Implicit Leadership and Followership Theories**

However, while leaders and followers may vary in their behaviours, which the current study assumes to be heavily influenced by differences in their information processing style and constructive thinking, theory and research suggests that individuals will not interpret these behaviours in the same way (e.g. Eden & Leviathan, 1975; 2005; Epitropaki & Martin, 2004; 2005; Lord, Foti, & de Vader, 1984: Lord & Maher, 1990; 1993; Lord, de Vader, & Alliger, 1986; Phillips & Lord, 1982; Poole, Gioia & Gray, 1989; Sy, 2010). Therefore, we need to understand what may be contributing to these differences in interpretation. Implicit leadership and followership theories appeared to offer an avenue for this. According to implicit leadership and followership theories, individuals hold idiosyncratic beliefs about the
nature of leaders and followers (i.e. what they look like, sound like, and how they should behave; see Lord & Maher, 1990; 1993; Eden & Leviathan, 1975; 2005; Sy, 2010). These beliefs serve to guide the observers’ interpretations of leader and follower actions, what a perceiver attends to, what they encode, and the information they retrieve when recalling leader or follower related information (Eden & Leviathan, 1975; 2005; Lord & Alliger, 1985; Lord & Emrich, 2001; Lord & Maher, 1990; 1993; Sy, 2010).

Implicit leadership and followership theory are based on role theory (Lord & Maher, 1990; 1993; Sy, 2010) which takes the perspective that the actions of individuals in most social activities are born from the knowledge of socially defined categories held by all to some degree (Ritzer, 2000). When a person holds a role status in a given context (such as a mother, a police officer, a leader or follower), it serves as a script to guide their behaviour. Such deployment of social categories in everyday functioning facilitates predictability in the social world (Ritzer, 2000; Weick, 1995). Leaders and followers, therefore, should draw upon their beliefs about how the dyadic partner should act in their interactions which then should influence how leaders and followers perceive the nature of the relationship (e.g. see van Gils et al., 2010). Consequently, implicit leadership and followership theories were seen as potential reasons that underpin differences in leaders’ and followers’ perceptions of their relationships.

There is, though, limited research on what predicts differences in these beliefs (c.f. Keller, 1999; Kruse & Sy, 2011; Schyns & Meindl, 2005). There is, however, a reason to suspect that information processing and constructive thinking should influence leaders and followers preferences for different traits and behaviours in followers and leaders respectively. Specifically, connectionist models emphasise
that basic knowledge is stored in nodes each, of which, are connected to other nodes (Hanges, Lord, & Dickson, 2000; Lord & Brown, 2001). Input from the environment or other nodes activates or inhibits other nodes based on the weighting and type of connections (i.e. inhibitory or activation). It is the pattern of node activation that represents complex knowledge. This description is somewhat similar to the description of the self-concept in the experiential system in that the latter also suggests that the self-concept is seen as a vast conceptual structure of interrelated schemas with general, abstract schemas at the broadest level which then funnels down to situation specific schemas at the other end (see Epstein, 2003). Given that constructive thinking and information processing influence cognitive-emotional processing, it is then theoretically possible that these personality factors will be related to leaders’ and followers’ preferences for particular traits and behaviours in both followers and leaders respectively. This reasoning served as the basis to consider the potential links between leaders’ and followers’ information processing style and constructive thinking and their implicit leadership and followership theories.

**Integrating Leadership and Followership Theories**

The preceding review strongly suggested a potential for integrating CEST (Epstein, 2003; 2014), implicit leadership (Eden & Leviathan, 1975; 2005 Lord & Maher, 1993) and followership theories (Sy, 2010) into a cohesive theoretical framework. By assimilating these theories into such a framework, the research is, therefore, addressing the call for a more holistic approach to understanding leadership (e.g. Shamir, 2007) and that leadership outcomes are the result of leaders and followers enacting their roles through their working relationship (see Lord &
Brown, 2001). Specifically, the four research studies presented in this dissertation
drew upon CEST (Epstein, 2003; 2014): (1) to help explain followers’ and leaders’
variations in their implicit leadership and followership theories respectively; and (2)
to help understand how implicit theories and CEST can be integrated together to help
explain the leaders’ and followers’ perceptions of their relationship (see Gerstner &
Day, 1997; Sin et al., 2009).

**Organisation of This Dissertation**

To help achieve these two goals, a literature review was undertaken which
resulted in the identification of several gaps (which have been briefly outlined in this
introductory chapter) and current directions in the leadership field (see Chapter 2).
An integrated research model was developed based on this review (see Chapter 2
also). This model was subsequently tested through four separate, but inter-related,
pieces of research (Chapters 3 to 6). This model integrated CEST (Epstein, 2003;
2014); implicit leadership and followership theories (Eden & Leviathan, 1975; 2005;
Lord & Maher, 1990; 1993; Sy, 2010) with Leader-Member Exchange (Dansereau et
al., 1975; Graen & Uhl-Bien, 1995; Northouse, 2007) to: a) to help explain followers
and leaders variations in their implicit leadership and followership theories
respectively (studies 1 and 2 respectively); and b) to help understand how followers’
imPLICIT leadership theories and leaders’ implicit followership theories can be
integrated with information processing style and constructive thinking to help
explain the leader’s and follower’s perceptions of their relationship (studies 3 and 4).
CHAPTER 2

Literature Review and Research Model

In the previous chapter, an overview of cognitive experiential self-theory (CEST) was presented (Epstein, 2003). A rationale was also presented for considering the leader-follower relationship as the core focus for studying leadership and that the nature of leader-follower relationships can be considered partly as a product of the interacting patterns of thinking in both leaders and followers. However, as leaders and followers are in fact social roles we must likewise consider how these elements play out in the relationship. The current chapter reviews leadership and followership definitions, theories and respective research that are relevant to this rationale.

Several key issues were observed in this literature review. First, it cannot be assumed leaders and followers experience their relationship similarly. Second, there is limited research on the antecedents of implicit leadership and followership theories despite the fact that these influence how individuals process information about leaders and followers. Finally, more research is required to better understand the antecedents of followers’ and leaders’ perceptions of the quality of their working relationship (Mahsud, Yukl, & Prussia, 2010). It is argued though that these issues can be overcome by integrating CEST, implicit leadership and followership theories, and leader-member exchange (Dansereau et al., 1975; Graen & Uhl-Bien, 1995) into an overarching general model to better understand leader and follower perceptions of their relationship. Such integration aligns with more recent conceptualisations of leadership that recognise that its outcomes are the result of the leader-follower relationship which is jointly influenced by leader and follower beliefs and behaviours (Lord & Brown, 2001). To this end, the chapter concludes with the
presentation of a research model that will guide the studies presented in chapters 3, 4, 5 and 6.

**Leadership Definitions**

Over 40 years ago Stogdill (1974) noted, “there are almost as many definitions of leadership as there are persons who have attempted to define the concept” (p. 259). This lack of a clear definition is perhaps the core reason why understanding the nature of leadership remains elusive. However, three general types of definitions in the leadership area have emerged: 1) leader-centric; 2) follower-centric; and 3) relational definitions. Leader-centric definitions typically define leadership as where the leader influences a follower to achieve some desired outcome (Northouse, 2007; Uhl-Bien et al., 2014; Yukl, 1998). For example, Katz and Kahn (1978) see the leadership process as going beyond simple positive and negative reinforcement to encompass an “influence increment” (p. 528). Alternatively, Northouse (2007) and Bass (1985) state that it is what the leader does to influence their followers to focus their attention on the achievement of some goal or end state. Adopting a leader-centric definition implies that leadership is something that the leader does to the follower to bring about desired attitudes and behaviours in them. Consequently, leaders are the causal agents of organisational performance (Lord & Maher, 1993) while followers are relegated to the role of “an empty vessel waiting to be led, or even transformed, by the leader” (Goffee & Jones, 2001, p. 148). In other words, followers are the recipients, or at best, moderators, of the leaders’ influence (Shamir, 2007).
In recognition that leader-centric definitions miss the active role of the follower (Chaleff, 2008; Kelley, 2008) another type of leadership definition which has been adopted is the process of being perceived by others as a leader (e.g. Lord et al., 1984; Lord & Maher, 1990; 1993). This moves the focus to the perceivers of leaders. In particular, the emphasis is on the cognitive processes occurring when thinking and interacting with the leader and how this influences the leadership process (Eden & Leviatan, 1975; 2005; Lord & Brown, 2001).

Leadership has also been defined as occurring in the social and relational interactions between people (Fairhurst & Uhl-Bien, 2012; Graen & Uhl-Bien, 1991; 1995; Hollander, 1971; 1992; 2012; Lord & Brown, 2001; Uhl-Bien & Graen, 1993). Research in this tradition explicitly understands leadership as a multi-faceted and dynamic process which relies not just on the influence of the leader on the follower, but also the follower’s influence on the leader (Baker, Anthony, & Stites-Doe, 2015; Lord & Brown, 2001; Oc & Bashshur, 2013). Definitions in this field, therefore, tend to emphasise the active role that followers play in the leadership process and that leadership itself is inherent to the social exchanges occurring between leaders and followers.

The different definitions influence the types and focus of research undertaken (Uhl-Bien et al., 2014). For example, the leader-centric definition lends itself more to research questions focused on leaders’ behaviours and characteristics and how these influence some desired outcome (see Gibb, 1947; Jenkins, 1947; Stogdill, 1948). The relationship based definition, though, lends itself to questions targeted towards how relationships develop, are maintained and how these relationships affect desired outcomes (e.g. see Graen & Uhl-Bien, 1991; 1995; Hollander, 1971; 1992; Uhl-Bien
& Graen, 1993). The following leadership theory classification system is generally aligned with these definitions.

**Leadership Theory Classification**

Traditionally, leadership theories have been classified according to how various leader characteristics (e.g. traits, behaviours, or styles) make them effective or ineffective across different situations. However, Graen and Uhl-Bien (1995) argue it is more beneficial to classify leadership theories into three general domains: (1) those focused on the leader; (2) those focused on the follower; and (3) those focused on the relationship. Such a classification system helps to focus attention beyond the traditional leader-centric theories to the other important leadership domains and how they may work together. Bringing attention to these other domains is important for current purposes, as a key aim of the author was to understand how different theories across these domains may be integrated. However as will be observed, such a classification also fails to recognise the followership process. This can be understood as the opposite side of the coin to leadership.

**Leader-Centric Theories of Leadership**

This section reviews theories falling under the leader-centric domain of leadership. As will be observed, followers at best are seen as moderators to the effectiveness of the leader in these theories.

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1 In general, the presentation of the theories reflects the historical timeline of their appearance in the scientific literature with earlier theories presented first.

2 For simplicity, the classification system does not cover other domains such as the group, team, and organisation and readers are directed to other sources for reviews of these types of leadership (e.g. Northouse, 2007; Zaccaro, Rittman, & Marks, 2001).
**Trait and “Great Man” theories.** Trait theories of leadership argue that effective leaders possess, or have inherited, specific core traits, or an integrated pattern of traits, which distinguish them from others and which are applicable to effective leadership across all contexts (Northouse, 2007; Segal, 1985; Stogdill, 1948; Zaccaro, Kemp, & Bader, 2004). Early studies sought to identify these distinguishing features. Characteristics which were observed to predict effective leaders included physicality (height, weight, appearance), speech fluency, intelligence, higher levels of task/area knowledge, need for achievement and power, emotional control, confidence, initiative, masculinity, dominance, extroversion, confidence and social skills (see reviews by Gibb, 1947; Jenkins, 1947, Mann, 1959; Stogdill, 1948).

Despite a wide range of traits identified, reviews of this research body concluded there was a lack of evidence to support the idea that leader traits alone could adequately explain (in)effective leadership (see Jenkins, 1947; Mann, 1959; Stogdill, 1948). For example, Mann (1959) concluded that traits identified as the most consistent predictors of effective leadership (intelligence, dominance, personality adjustment) had weak relationships at best (Kenny & Zaccaro, 1983). Similarly, Jenkins (1947) concluded that no single trait, or group of traits, had been identified as consistently distinguishing a leader from a non-leader. Based on these reviews, Stogdill (1948) and Mann (1959) stated that the traits and competencies of an effective leader depend, to a large extent, on situational demands. They also identified that a key weakness of the trait approach was that it ignored the interactions between leaders and followers (Stogdill, 1974). Most important though was that the trait approach failed to distinguish between the leader as a person and leadership as a process (Calder, 1977). The result of these reviews was a departure...
from a strict trait-based approach to looking at how situational and contextual factors could influence leadership (see Leadership Style Theories) (Bass, 1990; Kenny & Zaccaro, 1983; Mitchell, 1982; Yukl, 1998; Zaccaro, 2007).

During the 1980s though, arguments emerged that the departure from traits was premature and that they are indeed important in leadership (Kenny & Zaccaro, 1983; Zaccaro, 2007). One reason is that, until recently, there was a lack of a coherent personality framework (e.g. Big-Five Model of Personality\(^1\); see Goldberg, 1990), which may have contributed to the high variability observed in the early trait research (Barrick & Mount, 1991; Judge, Bono, Illies, & Gerhardt, 2002). Another reason for looking at leader traits is that they are important for leadership when taken from the perspective of the follower (Lord et al., 1986). This reason is particularly relevant for current purposes as it actively recognises followers in the leadership process. More detail on the importance of leader traits, when considered from the perspective of the follower, is presented later (see Implicit Leadership Theories sub-title).

**Leadership style theories.** During the 1950s and 1960s, the trend in leadership research moved away from the traits of leaders to their behaviours (Derue, Nahrgang, Wellman, & Humphrey, 2011). The focus was to identify how leaders behave and compare these to leadership outcomes (Yukl, 1998). The underlying assumption was that a universal set of behaviours could explain effective leadership across all situations and contexts (Fleishman, 1957; Northouse, 2007).

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\(^1\) One of the potential issues with the five-factor model of personality is that it may be covering the more conscious elements of personality rather than the unconscious elements (Epstein, 2003). It therefore does not cover important personality characteristics pertaining to the experiential system.
Researchers at Ohio State University and Michigan University were among the first to study leadership in this way (Fleishman, 1953; Fleishman & Peters, 1962; Halpin & Winer, 1957; Hemphill & Coons, 1957). At Ohio State University, researchers found that leaders’ behaviours could be best classified on two independent factors: consideration and initiating structure (Fleishman & Peters, 1962). The former is defined in terms of a leader’s orientation toward a group’s welfare such as addressing their feelings, showing appreciation, and being friendly and approachable. The latter dimension is defined in terms of the extent to which they delineate group roles, activities, set goals, and schedule work (Fleishman, 1957; Fleishman & Peters, 1962; House, 1971; Judge, Piccolo, & Ilies, 2004; Tracy, 1987).

Two similar factors - employee orientation and production orientation - were also observed by researchers at Michigan University (Kahn, 1956; Katz & Kahn, 1990). Employee orientation aligns with consideration while production orientation with initiating structure. Unlike consideration and initiating structure, though, employee orientation and production orientation were considered polar opposites (Northouse, 2007). However, after further research, they were later re-conceptualised as independent.

Research has, in general, found relationships between the two core leadership dimensions identified in the Ohio State University and Michigan University studies and various effectiveness criteria (Korman, 1966). Initiating structure has demonstrated positive relationships with various group cohesiveness variables (e.g. Christner & Hemphill, 1955), group performance (e.g. Filley & House, 1969) and satisfaction with leaders (e.g. Parker, 1963). Consideration has demonstrated negative associations with grievances and employee turnover (Fleishman & Harris, 1962) and a positive relationship with individual satisfaction (Badin, 1974).
However, inconsistencies and contradictions with these relationships within and across studies exist (Fleishman, Harris, & Burtt, 1955; House, 1971; House, Filley, & Kerr, 1971; Larson, Hunt, & Osborn, 1974; Yukl, 1998). For example, Filley and House (1969) found that low and unskilled workers tended to be less satisfied with supervisors who were high on initiating structure behaviours. In more skilled workforces, though, initiating structure has been positively associated with satisfaction (House, 1971; House et al., 1971). Results similar to these led Korman (1966) to question whether these leadership dimensions “have any predictive significance at all” (p. 360). This conclusion echoed by Yukl (1998), also argued that the only reliable finding was that leaders who are high on consideration tended to have more satisfied followers.

**Leader-Context Match Theories.**

Recognising that the trait and behavioural factors were too simplistic in explaining the complex phenomenon of leadership, research began to look at the match between a leaders’ style and the context\(^1\) in which they are leading (Seyranian, 2009). Consequently, these theories are referred to here as leader-context match theories. Four theories are reviewed here: 1) situational leadership theory (Blanchard, 1985; Hersey & Blanchard, 1969); 2) path-goal theory (House, 1971; 1996; House & Mitchell, 1975); 3) Fiedler’s contingency theory of leadership effectiveness (Fiedler, 1964; 1967) and; 4) cognitive resource theory of leadership (Fiedler, 1986; Fiedler & Chemers, 1984).

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\(^1\) The term *context* is used here in to refer to both the organisational context and the follower.
Situational leadership theory. Situational leadership theory places the emphasis on the need for a leader to adapt their style to the developmental level of the follower (Blanchard, 1985; Blanchard, Zigarmi, & Zigarmi, 1985; Hersey & Blanchard, 1969; 1977; Northouse, 2007). Corresponding to the traditional behavioural leadership categories of initiating structure and consideration, they argue that leaders need to adapt their use of directive (or task behaviours) and supportive (or relationship) behaviours based upon followers’ maturity levels (Graeff, 1983; Northouse, 2007). Leaders can be high or low in these dimensions resulting in four different leadership styles: directing style (high directive, low supportive); coaching style (high directive, high supportive); supporting style (low directive, high supportive); and delegating style (low directive, low supportive).

The choice of which style to deploy requires the leader to assess their followers’ maturity level on two dimensions: psychological maturity and job maturity. The former refers to the followers’ commitment, motivation and willingness to accept responsibility while the latter refers to their experience, knowledge and understanding of the task (Chemers, 1997). Followers can be high or low on both dimensions resulting in four developmental categories in which they can be placed: 1) willing and capable (high psychological and job maturity); 2) unwilling but capable (low psychological maturity but high job maturity); 3) willing but not capable (high psychological maturity but low job maturity) and; 4) unwilling and not capable (low psychological and job maturity; Hersey & Blanchard, 1977). Based on the developmental level of the follower, the model then prescribes a particular leadership style for that type of follower. However, while this has intuitive appeal, research generally fails to support the premise that such matching is required or
appropriate except for new employees for whom a directive style is found to increase satisfaction (Fernandez & Vecchio, 1997; Vecchio, 1987).

**Path-goal theory of leadership.** Path-goal theory provides a model for understanding the processes by which leaders motivate changes in followers’ psychological states to achieve some specified goal (Chemers, 1997; House, 1971; 1996; House & Mitchell, 1975). It was one of the first leadership theories to explicitly emphasise leader-follower interactions (Chemers, 1997). Path-goal theory states that followers assess the intrinsic and extrinsic value of achieving some specified work goal in addition to the probability that current behaviours will result in the achievement of this outcome (House, 1971). It is assumed that followers are more motivated when there are higher perceived intrinsic and extrinsic values attached to, and higher levels of expectancy in achieving that goal. Consequently, effective leadership requires the leader to positively influence the followers’ perceived value attached to the outcomes and the probability of achieving them. This includes increasing the payoff to achieving a work goal, communicating clearly the pathway to the goal, and removing any obstacles to achieving it (House & Dessler, 1974).

Path-goal theory also describes what leadership style a leader should adopt based on the needs of the follower and the situational demands (Northouse, 2007). It specifies four leadership styles (1) directive; (2) achievement-oriented; (3) participative; and (4) supportive (House, 1971; 1996; Martin, 2009). The choice of leadership style depends upon a wide range of environmental (e.g. task structure, authority system, work-group) and follower factors (e.g. personality and ability;
House, 1971; House & Mitchell, 1975). The number of possible contingency factors, therefore, facilitates extensive potential predictions for which style to choose.

While much research on path-goal theory of leadership has focused on environmental factors (e.g. see Dessler & Valenzi, 1977; Downey, Sheridan, & Slocum, 1975; 1976; Keller, 1989; Schriesheim & Schriesheim, 1980), in particular the degree of ambiguity in followers’ jobs (e.g. Downey et al., 1975; Schriesheim & DeNisi, 1981), there has been relative neglect on the impact of follower characteristics (Chemers, 1997). However, follower characteristics and needs influence how they react to the different leadership styles. For example, followers with high growth needs reported less positive experiences when the leader engaged in structuring and directive behaviours even when the work-task was unstructured (Griffin, 1980; 1981). In contrast, followers low in growth needs remained stable across all conditions. It seems logical to conclude that any theoretical formulation of leadership, therefore, needs to account for the needs and personalities of followers to fully understand the impact of leader behaviours (see also Chemers, 1997).

**Fiedler’s contingency theory of leadership effectiveness.** The contingency theory of leadership effectiveness (Fiedler, 1964; 1967) argues that leadership success is dependent on the interaction between the leader’s behavioural style (i.e. relationship or task style) and the characteristics of the work environment (Fiedler & Chemers, 1984; Peters, Hartke, & Pohlmann, 1985). It is assumed that certain leader styles, which are relatively fixed and dependent on leaders’ personality, are favoured to suit particular situational demands (Peters et al., 1985).
Situations are defined in terms of three key factors: (1) leader-member relations; (2) task-structure; and (3) position power (Northouse, 2007). Leader-member relationship refers to the nature (positive vs. negative) of the leader-follower relationship. Task structure (structured vs. unstructured) refers to the degree to which the task is clearly stated and understood by those involved. Position power refers to the strength or power (strong vs. weak) a leader has through their position to punish (e.g. dismiss) or reward (e.g. bonuses, promotion) their direct reports. The combination of these factors results in eight different situational types, known as octants 1-8 (Northouse, 2007; Seyranian, 2009). These situations are further classified as favourable, intermediate, or unfavourable. Each situation is assumed to be best suited to leaders with a particular leadership style. For example, a relationship focused leader would be most effective in situations where there are good leader-member relations, but there is low task structure and they hold weak positional power. Consequently, there are leadership styles that are mismatched to the situation (Fiedler & Chemers, 1984).

The propositions of the contingency theory of leadership effectiveness have been generally supported (see meta-analysis by Peters et al., 1985). However, there have been criticisms of its theory and methodology. At a theory level, there exists an inability to explain the underlying processes that facilitate the prediction of performance (Chemers, 1997; Fiedler & Garcia, 1987). Theoretically and methodologically, there are also problems using only the leader when assessing the quality of the leader-follower relationships. As Hollander (1971) notes, “interpersonal processes involve reciprocity of perception, not just the leader’s own perceptions [and requires]… awareness of the interplay of situational factors in a system of relationships including personality, structural, and tasks variables” (p.2).
In support, meta-analytical research demonstrates that leaders and followers do not usually see the same relationship in the same way (Gerstner & Day, 1997; Sin et al., 2009). Consequently, using a singular perspective to assess the quality of the leader-follower relationship does not appear suitable.

**Cognitive resource theory.** In reaction to the inability to explain the underlying processes underpinning performance, Fiedler proposed cognitive resource theory (Fiedler, 1986; Fiedler & Chemers, 1984; Fiedler & Garcia, 1987). Cognitive resources theory integrates the propositions of contingency theory with leaders’ cognitive resources to predict performance. Cognitive resources are the “intellectual abilities, technical competence, and job-relevant knowledge obtained by formal training or experience in the organization” (Fiedler & Garcia, 1987, p.2) and are assumed to be the major contributor to the plans, decisions and strategies of group action (Fiedler & Chemers, 1984; Fiedler & Garcia, 1987). These cognitive resources are particularly important when tasks are complex and require the application of logic and analytical analysis. However, stress and anxiety can undermine a leader’s ability to concentrate and think effectively (Fiedler & Chemers, 1984; Fiedler & Garcia, 1987). Consequently, decisions about effective courses of action can be undermined. Indeed, under certain conditions, intelligence has even been negatively related to performance (see Fiedler, 1986). Leaders’ experience and intelligence though can mitigate the effects of some of this stress on their decisions and actions (Fiedler, 1986; Fiedler & Garcia, 1987). Specifically, under highly stressful situations, a leader’s experience should result in better decisions as they are able to call upon previous experiences of similar situations and learnt techniques to appropriately guide them. For less experienced leaders, though, this lack of
experiential knowledge may result in poorer decisions and outcomes. In general, though, leader abilities will only support performance when followers are motivated and supportive of the leader (Fiedler, 1986).

The propositions of cognitive resource theory have been generally supported by research demonstrating positive relationships between leader intelligence and experience with performance under conditions of low and high stress respectively (e.g. Fiedler, 1986; Fiedler & Leister, 1977; Fiedler, Potter, Zais, & Knowlton, 1978; 1979; Potter & Fiedler, 1981). A meta-analysis by Judge, Colbert, and Ilies (2004) further reinforces these findings. Specifically, under conditions of low stress, leader intelligence shows a positive relationship with leadership. Under conditions of high stress though, this relationship disappears. While the key aspect of cognitive resource theory is the focus on the cognitive elements and experience of the leader though, it did not explicitly recognise humans as having two independent cognitive systems as described in CEST (Epstein, 1998; Cerni, Curtis, & Colmar, 2010). Furthermore, stress and anxiety (i.e. emotions) are seen as the outcome of unconscious information processing within CEST (Epstein, 1998; 2003). By looking purely at emotions rather than the underlying cognitions contributing to them, therefore, misses an important element in human cognition.

New Leadership Theories

A core issue with the leadership theories presented thus far is that none explicitly recognise the emotional and visionary aspects of leadership influence (Yukl, 1998). Instead, each is focused more on the transactional aspects of managing others (Chemers, 1997). In contrast, new leadership theories can be seen as an
attempt to incorporate the affective reactions of the follower to the leader as they articulate an inspiring vision (Uhl-Bien et al., 2014). Chemers (1997) states this in a different way when he says “many of the components of transformational leadership are present in other approaches… What is unique… is the extent to which a transcendent vision is the source of motivation for followers” (p.92-93). Most new leadership theories are typically described in similar ways (Chemers, 1997; Northouse, 2007). Thus, for current purposes, only two key new leadership theories are reviewed and briefly critiqued here: charismatic leadership (Conger & Kanungo, 1987; House, 1977) and transformational leadership (Avolio, 1999; Bass, 1985; Bass & Avolio, 1990).

Charismatic leadership. House (1977) initially put forward the theory of charismatic leadership. He argued that the effects of a charismatic leader can be identified through followers’ extraordinary levels of commitment, identification, and emulation towards, and with, the leader (Chemers, 1997). House (1977) identified three categories which encapsulated charismatic leadership: (1) personal characteristics of the leader; (2) behaviours of the leader; and (3) situational factors. Person characteristics can be understood as the traits of the leader and include extremely high levels of self-confidence, a need to dominate others, a moral conviction in the righteousness of their beliefs, and a high need to influence others. Behaviours are focused on: (1) the role modelling of their belief and values; (2) building an image which facilitates the perception of charisma in followers of competence, power, and concern; (3) stating of goals in ways which are transcendent, ideological and are of moral concern; (4) setting high expectations of followers to achieve these lofty goals; (5) show they are confident that the followers
can achieve these goals; and (6) does this in ways which bring about cognitive and emotional states in followers which are aligned to goal related behaviours. Situational factors include those contextual factors that support but are not necessarily needed, for the charismatic leadership process to occur (e.g. stressful situations which provide an opportunity for a leader to engender clear ways to think, feel and behave in the follower).

**Transformational leadership (Full-range leadership theory).**

Transformational leadership is similar in nature to charismatic leadership (Bass, 1985; Burns, 1978). Burns (1978) first described the *transforming* leadership concept in research on political leaders and defined it as a process by which leaders and followers transform each other to achieve higher levels of morale and motivation. A transforming leader does this through their personality, traits, and ability to make a significant change through example, articulation of an energising vision, and challenging goals. It is about transforming followers’ perceptions, values and expectations to achieve better goals than they could have thought initially possible. He set transforming leadership apart from transactional leadership based on the premise of transactions that occur between leader and follower in their relationship. Bass (1985) extended on Burns work to explain the underlying psychological mechanisms by which transforming and transactional leadership emerge; replacing the term transforming with transformational. In addition, whereas Burns (1978) clearly delineated between transformational and transactional leadership, Bass (1985) argued that leaders are able to exhibit both transformational and transactional leadership styles at the same time. The result was the development
of the Full-Range Leadership Theory (FRLT; Antonakis, Avolio, &

FRLT incorporates transformational, transactional, and laissez-faire
leadership categories into an overall leadership model (Bass, 1985; Bass & Avolio,
1993; Yukl, 1998). Transactional leadership refers a style of leadership which is
based on a contractually based exchange process; specifically, where the leader
specifies the requirements and rewards for completion, and monitors and controls
progression to the outcome (Antonakis et al., 2003; Bass & Avolio, 1994). Laissez-
faire leadership, at the opposite end of the spectrum, represents the active choice by a
leader to disengage from making decisions, and deploying the authority of their
position and is considered the least effective form (Antonakis et al., 2003).
Transformational leadership, in contrast, is argued to be the most effective style as it
inspires followers towards positive change through expanding their awareness of
what is possible (Antonakis et al., 2003; Avolio & Bass, 1991; Bass & Avolio,
1997).

Issues with new leadership theories. Charismatic and transformational
leadership theories have been popular in research and practice but have been
critiqued on several grounds (Northouse, 2007). In particular, while both theories
acknowledge followers in the leadership process (e.g. meeting their needs and
inspiring them to become more valuable individuals) they are still not given
prominence in the leadership process. Specifically, no explicit recognition is given to
the characteristics of the follower and the active and reciprocal role they have in the
leadership process (Yukl, 1999). Instead, the focus is still on the independent and
heroic leader who transforms the follower (Northouse, 2007). Yet research demonstrates that follower developmental characteristics (Dvir & Shamir, 2003), personality (Moss & Ngu, 2006; Shalit, Popper, & Zakay, 2010; Suls, Martin, & David, 1998), and values (Ehrhart & Klein, 2001; Shin & Zhou, 2003; Wofford, Whittington, & Goodwin, 2001) can influence the effectiveness of charismatic and transformational leadership. A related criticism is also the question of where charisma resides. Specifically, whether charisma is determined by followers (i.e. bestowed upon the leader; see Lord & Maher, 1993; Willner, 1984) or is inherent to the characteristics of a leader (see Conger & Kanugo, 1998). Given that both the leader and follower are interdependently influencing each other’s thoughts, emotions and behaviours (Hollander, 1992) it would seem likely that the attribution of charisma is dependent on both parties.

**Follower Centric Theories of Leadership**

So far, the focus has been on the leader and how they influence the follower to achieve particular outcomes. However, in the last 25 years or so, a substantial body of theory and research has emerged demonstrating that effective leadership is not only dependent on leaders’ behaviours but also how followers construct leaders (Felfe, 2005; Lord & Maher, 1993). The general lack of focus on followers prior to this recent period of time is surprising for three reasons: (1) leadership by definition implies followers; (2) followers’ are not passive, they play active roles in team, group, and organisational successes and failures (Avolio & Reichard, 2008; Baker, 2007) and; (3) followers’ make up the bulk of an organisation’s workforce and do most of the heavy lifting (Bennis, 2008). This section, therefore, reviews relevant
follower-centric theories of leadership including the attribution theory of leadership (Calder, 1977), implicit leadership theory (Eden & Leviathan, 1975; Lord & Maher, 1993), and the romance of leadership (Meindl, 1995; 1998; Meindl, Ehrlich, & Dukerick, 1985) with a particular focus on implicit leadership theory due to its core integration with the research undertaken in this dissertation.

**Attribution theory of leadership.** Calder (1977) argued that leadership is a dispositional attribute. However, it cannot be directly observed, only inferred from its observable impacts within a particular social context. Consequently, Calder argued that leadership research needed to reorientate its focus to how people socially construct leadership – “How people make inferences about and react to leadership is itself an important behaviour to explain” (Calder, 1977, p.186). At its most basic, the attribution theory of leadership (Calder, 1977) describes how people work backwards to infer leadership in a social context. This process begins with the seeking of evidence of leadership through actual, or indirect (e.g. through discussions with others of the effects of someone’s behaviours), observations of behaviour. If evidence exists to suggest leadership, then it is assessed against a leader prototype. This process can be considered a sense-making exercise as behaviours become linked to the underlying beliefs of leaders (Calder, 1977).

Points raised by Calder (1977) preceded some of the follower-centric theories described below (e.g. implicit leadership theory). However, a key distinction between Calder and these was the position that leadership itself was not important, only the perception of leadership (Chemers, 1997; Lord & Maher, 1990; 1993). Such a singular position seems unlikely. Without some objective object (in this case a
leader) by which to apply some standard (i.e. leadership prototype), a judgement as to whether something exists (i.e. leadership) cannot occur. Consequently, it is more likely that both objective and perceived leadership are contributing factors to the leadership process.

**Implicit leadership theory.** Implicit Leadership Theory (ILT) evolves from Eden and Leviatan’s (1975) initial focus on Implicit Organisational Theory and refers to an individual’s personal assumptions of the traits and abilities of leaders’ (Eden & Leviathan, 1975; 2005; Lord & Maher, 1993). They are the knowledge structures or schemas which specify and organise information around the traits and behaviours of a leader and act to help people make sense of the organisational environment specifically in relation to leaders (Poole et al., 1989; Weick, 1995). They are activated when a follower comes into contact with a known leader or a person exhibits characteristics associated with being a leader (Lord & Maher, 1993) and have important implications for group and organisational outcomes (Hansbrough, 2005; Nye, 2005). For example, leaders who match their followers’ ILTs are more likely to be given an acknowledgement for success, are perceived to be more powerful, and obtain more positive evaluations (Lord et al., 1984; Nye & Forsyth, 1991).

Leadership categorisation theory sought to explain the cognitive processes underpinning the recognition and categorisation of leaders (Lord, Foti, & Philips, 1982; Rosch, 1978). Within this theory, leader categories are hierarchically organised at three levels: (1) the superordinate level; (2) the basic level; and (3) the subordinate level. The superordinate contains the attributes common to all leaders.
(“family resemblance”) and those that distinguish them from “non-leaders” (Hoogh, Den Hartog, & Koopman, 2005; Lord et al., 1984). The basic level contains perceptual and functional attributes that are more refined to the context in which leadership is being experienced (e.g. business leaders, political leaders, military leaders, and religious leaders; Lord et al., 1984). The subordinate level contains more distinctive types of leaders that emerge at the basic level. For example, business leaders may be further distinguished by those at lower levels of the organisation to those in strategic leadership roles (Lord & Maher, 1993).

One of the weaknesses of leadership categorisation theory is the static view of leadership schemas. Specifically, it assumes that prototypes of leaders are relatively fixed (Lord, Brown, Harvey, & Hall, 2001; Lord & Emrich, 2001). However, while ILTs are generally quite stable over time (see Epitropaki & Martin, 2004), they can vary across contexts (e.g. see Epitropaki & Martin, 2005). A connectionist model of ILTs, therefore, was proposed which takes a more dynamic view of leader-prototype construction (Hanges et al., 2000; Lord et al., 2001).

Connectionist models emphasise the interconnections between units represent the basic knowledge blocks of the connectionist network and can be activated by environmental input or by other units in the network (Hanges et al., 2000). Units in this network are activated via initial environmental input. This activation then selectively spreads throughout the entire network. The spread of this activation depends on the inputs and constraints acting in a particular context and the weighting of the relationships between units. It is the pattern of this activation that represents complex knowledge (Lord & Brown, 2001). Lord and colleagues (2001) identify four different types of contextual constraints that influence units in an ILT network to become activated: (1) the organisational culture; (2) the leader; (3) the follower;
and (4) the current task. Thus, the network is regenerated during each experience of a leader, in relation to current contextual factors, and can help explain both the flexibility as well as the stability of ILTs (Lord & Brown, 2001; Hanges et al., 2000; Shondrick, Dinh, & Lord, 2010). This description of the connectionist model appears compatible with CEST descriptions of the self-concept (Epstein, 2003; see also chapter 1) suggesting a theoretical crossover between CEST and ILTs.

Early ILT research was primarily concerned with how ILTs influenced leadership measurement. When the leader category is made salient, the perceiver actively processes and manipulates information about that leader through the information and characteristics contained in their ILT (Bass & Avolio, 1989; Lord et al., 1984; Rush, Thomas, & Lord, 1977). Drawing upon adaptive resonance theory (see Grossberg, 2013) Shondrick and Lord (2010) describe how this may happen using an information processing approach to demonstrate that resonance (i.e. where an external stimulus such as a leader is matched to a specific cognitive category) creates difficulty in distinguishing between the ILT and the actual leader’s behaviours. Indeed, early research demonstrates that people’s ILTs of prototypical leaders typically represent the same factor structure as evaluations of actual leaders (Eden & Leviatan, 2005; Schyns & Meindl, 2005) especially when the amount and access to information about the leaders’ behaviour are small or vague (Eden & Leviatan, 1975; Uhl-Bien et al., 2014). Consequently, when individuals are asked to rate a leader, a systematic error may occur due to individuals drawing upon their ILTs to fill in the missing information gaps about the leader (see Bass & Avolio, 1989; Eden & Leviatan, 2005; Lord et al., 1984; Schyns & Meindl, 2005).

Lord and colleagues (1984) were amongst the first to conduct research to try to identify the specific contents of ILTs as previous research had typically measured
them on an ad-hoc basis. They identified 59 traits and behaviours (e.g. intelligent, decisive, fair, and persuasive) all of which were associated with leaders in varying degrees. Offerman, Kennedy and Wirtz (1994), recognising the need to develop a reliable and valid measurement tool for measuring ILTs, identified 41 traits and behaviours people associate with leaders. These load onto eight core ILT factors: (1) Sensitivity (2) Dedication; (3) Charisma; (4) Attractiveness (5) Masculinity (6) Intelligence (7) Strength and; (8) Tyranny and characterize individual understandings of leaders, effective leaders, and supervisors albeit to different degrees (e.g. sensitivity was seen as less important in supervisors than ineffective leaders).

Research supports the generalizability of these ILT factors (Epitropaki, 2000) although some studies suggest that, in the general working population, six factors may be a better reflection of ILTs (see Epitropaki & Martin, 2004; 2005). Only a limited amount of theory and research looking at the individual characteristics that contribute to variations in these ILT factors has emerged (c.f. Ayman-Nolley & Ayman, 2005; Felfe, 2005; Keller, 1999). This is despite Hunt, Boal and Sorenson (1990) over 20 years ago noting that characteristics of the individual may predict ILTs. Schyns and Meindl (2005) again more recently called for more research in this area, a call that the current dissertation seeks to address. Within the limited prediction-focused research body, though, Keller (1999) found that personality traits and parental traits predicted students’ ILTs. Specifically, drawing from similarity and positive self-illusion literature, she found that the personality traits of agreeableness, conscientiousness, extroversion, openness and neuroticism tended to be related to similar preferences for traits and behaviours in their leader. There was also evidence that self-reported maternal and paternal traits were related to the students’ preferences for leader traits. For example, higher levels
of parental tyranny were associated with higher levels of tyranny in their ideal leader. Keller (1999) also found evidence that some individuals preferred a leader who was different from the self. In particular, individuals who experience high levels of negative emotions (e.g. guilt, fear, anxiety) preferred an ideal leader to be sensitive suggesting that there is a compensatory component in more neurotic followers ILTs (Keller, 1999). Specifically, such these types of followers may find that a caring and sympathetic leader is ideal as they provide a sense of safety and thus compatibility. Thus, she concludes that people not only look for symmetry in leader traits to that of their own but also idealise traits which will complement them.

While these findings by Keller (1999) are important, there are several theoretical and methodological issues that should be considered. First, CEST states there are two self-concepts that exist independently in each system (Epstein, 2003). Research suggests that mainstream personality measures, akin to that used by Keller (1999), primarily measure only the personality traits within the rational system (Epstein, 1992; 2001). Considering how the experiential components of personality may influence an individual’s ILT would, therefore, be a potentially important area to study, especially considering that the experiential system is seen to influence most people’s behaviours (Epstein, 1998; 2003). Second, her use of students (reported mean age of 20) is unlikely to reflect a general working population who would tend to be older and less educated. Furthermore, they are also likely to have less experience with business leaders compared to a general working population. Consequently, Keller’s (1999) results may not be fully generalisable to the general working population.
**Romance of leadership.** The romance of leadership as described by Meindl and colleagues (1985) can be considered a special form of ILTs (Meindl, 1995; 1998). This is because it puts a particular focus on how people use the concept of leadership to “understand, interpret, and otherwise give meaning to organizational activities and outcomes” (Meindl et al., 1985, p. 78). The use of the word “romance” is to draw attention to the observation that people in society generally bias, or assume, leadership is the most important factor in the (dys)functioning and (under)performance of groups and organisations whilst relegating other elements as less important (Felfe, 2005; Meindl, 1995; Meindl et al., 1985). This bias draws the focus away from followers and the situational factors, both of which may be objectively important causal factors to organisational success and failure. This occurs because it is often cognitively simpler to explain various organisational events and outcomes as due to a single factor rather than try to understand their real complexity (Schyns & Bligh, 2007). Such propositions help to understand, at least partly, why such intense interest is targeted towards leaders in general at the expense of other important leadership factors. It further suggests a need for researchers to move away from this societal perceived singular impact of leaders to other elements to better understand the dynamic leadership process. Another way that leadership, therefore, has been considered is through the relationship between leaders and followers.

**Relationship-Focused Perspectives of Leadership**

Relationship-focused perspectives of leadership typically recognise that leadership occurs within leader-follower interactions. These approaches, therefore, understand leadership as a dynamic process mutually influenced by both leaders and followers. Relationship based perspectives which are reviewed here include
psychodynamic approaches to leadership (Bornstein, 2003; Stech, 2007), the relational view of leadership (Hollander, 1971; 1992) and leader-member exchange (Dansereau et al., 1975; Graen et al., 1973).

**Psychodynamic approaches to leadership.** One of the core aims of the psychodynamic approach, in regards to leadership, is to focus on providing insight into leaders’ and followers’ own personality types and discussing the implications of these to their working relationship\(^1\) (Stech, 2007). Rather than a single theory, the psychodynamic approach is a collection of theories and models focused on understanding the consistent patterns in the way people think, feel, and act towards the world, and others, and how these impact on relationships at work (Stech, 2007). These patterns are referred to as a person’s personality and our early experiences in life have a critical impact on its development (Bornstein, 2003). The psychodynamic approach to leadership differs from previous leadership theories so far described in several key ways including: (1) a recognition of the importance of the unconscious in influencing peoples’ functioning and; (2) a focus on how the personalities of the leader and follower influence their working relationship (Bornstein, 2003; Stech, 2007). It is because of the focus on the unconscious mind that psychodynamic approaches are not mainstream within the study of leadership (Jackson & Parry, 2011). Yet the theories and ideas in this field can provide significant insight into the interactions between leaders and followers.

A key psychodynamic theory underpinning the highly used Myers-Briggs Type Inventory (MBTI; Myers & McCaulley, 1985) comes from Carl Jung,\(^1\)

\(^1\)It is because of these features of psychodynamic conceptualisations of leadership that they are considered here as relationship approaches.
Katherine Briggs and Isabelle Briggs-Myers (Jung, 1923; 1991; Myers & Myers, 2010). Together they argued that individuals vary on four key dichotomous cognitive preference dimensions regarding: sensing-intuition, thinking-feeling, extraversion-introversion, and judging-perceiving. These preferences influence how people perceive the world and make decisions. For the sensing-intuition dimension, those high in sensing gather information in a highly precise way and emphasise facts and detail. In contrast, those high in intuition prefer to focus on the theoretical and abstract. In terms of the thinking-feeling dimension, those high on thinking prefer to make objective decisions based upon a rational and analytical consideration of the evidence. Those high on feeling though prefer to make decisions in more subjective ways. For the extraverted-introverted dimension, those high on extraversion typically are energised by, and process information through, interacting with the physical world. Introverted types, in contrast, are energised by, and process information, by seeking quiet internal reflection. In terms of the judging-perceiving dimension, those high on judging prefer structure and planning and are more decisive and deliberate. In contrast, those high on perceiving are more flexible and adaptable to things. A total of 16 personality types can be identified by these four cognitive dimensions.

Followers’ personality type has been found to predict ratings of their leader’s transactional and transformational leadership (Atwater & Yammarino, 1993; Hautala, 2005; 2006). For example, individuals high on extraversion and feeling, tend to perceive higher levels of transformative behaviour in their leaders than those of introverts and thinking types (Hautala, 2005). Atwater and Yammarino (1993) found that subordinates’ thinking/feeling predicted rating of their leader’s transactional and transformational leadership behaviours in a military setting. Interestingly, Atwater and Yammarino (1993) used an earlier version of the
Constructive Thinking Inventory (Epstein & Meier, 1989) and found a negative relationship between a subordinates’ emotional coping and their rating of their leader’s transformational leadership. They argued that, unlike poor emotional copers, good emotional copers are secure in their self and, thus, less likely to be influenced by others’ opinions of them (i.e. more resilient).

Attempts have also been made to describe how specific leader personality types should interact with followers of a specific personality type (e.g. Kroeger et al., 2002). For example, Kroeger and colleagues (2002) state that extraverted leaders should be aware that silence is not indicative of agreement or consent in introverted followers. Consequently, they need to provide them space for reflection and allow them to digest ideas and decisions. In contrast, if the follower is also an extravert, the leader needs to be aware that the quantity of discussion is not the same as the quality of outcomes. Furthermore, they need to provide extensive time for the discussion of ideas. To the author’s awareness, though, no empirical assessment of these recommendations of how leaders should adapt to follower personality types have been undertaken.

Northouse (2007) argues that the ideas within the psychodynamic literature could be useful to better understand the leadership process. Indeed, while management scholars have focused less on the role of followers, those in the field of psychoanalysis and anthropology have specifically identified the need to focus on the psychological link between leaders and followers and the effects this link has on their lives at the individual level (Baker, 2007). Sociological scholars have also identified leadership as an intertwined relationship between leaders and followers and that the former need to live according to the norms of those they lead (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Homans, 1950). Thus,
psychodynamic theories of leadership have implications for where to focus attention in the leadership process. Specifically, the emphasis is taken away from the leader and instead is on the interactions of each other’s personality (Kets de Vries, 2004; Winkler, 2010), a focus that is not explicitly present in the other leadership theories so far presented. Consequently, within the psychodynamic approach, the effectiveness or quality of the leader-follower working relationship is a result of the combination of leaders’ and followers’ personality (Stech, 2007).

However, psychodynamic approaches to leadership are not without critical limitations. First, many psychodynamic theories were not developed through observation of normal populations but in the context of clinical observation and the treatment of people with significant psychological dysfunctions (see Berne, 1961; Stech, 2007). Generalisability of these theories, therefore, is a potential issue. Second, the theories and methods used in the psychodynamic approach are limited in their scientific defensibility for understanding the unconscious (Epstein, 2003). In recent decades, though, there has been an increasing recognition that many of the ideas within the early psychodynamic approaches are indeed compatible with cognitive psychology models of perception, memory and information processing (Bornstein, 2003; Bucci, 1997; Horowitz, 1988; Stein, 1997). Importantly, CEST with its approach to understanding the cognitive unconscious appears to be quite well suited to developing a better understanding of psychodynamic concepts in the domain of leadership in a much more scientifically defensible way (Epstein, 2003).

Third, from a practical perspective, the concepts and methods within the psychodynamic approach limit themselves in terms of how we approach leader training and development (Stech, 2007). At best they argue for leaders and followers to become aware of their own and other’s interpretative and behavioural patterns in
order to become more tolerant towards the self and others’ reactions (Stech, 2007). While this insight is necessary, it does not lend itself to changing these interpretative and behavioural patterns. CEST though is of more relevance from a practical perspective given that information processing styles and constructive thinking elements can be changed in leaders (Cerni et al., 2010). Consequently, these elements should be amenable to change in leaders and followers and, thus, go beyond simply bringing awareness to how two personality types may operate within leader and follower interactions to actively changing these to improve the relationship.

Finally, while psychodynamic approaches recognise the need to look at the interaction between leader and follower personalities and their impact on their working relationship, they do not explicitly recognise that leaders and followers hold different beliefs about the roles of follower and leader. Yet ILTs (see above) and implicit followership theories (discussed below; Sy, 2010) also influence how leaders and followers perceive and evaluate their dyadic partner. Consequently, there exists a need to integrate these different elements in a more holistic way to better understand the leader-follower relationship.

**Relational view of leadership.** Hollander originally critiqued leadership research (primarily trait and situational leadership theories), which focused on the leader holding a specific position of authority rather than as a process involving both the leader and the follower (Hollander, 1971; 1992). In his relational view of leadership (see Hollander 1971; 1992; 2012), leadership is not bound to the leader as a person, but rather as a process which “must be gauged in light of the attributes and
perceptions of the led and the structure and setting within which the leader and followers interact for the achievement of specifiable organizational ends” (Hollander, 1971, p.1). Leadership, therefore, is understood to operate within a system of constraining and enabling relationships in regards to both task demands and follower characteristics (Hollander & Offermann, 1990). Similar to Leader-Member Exchange (Graen & Uhl-Bien, 1991; 1995; Uhl-Bien & Graen, 1993) described below, exchanges or transactions between leaders and followers occur (Hollander & Julian, 1969; Hollander & Offermann, 1990). Specifically, the resources provided to the follower by the leader serve to increase the levels of influence and status the leader is given by the follower resulting in the leader holding the greater legitimate authority to direct the follower. Importantly, though, the leader was still seen by Hollander to hold the more important and influential role in this process.

**Leader-member-exchange (LMX).** The key focus of Leader-Member Exchange Theory (LMX) is on the dyadic relationships between leaders and followers (Dansereau et al., 1975; Graen et al., 1973; Graen & Uhl-Bien, 1995; Northouse, 2007). Originally called Vertical Dyad Linkage Theory (Dansereau et al., 1975; Graen et al., 1973, LMX has gone through a number of evolutions since its initial inception to now become the most prominent relational or dyadic leadership theory (Bauer & Erdogan, 2016; Day & Miscenko, 2016).

LMX was originally proposed due to problematic assumptions in previous models of leadership which included: (1) the view that followers are essentially seen as a homogeneous set of individuals who perceive, interpret and react in very similar
ways; and (2) that the leaders act similarly with each of their followers (Dansereau et al., 1975). It emphasises the process of role making between a leader and follower and takes the position that leaders will develop different types of exchange relationships with each of their followers (Graen & Uhl-Bien, 1991; 1995). These relationships will range from low quality, or purely contractual based (“the out-group”), to high quality which are characterised by mutual trust, respect, liking and reciprocal influence (“the in-group”; Liden & Maslyn, 1998). Since this initial conception, LMX has gone through several changes to present a more prescriptive approach to effective leadership (Graen & Uhl-Bien, 1995). There have also been recent trends at extending the dyadic view to both the group (e.g. Boies & Howell, 2006; Gajendran & Joshi, 2012) and network levels (e.g. Goodwin, Bowler, & Whittington, 2008; Venkataramani, Green, & Schleicher, 2010) on the recognition that leadership is not only dyadic in nature but also occurring among multiple members within an organisational network (Graen & Uhl-Bien, 1995). However, these are not of immediate interest for the current review purposes.

There is now substantial evidence to demonstrate that the quality of the leader-follower relationship is a key factor in leadership effectiveness (Dulebohn et al., 2012; Erdogan & Liden, 2002; Graen & Uhl-Bien, 1995; Ilies, Nahrgan, & Morgeson, 2007; Liden, Wayne, & Stilwell, 1993). When high quality relationships exist there are associated improvements in performance evaluations, organisational commitment, innovation and creativity, employee turnover, and job stress for both followers and leaders (Dulebohn et al., 2012; Dunegan, Uhl-Bien, & Duchon, 2002; Erdogan & Liden, 2002; Graen & Uhl-Bien, 1995; Judge & Ferris, 1992; Liden et al., 1993; Tierney, 2016). In addition, followers work harder (Basu & Green, 1997; Duchon, Green, & Taber, 1986), engage in more effective communication (Fairhurst,
1993; Fairhurst & Chandler, 1989), and show increased organisational citizenship behaviours (Nystrom, 1990; Seers & Graen, 1984). Furthermore, many of these outcomes are observed across different cultures and nations (Anseel & Lievens, 2007; Eden, 1993; Erdogan, Liden, & Kraimer, 2006; Schyns, Paul, Mohr, & Blank, 2005; Wakabayashi & Graen, 1984) demonstrating that relationship quality is a highly generalisable construct (van Gils et al., 2010). Given the wide-ranging important organisational outcomes, it becomes important to understand LMX’s antecedents.

While the consequences of LMX have been extensively researched, its antecedents have been somewhat less studied (Mahsud et al., 2010). However, recent meta-analytical research (Dulebohn et al., 2012) identifies several general antecedent categories: (1) follower characteristics; (2) leader characteristics and (3) interpersonal variables. Under the follower characteristics category, a leader’s perception of competence and ability of the follower is positively related to the follower’s perception of LMX quality. Follower personality traits of agreeableness, conscientiousness, and extraversion, locus of control, and positive affect were also positively related to perceptions of follower LMX. Such traits and behaviours are likely to be viewed by leaders as positive and productive as they help them move towards their goals in their role. For example, high levels of conscientiousness are one of the most reliable predictors of job performance (Barrick & Mount, 1991). Agreeableness is also associated with increased pro-social and helping behaviours and cooperation (Graziano, Habashi, Sheese, & Tobin, 2007) in addition to reciprocity (Perugini, Gallucci, Presaghi, & Ercolani, 2003). High conscientiousness and agreeableness in followers are therefore likely to result in more respect and trust
for the follower which facilitates more effective working relationships or higher quality working relationships (i.e. high LMX).

Other studies in the school of information processing have found that a variety of cognitive factors are related to LMX (Day & Miscenki, 2016). Engle and Lord (1997) found that if leaders and followers perceived that their attitudes were similar to their dyadic partner, the higher their LMX rating. Similarly, other research demonstrates that similarity in leaders and followers’ identities predict LMX ratings (Jackson & Johnson, 2012). In this study, when both leaders and followers perceived themselves as unique individuals, who are motivated to fulfil their partners role expectations and better their welfare, and saw themselves as part of a collective (i.e. held compatible self-definitions), they were more likely to report higher LMX levels. Emotional intelligence similarity between leaders and followers has also been associated with higher follower LMX rating (Sears & Holmvall, 2010). However, not all research has found that congruence between leaders and followers will ultimately result in increased LMX (e.g. Oren, Tziner, Sharoni, Amor, & Alon, 2012). Given the integral links with affect in CEST (Epstein, 2003), it is also important to note that affect influences LMX ratings (Sears & Holmvall, 2010; Xiaqi, Kun, Sufang, 2012; Xu, Liu, & Guo, 2014). Xu and colleagues (2014), for example found that emotional masking by followers negatively impacted on their LMX rating, which subsequently had deleterious effects on their wellbeing, job satisfaction and turnover intent. Xiaqi and colleagues (2012) found that leaders with high emotional intelligence tended have followers who rated their relationship as more positive.

While extensive research has adopted LMX as an approach to understanding and studying leadership, there are problems in its initial theoretical basis in that it
assumes that leaders and followers experience the relationship similarly (Graen & Uhl-Bien, 1995). Graen and Uhl-Bien (1995) state that the “expected agreement between leader and member reports is positive and strong and used as an index of quality of data” (p. 237). Consequently, research has usually only measured perceptions of the relationship from a single source, the follower, on the assumption that both the leader and follower will experience the relationship in similar ways (Graen & Uhl-Bien, 1995; Wilson et al., 2010; van Gils et al., 2010). Indeed, Sin and colleagues (2009) found that only about 10% of the research papers published between 1996 and 2008 on LMX assessed the construct from both the leaders’ and followers’ perspective. Similarly, more recently Day and Miscenki (2016) state that “there are fewer studies in the literature that have examined leader (compared with follower) traits in relation to LMX, which is somewhat surprising” (p. 18). Yet meta-analytical research (Gerstner & Day, 1997; Sin et al., 2009) demonstrates that the correlation between leaders’ and followers’ rating of their relationship is actually quite low (r’s between .29-.37). If it is correct to assume that leaders and followers experience the relationship to a similar extent, then a much stronger correlation should be expected. Consequently, future research on LMX needs to reconsider this aspect of the theory. Specifically, it would need to theorise what is contributing to these differences between leaders and followers (e.g. see Wilson et al., 2010; van Gils et al., 2010), which the current research attempts to address.

The preceding review has focused on leadership from leader, follower and relationship perspectives. Followers though have important influences on the leadership process (Uhl-Bien et al., 2014). Indeed, Lord and Brown (2001) stated that leadership is an interdependent process that relies on leaders leading and followers following within a context. It appears, though, that most of the leadership
theories presented so far have failed to consider the impact of followers and following on leadership. Consequently, a review followership literature is necessary.

**Followership**

Compared to the leader-domain, research on followers and followership is heavily under-researched (Uhl-Bien et al., 2014; Bjugstad, Thach, Thompson, & Morris, 2006). A search conducted February 2014 on ProQuest containing the keyword “leadership” returned 2,195,501 articles. In contrast, the keyword “followership” returned only 718. This is a ratio of approximately 3000 to 1 in favour of leadership research. This lack of focus on followers is likely, in part, underpinned by the cultural stereotypes which revolve around leaders and followers (see Alcorn, 1992; Lundin & Lancaster, 1990; Meindl, 1995; Meindl et al., 1985). Specifically, whereas leaders are typically ascribed with more positive connotations in society (e.g. Meindl et al., 1985), followers are typically depicted in a more negative fashion (e.g., sheep, passive, obedient; see Berg, 1998).

Various writers argue though that the success of organisations depends not only on good leaders but also on active and courageous followers (e.g. Chaleff, 1995; Kelley, 1988; 2008; Lundin & Lancaster, 1990). Indeed, the move to more decentralised, flatter organisational structures over the last few decades has meant followers are becoming increasingly expected to take more independent and active roles which do not depend on regular direction from those above (Lord, 2008; Parker, Williams, & Turner, 2006). In particular, followers of highly skilled professions are expected to be self-directed, self-motivated and act with minimal direction (Howell & Méndez, 2008). Such proactivity in followers helps contribute
to both positive individual and organisational outcomes (e.g. Seibert, Kraimer, & Crant, 2001; van Scotter, Motowidlo, & Cross, 2000). However, such proactivity does not align with the stereotype of the passive follower.

Encouragingly, there is an increasing recognition that the follower is an active contributor to organisational success and failure (e.g. Awamleh & Gardner, 1999; Ayman, 1993; Gardner & Avolio, 1998; Nye, 2002). Indeed, over 50% of the 718 followership articles were published after the year 2000. Furthermore, the number of books which hold the word “followership” in their title have increased in recent years (Jackson & Parry, 2011). A review of this body of followership theory and research is presented below. A core thread throughout is that the effectiveness of a leader is dependent on their followers’ consent to play their role (Bjugstad et al., 2006). If leaders do not have the confidence and support of their followers, they are unlikely to function effectively.

**Followership Theories**

According to Uhl-Bien and colleagues (2014), followership theories can be broadly classified under role and relationship based perspectives.

**Role-Based Theories of Followership**

Role-based theories are focused on how followers undertake their role in relation to the leader and how this impacts on the leadership process and organisational outcomes. According to role theory, the actions of individuals in most social activities are born from the knowledge of socially defined categories held by
all to some degree (Ritzer, 2000). When a person holds a role status in a given context (such as a leader or follower) it serves as a script to guide the individual’s behaviour (Biddle, 1979). The deployment of social categories in everyday functioning facilitates predictability in the social world (Ritzer, 2000; Weick, 1995). When individuals actively identify with their roles they come to think, feel and act in ways which are aligned with them (e.g. Chiricos, Barrick, Bales, & Bontrager, 2007; Jussim, Nelson, Manis, & Soffin, 1995). Relevant theories falling under role-based perspectives, reviewed below, include the dynamics of subordinacy (Zaleznik, 1965), effective followership (Kelley, 1988; 1992; 2008), courageous followership (Chaleff, 1995; 2003; 2009), obedience and proactive behaviours (e.g. Crant, 2000; Reicher, Haslam, & Smith, 2012), and implicit followership theories (Sy, 2010). A particular focus is on implicit followership theories due to their importance in the research undertaken in this dissertation.

**Dynamics of subordinacy.** Zaleznik (1965) proposed a role based theory of followership called the Dynamics of Subordinacy which draws on psychodynamic concepts of projection and transference. Zaleznik argued that it is through the relationship with authority figures that the followers’ internal motives, desires and wishes are played out. There are two key dimensions on which these motives, desires and wishes emerge: (1) dominance-submission; and (2) activity-passivity. For dominance-submission, followers can range from those who want to dominate or control authority figures to people who seek to be controlled by those in authority positions. For the activity-passivity dimension, followers can range from those who seek to initiate and intrude into their working environment, to those who prefer for those in positions of authority to initiate actions and provide direction. From these
two dimensions, followers can be classified into four types: (1) **impulsive** (dominant - active), (2) **compulsive** (dominant - passive), (3) **masochistic** (submissive - active), and (4) **withdrawn** (submissive - passive). By being aware of such follower types and their underpinning internal conflicts, Zaleznik sought to help leaders achieve greater sensitivity and judgement in their relationships with followers (1965).

As the basis of the dynamics of subordinacy theory is psychodynamic in nature (Zaleznik, 1965), it has the same limitations as those presented previously for psychodynamic approaches to leadership. However, as noted, CEST (Epstein, 2003) is able to integrate psychodynamic theories in a more scientifically defensible manner. Consequently, the ideas presented within this and subsequently related psychodynamic theories (e.g. see Oglensky, 1995) appear to be quite useful when drawn upon to help understand how certain aspects of the followers’ unconscious world influence the leader-follower relationship. For example, Oglensky (1995) argues that followers’ relationships with leaders are complex emotional attachments that reflect followers’ internal needs and dispositions. This is a dynamic perspective of the follower as it places them as active in a hierarchically based social relationship, which interacts with their internal cognitive-emotional world. Consequently, in this view, the followers’ inner world influences the relationship with the leader, a view that had not been traditionally recognised within mainstream leadership theories. However, we must also consider the internal worlds of the leader in these relationships as the same will exist for them.

**Effective followership.** Kelley (1988) published a widely cited paper in which he argued that organisational successes (and failures) are not only dependent
on leaders, and how well they lead, but also on how effective followers are in following. He identified two underlying behavioural bi-polar dimensions of follower qualities: (1) dependent-independent and; (2) passive-active (Kelly, 1988; 1992; 2008). The dependent-independent dimension refers to the degree followers are independent, critical thinkers. The passive-active dimension refers to the degree followers are active and take the initiative in decision making. Based on whether a person falls high or low on these two dimensions, five different follower styles are identified: (1) alienated followers (high independence – low active); (2) star followers (high independence – high active); (3) passive followers (low independence – low active); (4) conformist followers (low independence – high active) and (5) pragmatist followers who fall midway on both dimensions. Star followers are seen as most effective as they are positive, independent thinkers who can achieve without direction and demonstrate the courage to voice antithetical positions in a respectful and positive way to their leaders (Kelly, 1988; 1992). However, while star followers may be theorised by Kelly as the most effective, subjectively it would appear that leaders do not evaluate these follower types in such a positive manner (e.g. see Crant, 2000; Reicher et al., 2012)

**Courageous followership.** In a similar vein to Kelley (1998), Chaleff (1995; 2003; 2009) argues that effective followership is necessary to bring about effective leadership. Chaleff (1995; 2008) identifies two dimensions on which followers can be placed: (1) low-high support and (b) low-high challenge of the leader. Based upon these, he identifies four different styles of follower: (1) the implementer (high support – low challenge); (2) the partner (high support – high challenge); (3) the individualist (low support – high challenge); and (4) the resource (low support – low
challenge; Chaleff, 2008). For Chaleff, partners are the most effective type of follower as they have both the courage to forcefully stand up for, and support, their leader in their aim to achieve group and organisational goals, but also to challenge and confront them when their actions may be morally questionable or result in poor operational outcomes. In Chaleff’s view, effective followers, therefore, are active contributors to achieving a positive working environment and are, at least partly, accountable for the achievement of (and indeed the failure to achieve) group and organisational goals (Chaleff, 1995; 2003; 2009).

It is important to note here that Chaleff (2009) sees effective leadership and followership as fundamentally intertwined. It is not only the followers who need to be courageous, but leaders also need to be courageous in the face of the candour of their followers. If they do not demonstrate such courage to potentially critical feedback, then they are likely to instil a culture of silence that undermines both effective leadership and followership. Indeed, he states “leaders rarely use their power wisely or effectively over long periods [of time] unless they are supported by followers who have the stature to help them do so” (Chaleff, 2003, p.1). The recognition that both leaders and followers need to be courageous is an important notion, as it requires a consideration of the reasons as to why they may or may not be “courageous”. It is proposed that their internal world may hold the key to understanding this.

**Obedience and proactive follower behaviours.** Specific follower behaviours have also been studied. These include obedience and proactive behaviours. As already noted, followers are typically portrayed in more negative
terms such as *sheep, passive and obedient* (Baker, 2007; Berg, 1998). When individuals actively identify with their roles they come to think, feel and act in ways which are aligned with them (e.g. Chiricos et al., 2007; Hoption, Christie, & Barling, 2012; Jussim et al., 1995). In conjunction with the more positive and active beliefs about leaders (Berg, 1998; Meindl et al., 1985) and the belief that they have an inherent right to hold a position of authority (Hollander & Offerman, 1990), the result is a tendency for followers to relegate themselves to simply following the directions of the leader while the leader takes overriding responsibility (e.g. Blass, 2009; Milgram, 1965; Reicher et al., 2012; Vanderslice, 1988). While the image of the obedient follower is prevalent, it is clear that not all followers are willing to be so blindly obedient (e.g. see Carsten, Uhl-Bien, West, Patera, & McGregor, 2010; Milgram, 1965) nor do some leaders expect this of followers (e.g. McGregor, 1960; Sy, 2010). Instead, some followers take a dynamic and active approach to their role which is also expected by some leaders.

Proactive behaviour refers to the challenging of the status quo through actively adapting to the current situational demands in order to bring about improved outcomes (Belschak, Hartog, & Fay, 2010; Crant, 2000; Grant & Ashford, 2008). Research on proactive behaviour has primarily been concerned with four key areas: (1) *voice*; (2) *issue-selling*, (3) *taking charge*; and (4) *helping* (Grant, Parker, & Collins, 2009). Such behaviours are inherently connected with how employees behave in the workplace to effect change and have generally been associated with a wide range of positive individual and organisational outcomes including increased performance (Rank, Carsten, Unger, & Spector, 2007), quicker career advancement (Seibert, Crant, & Kraimer, 1999), increased organisational commitment (Hartog & Belschak, 2007) and job satisfaction (Wanberg & Kammeyer-Mueller, 2000),
organisational strategy (Dutton & Ashford, 1993), firm success (Baer & Frese, 2003; Frese & Fay, 2001), and team effectiveness and satisfaction (Kirkman & Rosen, 1999).

Due to the fact that leaders and followers do not usually see their relationship in the same ways (Gerstner & Day, 1997; Sin et al., 2009), perhaps the most relevant research in the proactivity literature to the current dissertation is how leaders’ interpret follower proactive behaviours. Despite the generally positive outcomes of follower proactive behaviour, not all leaders interpret proactive behaviours in the same way (Grant et al., 2009) and there is a general lack of understanding why this is the case (see Grant & Ashford, 2008). Some have argued that supervisors may see follower proactive behaviours as a threat (e.g. Grant et al., 2009) or an ingratiation attempt (Bolino, 1999; 2003) rather than as a constructive attempt at improving the situation. Argyris and Schön (1978) argue that many supervisors are driven to protect themselves from various negative experiences due to potential embarrassment, personal threat and/or feelings of vulnerability or incompetence. Undeniably, there is strong evidence demonstrating that people often feel threatened when confronted with negative criticism or feedback (Carver, Antoni, & Scheier, 1985; Meyer & Starke, 1982; Sachs, 1982; Swann & Read, 1981). This can even motivate individuals to avoid or dismiss the criticism and even attack the messenger’s credibility (Ilgen, Fisher, & Taylor, 1979; Morrison & Milliken, 2000). Proactive behaviours in followers, therefore, appear to have the potential to engender negative reactions in some leaders (Frese & Fay, 2001) due to their inherent nature of questioning the status quo (e.g. questioning leaders’ directions, decisions and actions).
Leaders’ negative reactions to followers’ proactive behaviour may also be related to the way in which leaders’ process information. For example, emotional coping contains items targeting how “thick-skinned” someone is to disappointment, rejection criticism and disapproval (Epstein, 2001), all of which are behaviours a proactive follower would likely demonstrate to some degree. Consequently, it appears there are potential links between the reactions in leaders to proactive follower behaviour and constructive thinking as conceptualised in CEST.

**Implicit followership theory.** Despite being a relatively new concept in the literature, implicit followership theory (IFT) holds significant potential for influencing the way we conceptualise leadership and followership (Avolio, Walumbwa, & Weber, 2009; Epitropaki, Sy, Martin, Team-Quon, & Topakas, 2013). IFT corresponds to ILT but focuses its attention on the knowledge structures or schemas, which specify and organise information around the traits and behaviours of a follower and thus act to help people make sense of the organisational environment specifically in relation to followers (Sy, 2010). Once someone is attributed with followership status, perceptions and judgements are filtered through the individual’s IFT, which in turn, have a subsequent influence on the behaviours in relation to the follower (Lord & Maher, 1993; Poole et al., 1989; Sy, 2010). Like ILTs, both cognitive categorisation and connectionist models have been drawn upon to explain the cognitive processes underpinning the recognition and categorisation of followers (Epitropaki et al., 2013).

The roots of IFTs can be observed in McGregor’s (1960) observation that managers can hold two different understandings about the nature of followers, which
he referred to as Theory X and Theory Y managers. Theory X managers’ have rather
negative beliefs of followers, seeing them as lazy, unmotivated, and selfish (e.g.,
only work for payment). In contrast, Theory Y managers’ beliefs are more positive.
They tend to see employees as self-motivated and will, when provided the
opportunity, seek to do well in their tasks. Actions of the manager become aligned
with how the manager sees the nature of followers. For example, monetary rewards
contingent on work output and systems of control are more applicable for Theory X
managers’. In contrast, Theory Y managers will tend to engage in more democratic
and trusting behaviours with their followers.

As IFT is a relatively new area of research, there have only been a small
number of studies conducted so far. Research looking at the content of IFTs
identified 18 traits and behaviours which managers associate with followers (Sy,
2010). These loaded on to six main factors which they labelled: (1) Industry; (2)
Enthusiasm; (3) Good-citizen; (4) Incompetence; (5) Insubordination; (6)
Conformity. These six factors also loaded onto a second-order two-factor structure:
Followership Prototype (corresponding to the first 3 main factors presented above)
and Followership Anti-prototype (corresponding to the last 3 main factors). These
two second-order factors appear to somewhat align with Theory X and Theory Y
managers described above (see McGregor, 1960).

Research looking at the consequences of IFTs has found that leader IFTs are
positively related to both leaders’ and followers’ perceptions of relationship quality,
trust, liking and job satisfaction (Sy, 2010). Recent research has also found that
when leaders’ hold positive IFTs, it creates a naturally occurring Pygmalion effect in
followers (Whiteley, Sy, & Johnson, 2012). Specifically, positive leader IFTs result
in higher performance expectations and relationship quality, which subsequently
increase performance in followers. These results suggest that leader IFTs, at least in part, shape the pattern of leaders’ interactions with followers and form the basis by which the leader perceives and judges the followers' behaviour in a dyadic relationship (Sy, 2010). Due to these findings, Whiteley and colleagues (2012) recently recommended that future research should look at the antecedents of IFTs.

Given the relative newness of IFTs though, only a limited amount of research on IFT antecedents has so far emerged (cf. Derler & Weibler, 2014; Kruse & Sy, 2011). Kruse and Sy (2011) manipulated positive and negative affect in students, employed adults and current leaders and found that positive affect was positively related to individuals reporting more prototypical IFTs while negative affect was positively related to anti-prototypical IFTs. The researchers suggest that, in addition to cognitive components, affect also contributes to congruent effects on people’s IFTs as would be predicted by connectionist, dynamic views of implicit theories. Like previous work though on ILTs (e.g. Keller, 1999), these researchers did not recognise that humans have two information processing systems. Consequently, one of the aims of the current research was to assess whether these systems would be related to leader IFTs.

**Relationship Based Perspectives of Followership**

In addition to the role-based perspectives discussed above, Shamir (2007) has outlined a relational approach to followership called the co-production of leadership.
**Co-production of leadership.** Drawing upon LMX theory as its basis, Shamir (2007) argues leadership is a social relationship and that the creation, nature, and outcomes of leadership are dependent on, or co-produced by, both leaders and followers. In this view, therefore, followers are not passive individuals but are active in affecting the nature of the relationship and its outcomes. The co-production of leadership readdresses the bias on leaders in previous leadership theory and research. Specifically, there exists a need not only to understand how leaders’ characteristics and behaviours influence the leadership relationship, but also how the followers’ characteristics and behaviours influence it (e.g. Carsten & Uhl-Bien, 2012; Carsten et al., 2010; Shamir, 2007). Furthermore, there is an explicit recognition that the dyadic partner of leaders and followers influence their characteristics and behaviours in any given relationship (Shamir, 2007). This comprehensive and balanced approach to leadership, therefore, strongly suggests that leadership research needs to turn its focus to understanding how both leaders and followers jointly contribute to the leadership process.

**Limitations in Leadership/Followership Research:**

**Proposal of an Integrated Research Model**

As the literature review demonstrates, leadership has traditionally been approached from a leader-centric perspective. Even the focus in today’s current mainstream leadership theories remains on the “heroic leader” while the followers’ impact on the leadership process is still relatively ignored. These issues are echoed by practitioners who recognise there are problems in failing to account for the follower in leadership training programmes (e.g. Hosking, 2002; Schyns, Kiefer,
Kerschreiter, & Tymon, 2011; Schyns, Tymon, Kiefer, & Kerschreiter, 2012). It is encouraging though to observe an increase in followership research to help understand the role that followers and following have on the leadership process – where there has been a “reversing of the lens” (Shamir, 2007, p. X). Certainly, more recent conceptualisations recognise the interdependent nature of leadership and followership; seeing leadership outcomes as resulting from the leader-follower relationship, of which, is jointly influenced by leader and follower beliefs and behaviours (Lord & Brown, 2001). This reconceptualization towards a more holistic view of leadership is required to move the field of leadership forward.

This need for integration in leadership theory formed the basis for the development of a general research model. This model addressed three issues observed in the literature review while also acknowledging the more recent dynamic conceptualisations of leadership (e.g. Lord & Brown, 2001; Shamir, 2007). The first, which formed the basis for approaching the remaining two issues, is that relationship quality is usually only measured from the perspective of follower without consideration of leaders’ perspectives (Sin et al., 2009; Wilson et al., 2010). The evidence is clear though that there are problems with the assumption in LMX theory that either a leader’s or follower’s perspective of their relationship is indicative that their dyadic partner holds a similar view (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Sin et al., 2009). It is proposed, therefore, that ILTs (Lord & Maher 1993) and IFTs (Sy, 2010) may help to explain this divergence in leader and follower views of their relationship.

ILT and IFT are based in role theory as they specify and organise information around, the traits and behaviours of both leaders and followers and serve to guide observers’ interpretations of their respective actions, what perceivers attend to, what
they encode, and the information they retrieve when recalling leader or follower related information (Eden & Leviathan, 1975; 2005; Epitropaki & Martin, 2004; 2005; Lord & Maher, 1990; 1993; Lord et al., 1984; Phillips & Lord, 1982; Poole et al., 1989; Sy, 2010). ILTs and IFTs, therefore, bias perceivers’ attention towards, and act as a basis for judgement for, specific leaders and followers actions respectively (Lord & Maher, 1993; Sy, 2010). Interactions between leaders and followers should make salient, at both a conscious and unconscious level, their ILT and IFT. Indeed, the behaviours of people change in the face of authority (Chaleff, 2009; Milgrim, 1965). Consequently, ILTs and IFTs should identify what is specifically prevalent in the minds of leaders and followers when they interact, and how they observe, judge, and behave in that relationship. These differences should help too, at least in part, explain leader and follower LMX variations.

Second, this dissertation seeks to add to the limited amount of research undertaken on ILT and IFT antecedents (c.f. Keller, 1999; Kruse & Sy, 2011; Schyns & Meindl, 2005). In particular, what individual factors predict variations in followers’ ILTs and leaders’ IFTs. Specifically, previous ILT and IFT research have not considered the experiential components of personality as potential antecedents. However, there are theoretical reasons to expect that they will be related. Kruse and Sy (2011) found that manipulating affect has the potential to influence IFTs. Specifically, increased positive affect increased people’s expression of prototypical followership traits while negative affect increased people’s expression of anti-prototypical traits. However, given the more transient nature of affect, these changes are likely to be somewhat short-lived. Consequently, once the affect has worn off, people are likely to revert to their original IFTs.
From the perspective of CEST, affect is an outcome of underlying cognitive processes occurring in the experiential system (Epstein, 1998; 2003; 2014). Changes in these underlying cognitive processes, therefore, should provide more stable and long-lasting changes in IFTs. This is because it changes the underlying cognitive processes that contribute to leaders’ affective experiences. Theoretically, the same should also apply to followers’ ILTs. If these cognitive processes were to relate to leaders’ and followers’ beliefs, then it would provide a framework for better understanding the interplay of factors influencing the nature of the leader-follower relationship. In turn, greater understandings of these contributing factors may lead to opportunities for these beliefs to be changed in both leaders and followers via training (see Schyns & Meindl, 2005). This also suggests that leadership outcomes could not only be improved by targeting the leader, but also follower characteristics and beliefs.

The third issue is that LMX antecedents have been less researched relative to its consequences (Mahsud et al., 2010). There are reasons to believe that both leaders’ and followers’ information processing styles (Norris & Epstein, 2011) and degree of constructive thinking (Epstein, 2001) should be linked to their dyadic partners’ LMX rating. Specifically, an individual’s information processing style and constructive thinking have significant influences on individuals’ behaviours across a wide range of contexts and situations (see Epstein, 2003; 2014; Epstein et al., 1996; Norris & Epstein, 2011; Pacini & Epstein, 1999a). In fact, CEST states that much of our behaviour appears to be influenced by schemas in the experiential system (Epstein, 1994; 1998; 2001) including those occurring in the leader-follower relationship. Consequently, the general stability of these personality constructs should influence the general behaviours that are manifested in leader-follower
relationships (e.g. see. Cerni, Curtis, & Colmar, 2012; Curtis & Lee, 2013). A key aim of the current research, therefore, was to investigate if both leader and follower information processing style and constructive thinking, as described within CEST (Epstein, 2003; 2014), would predict their dyadic partner’s LMX rating.

Proposal of a Research Model and Outline of Chapters 3 to 6

Throughout the above is the recognition that the three gaps observed in the literature can be overcome by integrating and expanding upon leadership theory in a holistic and integrative way which is aligned with modern conceptualisations of leadership (e.g. Lord & Brown, 2001). Specifically, LMX, ILT, and IFT theories and CEST appear to show a high degree of overlap. Integrating these may, therefore, help explain variations in followers’ ILTs, leaders’ IFTs, in addition to differences in leaders’ and followers’ LMX. A graphical integration of these theories is shown in Figure 2.1.
This model served as a guide for conceptualising the research undertaken across the next four chapters. It was based on the identification of four independent, but fundamentally inter-related, research questions aligned with the limitations discussed above. Study 1 (top left-hand relationship) sought to investigate whether followers’ information processing style and constructive thinking influence their ILT. Study 2 (top right-hand relationship in Figure 2.1) sought to understand how leaders’ information processing style and constructive thinking influences their IFT. Study 3 sought to investigate whether leaders’ information processing style and constructive thinking influence their followers’ LMX. In addition, given that follower ILTs serve to guide their interpretations of leaders’ actions (Lord & Maher,
1993), what they attend to, what they encode, and the information they retrieve when recalling leader related information (Lord et al., 1984; Lord & Maher, 1990; Phillips & Lord, 1982), study 3 also sought to investigate whether the followers’ ILT would moderate these relationships. Study 4 sought to investigate whether followers’ information processing style and constructive thinking influence their leaders’ LMX. It also sought to investigate whether the leaders’ ILT would moderate these relationships.
CHAPTER 3

ILT Congruency: Exploring the Relationships between Followers’ Information Processing Style, Constructive Thinking, and Implicit Leadership Theories

As noted in the previous chapter, there has been an increasing level of attention towards a follower-centric model of leadership in recent years, which acknowledges that effective leadership is not solely dependent on leaders’ traits and behaviours but also on how followers socially construct leaders (Felfe, 2005). Consequently, the role of followers’ perceptions and expectations of the leadership process is emphasised (Foti & Lord, 1987; Kenney, Schwartz-Kenney, & Blascovich 1996; Larson, 1982; Lord & Alliger, 1985; Lord & Maher, 1993; Lord et al., 1984).

Implicit Leadership Theories (ILTs) are an individual’s personal assumptions of the traits and abilities of leaders (Eden & Leviathan, 1975; Lord & Maher, 1993; Lord et al., 1984). They are stable dynamic cognitive schemas, or knowledge structures, which specify and organise information around, the traits and behaviours of a leader (Epitropaki & Martin, 2004; 2005; Poole et al., 1989). Thus, they serve to guide people’s interpretations of leaders’ actions (Lord & Maher, 1993), what a perceiver attends to, what they encode, and the information they retrieve when recalling leader related information (Lord et al., 1984: Lord & Maher, 1990; Phillips & Lord, 1982).

Previous ILT research has primarily focused on their content (e.g. Deal & Stevenson, 1998; Lord et al., 1984), their impacts on the measurement of leadership (e.g. Bass & Avolio, 1989; Eden & Leviatan, 1975; 2005; Nye & Forsyth, 1991; Rush et al., 1977), and organisational outcomes (Hansbrough, 2005; Nye, 2005). An important study conducted by Offerman and colleagues (1994), sought to uncover if there was a core set ILT dimensions held by people. They found evidence for eight ILT dimensions, which they labelled sensitivity, dedication, charisma,
attractiveness, masculinity, intelligence, strength and tyranny. Inter-individual variations are observed across these (e.g. Epitropaki & Martin, 2004; Koommoo-Welch, 2008; Offerman et al., 1994). Furthermore, differences are observed across gender, with males rating ideal leaders as less sensitive and more tyrannical than females (Deal & Stevenson, 1998; Epitropaki & Martin, 2004).

Only a small body research though has been published on what individual factors predict variations in ILTs (c.f. Keller, 1999; Schyns & Meindl, 2005). The research (Keller, 1999; Epitropaki & Martin, 2004; 2005) which has been conducted has yet to consider the rational and experiential processing systems as posited in Cognitive-Experiential Self Theory (CEST; Epstein, 2003) as different components of personality. As Epstein (2003) states: “If there are two different information-processing systems, it can only be a source of confusion to conduct research as if there were only one, which is the customary practice (p.180). In addition, the use of organisational samples has been limited (c.f. Epitropaki & Martin, 2004; 2005) despite the potential importance ILTs could have on effective organisational functioning (Schyns & Meindl, 2005). The current study, therefore, seeks to add to this area by drawing upon CEST (Epstein, 1998; 2003) and person-supervisor fit literature to explain variations in ILTs in a general working population. It is generally posited that followers develop preferences for traits in leaders that are congruent with their preferred information processing style (Epstein et al., 1996; Norris & Epstein, 2011) and the degree to which they process information constructively (Epstein, 1998; 2001).
**Person-Supervisor Fit: The Importance of Similarity**

Person-environment fit (P-E fit) is defined as generally occurring when there is a compatibility, or congruence, between an individual and the work environment (Kristof-Brown, Zimmerman, & Johnson, 2005). From this broad definition, several conceptualisations of P-E fit have emerged in the literature including: (1) person-vocation fit; (2) person-job fit; (3) person-organisation fit; (4) person-group fit; and (5) person-supervisor fit (Kristof, 1996; Kristof-Brown et al., 2005). Whilst the majority of research has focused on the initial four conceptualisations, the most relevant for the current research is person-supervisor fit (P-S fit). This has been defined as the compatibility between an employee and their supervisor (Kristof-Brown et al., 2005). There have also been multiple ways of conceptualising and measuring fit (see Caplan, 1987; Judge & Ferris, 1992; Kristof-Brown et al., 2005). The most relevant is in terms of needs-supply which broadly refers to where leaders meet or address followers’ needs, values and preferences (Caplan, 1983; 1987; Kristof, 1996).

The similarity between leaders and followers has been demonstrated as a key factor in the quality of leader-follower relationships (Bauer & Green, 1996), performance (Wexley & Pulakos, 1982), and job satisfaction (Turban & Jones, 1988). Schaubroeck and Lam (2002) note that similarities in leader-follower attitudes, dispositions, values, goals and intentions are typically more prevalent in fit assessments than more visually obvious demographics such as gender, age or race. When personality traits are shared between leaders and followers, they are more likely to successfully work together due to a set of common reference points in perceiving, understanding and behaving when confronted with the same environmental inputs (Schoon, 2008). Indeed, in a key study drawing upon similarity
theory to explain variations in follower ILTs, Keller (1999) found students preferred leaders who demonstrated similar personality traits – where individuals tend to prefer leaders similar to the self. However, she also found that neurotic individuals who experience high levels of negative emotions (e.g. guilt, fear, anxiety) preferred an ideal leader to be sensitive – a more complementary trait.

The above suggests that individual processing style preferences influence what followers looks for in leaders; where they would prefer a leader whose traits and behaviours are congruent with their preferred information processing style. The independence of the two systems and the differences in processing rules also suggests that what is necessarily congruent with one system may not be for the other. Furthermore, followers more prone to experiencing negative affect may seek compensatory traits in leaders. Given that emotions are the domain of the experiential system (Epstein, 2003; 2014), it, therefore, becomes necessary to look at its role in ILT preferences.

**Theory Development**

It is assumed that individuals seek to think, behave and communicate in ways that are congruent with their information processing style (see Berne, 1961). However, environmental demands can force people to think, behave or communicate outside of their preferred information processing style resulting in the experience of negative affect (e.g., see McCann & Higgins, 1988). As described within the CEST framework, this may manifest in negative vibes (i.e. vague feelings that may exist at the border awareness) such as agitation, irritation, tension, disquietude, queasiness, edginess, and apprehension (see Epstein, 2003) or more overtly in the form of clearly defined emotions (e.g. fear, anxiety, worry). Each of these is a non-satisfying need
state. In contrast, when demands are congruent to individuals’ processing styles, they are likely to experience more positive vibes and emotions such as wellbeing, calmness and positive anticipation (Epstein, 2003) – a satisfying need state (Epstein, 1998; 2014).

In the context of the current study, leaders are theorised as a potent environmental demand source for influencing what (i.e. content) and how (i.e. process) followers process information. This is due to leaders’ inherent, positional power that provides them more control over the nature and frequency of communication that occurs in leader-follower interactions (e.g. see Tost, Gino, & Larrick, 2013; Watson, 1982). Furthermore, leaders’ dispositions have indirect impacts on the nature of people’s experiences at work (Grojean, Resick, Dickson, & Smith, 2004; Pirola-Merlo, Härtel, Mann, & Hirst, 2002). For example, leaders have been found to positively and negatively influence team climate (Pirola-Merl et al., Hirst, 2002). According to CEST (Epstein, 2003; 2014), followers would process incoming information during on-going direct and indirect experiences of leaders via both the rational and experiential systems. Over time, via these direct and indirect leader-work events, followers will come to associate specific leader traits and behaviours which enable them to adopt (i.e. congruent with) their preferred information processing style and those traits and behaviours which do not allow them to adopt (i.e. are not congruent with) their style. Specifically, the positive or negative vibes and emotions experienced create the learning opportunities for followers to associate leaders’ traits and behaviours with their experience of emotions. Drawing on these lines of reasoning and findings, several hypotheses regarding the relationships between followers’ information processing style and their ILT preferences can be made.
Hypothesis Development: Information Processing Style and ILTs

Followers who demonstrate a preference for a rational processing style may come to favour leader traits associated with intelligence (e.g. *intellectual, clever, educated*). An intelligent leader would tend to engage in familiar behaviours (e.g. articulates reasoning behind decisions; is logical), which aids in communication and understanding, and facilitate a work climate aligned to the rational follower’s ways of processing information (e.g. allow follower time to consider their positions).

Indeed, previous research has demonstrated that rational leaders tend to be rational persuaders (Curtis & Lee, 2013). Previous research has also demonstrated that individuals tend to be more receptive to messages aligned with their processing style (see Rosenthal & Epstein, 2000 as cited in Epstein, 2003). It is, therefore, hypothesised that:

**Hypothesis 1:** A positive relationship between followers’ rational information processing and their preference for leader intelligence will exist.

There are several ILT dimensions that appear more congruent with experiential system processing, albeit for different reasons: charisma, dedication, strength, tyranny, sensitivity and attractiveness. Charisma includes traits such as inspiring, dynamic, and energetic while dedication includes traits such as dedicated and goal-oriented (Offermann et al., 1994). The act of inspiring is best achieved through the arousal of positive and strong emotions (e.g. optimism and positive thinking) in others in order to bring about desire and commitment to achieve a goal (see; Chemers, 1997; McColl-Kennedy & Anderson, 2002; Uhl-Bien et al., 2014; Yukl, 1998). This is especially evident when the outcome requires a highly creative
approach. Indeed, charismatic leadership theory (Conger & Kanungo, 1987; House, 1977) and transformational leadership theory (Avolio, 1999; Bass, 1985; Bass & Avolio, 1990) recognise the importance of emotional appeals to followers when trying to influence others (Shamir, House, & Arthur, 1993). Furthermore, leaders are in a position to facilitate or minimise the barriers to, the ‘cognitive space’ for employees to be creative (e.g. to take risks, explore new cognitive pathways; Oldham & Cummings, 1996). Charisma and dedication related traits appear to be highly congruent with the experiential system due to its intimate connections to emotion and creativity. Therefore, it is hypothesised that:

**Hypotheses 2 and 3:** Positive relationships between followers’ experiential information processing and their preference for leader charisma and dedication will exist.

The strength dimension of ILTs includes the items *strong* and *bold* (Offerman et al., 1994). Synonyms of these items include confidence, courage and conviction; of having a force of character to push things through (Bold, n.d.; Strong, n.d.). In charismatic leadership, being bold, courageous, and strong are important traits for leaders (see Conger & Kanungo, 1987; 1998). Strength demonstrates high positive correlations with the charisma and dedication dimensions (see Epitropaki & Martin, 2004; Offerman et al., 1994). Such leaders, therefore, may tend to use emotional and experientially (i.e., based on experience and actual events) based communication (e.g. see Bass, 1985; House, 1977). High experiential processors have shown to be more receptive to messages such as personal appeals and vivid individual cases (Rosenthal & Epstein, 2000 as cited in Epstein, 2003). Followers
with high experiential processing style, therefore, may prefer a strong and bold leader. It is, therefore, hypothesised that:

**Hypotheses 4:** A positive relationship between followers’ experiential information processing and their preference for leader strength will exist.

The tyranny dimension of ILTs contains, what could be reasonably described as, the less socially desirable traits of leaders such as *power-hungry, demanding, obnoxious* and *pushy* (Offerman et al., 1994). Leaders who adopt such traits can actually increase their influence over followers but via intimidation rather than respect (Cheng, Tracy, Foulsham, Kingston, & Henrich, 2013). These traits, therefore, have increased potential to elicit more negative vibes and emotions (e.g. fear, anxiety, worry) in followers resulting in lower levels of satisfaction and poorer leader-follower relationships (see Schyns & Schilling, 2013). In support, Fulk and Wendler (1982) found that leaders who were achievement-oriented in combination with the use of arbitrary and punitive behaviours increased anxiety in subordinates. Followers who experience more frequent and intense emotions, therefore, may not prefer such leaders as they would be likely to trigger more frequent and intense *negative* vibes and emotions compared to low experiential processors. It is, therefore, hypothesised that:

**Hypothesis 5:** A negative relationship between followers’ experiential information processing and their preference for leader tyranny will exist.
Sensitivity includes what could be considered as socially positive traits such as\textit{sympathetic, helpful, understanding, warm} and \textit{sincere} (Offerman et al., 1994). Such traits are intimately linked to the ability to empathise and understand the needs of others (Mahsud et al., 2010). It is also about knowing what others are feeling (Shamay-Tsoory, Aharon-Peretz, & Perry, 2009). Indeed, charismatic and transformational leadership theories state that leaders should adapt their style to the needs (task and emotional) of their followers (Avolio, 1999; Bass, 1985; Bass & Avolio, 1990; Conger & Kanungo, 1987; House, 1977). Thus, these theories require leaders to empathise with their followers to some degree. The development of positive and effective relationships, which includes empathy, is associated with the experiential system (Pacini & Epstein, 1999a). Specifically, high experiential processors tend to be more empathic and have higher quality social relationships (Norris & Epstein, 2011; Pacini & Epstein, 1999a). Followers with high experiential processing styles may, therefore, prefer sensitive leaders as they tend to engage in warmer and more supportive interactions as well as creating more socially positive (e.g. interpersonal trust) work environments. For example, leaders with low sensitivity would be more likely to create opportunities for conflict (e.g. see Xin & Pelled, 2003) resulting in negative vibes and emotions experienced for high experiential processors. Therefore, it is hypothesised that:

\textbf{Hypothesis 6:} \textit{A positive relationship between followers’ experiential information processing and their preference for leader sensitivity will exist.}

High experiential processors tend to be attracted to beauty and art (Norris & Epstein, 2011). Emotional experience is intimate to the aesthetic experience (Leder,
Belke, Oeberst, & Augustin, 2004). Followers who exhibit high experiential processing styles may, therefore, prefer, or be more receptive to, attractive leaders (e.g. physical attractiveness, stylish clothes and ‘classy’ behaviours). High experiential processors also tend to rely more on heuristic rules when making decisions (e.g. see Denes-Raj & Epstein, 1994; Denes-Raj, Epstein, & Cole, 1995; Kirkpatrick & Epstein, 1992; Pacini & Epstein, 1999a, 1999b). The intuitive tendencies of high experiential processors, therefore, may see them more likely to draw upon general leader stereotypes, which include an attractiveness element (see Offerman et al., 1994). Consequently, they may be more receptive to attractive leaders. It is, therefore, hypothesised:

**Hypothesis 7:** A positive relationship between followers’ experiential processing and their preference for leader attractiveness will exist.

**Hypothesis Development: Constructive Thinking and ILTs**

As the components of constructive thinking also influence the ways in which individuals attend to the world and assimilate information in a given moment (see Epstein, 2003; 2014) these may also relate to followers’ ILT preferences in a similar way to that described for information processing. Specifically, followers may develop preferences for leader traits that are congruent with their tendency to process information either constructively or destructively. For example, a follower who tends to processes criticism more constructively (i.e., criticism is less likely to impact on their self-worth) would be less likely to experience negative vibes and/or emotions. Consequently, they would be less cognitively motivated to develop a preference for leader traits and behaviours, which facilitate more sensitive or empathic interactions.
Given the large number of factors contributing to an individual’s constructive thinking (see Epstein, 2001), a specific theoretical basis for each factor is described below.

Individuals with low emotional coping tend to have automatic thoughts to disappointing outcomes, which result in feelings of distress and anxiety (Epstein, 2001). Individuals with low emotional coping may, therefore, develop preferences for traits in leaders, which serve to mitigate or avoid the destructive pathway tendencies that result in their experience of negative affect. It may, therefore, be that sensitive leaders, who display empathic behaviours, appeal to poor emotional copers as the former would help remove or minimise followers’ experience of distress and anxiety when they are under threat (e.g. high workloads, issues and problems, inter-employee conflict; see Fogarty, Curbow, Wingard, McDonnell, & Somerfield, 1999; Fulk & Wendler, 1982; Roter, 2000). In contrast, high emotional copers who process information more constructively (e.g., self-accepting; not dwelling on issues) would place less personal value on sensitive leaders due to better emotional coping skills.

Indeed, given that teams and organisations exist at the most fundamental level to perform in some way (e.g. financially, unit sales) some strong emotional copers may even prefer less sensitive leaders as they see them to be ‘getting the job done’ (i.e. task focused) without needing to focus on the perceived irrelevance of emotional states to achieving team/organisational performance (e.g. see Ehrhart & Klein, 2001 for descriptions from followers of task vs. relationship based leaders). Therefore, it can be hypothesised that:

**Hypothesis 8:** A negative relationship between followers’ emotional coping and their preference for leader sensitivity will exist.
Whilst sensitive leaders may help and support followers with low emotional coping to better deal with more general workplace threats to self-esteem, tyrannical leaders may be seen as a key threat source. Tyrannical leaders are described as conceited, power hungry, demanding, pushy and loud (Offerman et al., 1994). Followers with low emotional coping may be particularly sensitive to such leader due an increased probability of conflict, verbal abuse and non-supportive behaviours (see Schyns & Schilling, 2013). Some followers may also dwell on their negative interactions and experiences with tyrannical leaders. Such dwelling is a sub-dimension of emotional coping (see Table 1.3 and Epstein, 2001). In contrast, good emotional copers would be more likely to have constructive cognitions when faced with tyrannical leaders; where they are more thick-skinned to their negative behaviours. Some followers with good emotional coping may even perceive tyrannical leaders positively as they see such behaviours support task completion (see Ehrhart & Klein, 2001). Indeed, toxic leaders, who have similar traits to tyrannical leaders, at least on the face may appear adaptive in terms of high performance when achieving organisational goals (see Whicker, 1996). For example, in the TV show Hell’s Kitchen, Gordon Ramsay shouts at the contestants and is highly demanding of them in order to intimidate and motivate them to perform (van Kleef, Homan, Beersma, & van Knippenberg, 2010). In reality, though, the actions of toxic leaders can result in a net cost to the organisation in terms of the “carcasses of those who work for them” (Reed, 2004, p.68). These organisational outcomes may not always be immediately apparent to such followers given that these negative repercussions typically are long-term and less visible (e.g. employee turnover; commitment) than the short-term positive outcomes (e.g. a report being completed). Therefore, it is hypothesised that:
**Hypothesis 9:** A positive relationship between followers’ emotional coping and their preference for leader tyranny will exist.

Good behavioural copers tend to be optimistic, positive thinkers and deliberate in terms of hard work, planning and doing one’s best and of engaging in effective action (Epstein, 2001). Good behavioural copers also tend to be more extraverted (Epstein, 2001). The ILT dimensions which appear to be congruent with behavioural coping include **charisma** and **dedication**. Charismatic leaders are more likely to act in ways that inspire and motivate followers to do their best (e.g. see House, 1977). Highly dedicated leaders, with traits such as **hard-working** and **goal-orientation** would serve to support a follower as they would help them to remain on track and show commitment to the achievement of specified goals (e.g. see case study by Toegel, Liu, Coughlan, & Perrinjaquet, 2011). Therefore, it is hypothesised that:

**Hypotheses 10 & 11:** Positive relationships between followers’ behavioural coping and their preference for leader charisma and dedication will exist.

Naïve-optimism is a form of destructive thinking where individuals think in simplistic, stereotyped ways (Epstein, 2001). Naïve optimists are unrealistically optimistic and think the best is going to turn out despite evidence to the contrary. For example, they tend to endorse the belief that people should look happy no matter what they feel or that everyone can get ahead if they work hard. It is positive thinking at its most extreme but with the associated cost of failing to plan for the future (Epstein, 1998; 2001). As naïve optimists tend to endorse stereotyped ways of
thinking, they may conceptualise an ideal leader as culturally stereotypical – as one that is high on charisma and dedication (e.g. see Offermann et al., 1994). Therefore, naively optimistic followers may be particularly receptive to charismatic and dedicated leaders. In addition, such followers are also more likely to associate attractive leaders with other positive elements (i.e. halo effect; e.g. see Verhulst, Lodge, & Lavine, 2010). It was, therefore, hypothesised that:

**Hypotheses 12, 13 & 14:** Positive relationships between followers’ naïve-optimism and their preference for leader charisma, dedication and attractiveness will exist.

**Method**

**Participants**

A total of 352 currently employed employers who were not a manager/supervisor and were over the age of 18 volunteered to complete an online two-stage survey in return for confidential written developmental feedback on their constructive thinking. Of these individuals, 242 (68.8%) were female and 110 (31.3%) were male. The mean age for the overall group was 40.09 ($SD = 12.36$; range 18-78). Individuals had been in their current organisation for an average period of 70.07 months ($SD = 79.49$; median = 43.00). The mean age for females was 40.28 ($SD = 12.66$; range 18-78). The mean age for males was 39.67 ($SD = 11.69$; range 18-65). There were no significant differences between males and females on age, $t(350) = .425, p = .671$, or organisational tenure, (male $M = 65.73, SD = 6.32$; female $M = 72.03, SD = 5.46$), $t(349) = .754, p = .452$. 
Measures

Rational/Experiential Multimodel Inventory (REIm; Norris & Epstein, 2011). The REIm (Norris & Epstein, 2011; see Appendix A) is based on the CEST theoretical framework (Epstein, 1994; 2003) and is designed to measure the degree to which an individual prefers to use a rational or experiential processing style. It contains 42 items in total; 30 in the main Experiential scale and 12 in the Rational scale. Responses are made on a 5-point Likert scale indicating how much a statement is true of them (1 = Definitely False; 5 = Definitely True). The rational scale measures the degree an individual uses their rational system to process information (e.g. “I have a logical mind.”). Overall experiential processing is targeted via three sub-scales which contain 10 items each: (1) intuitive; (2) emotionality and; (3) imagination. The intuitive facet is designed to assess the ability and engagement of an individual’s use of intuitive judgements (e.g. “I often go by my instincts when deciding on a course of action”). The emotionality sub-scale assesses the intensity, frequency, duration, and favourable attitude towards strong affect (e.g. “My emotions don’t make much difference in my life”; reversed scored). The imagination sub-scales assesses the engagement in, and appreciation of, imagination, aesthetic productions, and imagery (e.g. “Sometimes I like to just sit back and watch things happen.”) Higher scores indicate a higher preference for processing on that particular dimension.

Constructive Thinking Inventory (CTI; Epstein, 2001). The CTI is a standardised test designed to measure the constructive and destructive automatic thoughts in the experiential system (Epstein, 2001). It contains 108 self-report items which include a global scale of constructive versus destructive automatic thinking
and six main dimensions. These dimensions were previously presented in Table 1. People respond on a 5-point Likert scale how much a statement is true of them (1 = Definitely False; 5 = Definitely True). Raw scores are entered into an electronic scoring programme (Epstein & PAR Staff, 2008) and converted to T-Scores based upon gender norms. Research demonstrates that the main scales demonstrate good/excellent reliability (Epstein, 2001).

Implicit Leadership Theory Questionnaire (Offerman et al., 1994) – adapted. The Implicit Leadership Theory Questionnaire (see Appendix B) is designed to measure an individual’s ILT. It was developed using a rigorous validation process in both a student and working population sample. In the original version, individuals are asked to rate on a 7-point Likert scale (1 = Not at all Characteristic; 7 = Extremely Characteristic) the degree to which 41 traits are characteristic of “a leader in a business setting”. Epitropaki and Martin (2004) found support for the evidence validity of this instrument in a variety of different samples. The target of focus (e.g. leader, supervisor, manager or ideal leader) influences the overall rating (e.g. Epitropaki & Martin, 2004; Offerman et al., 1994). Therefore, specifying the target for research is important. The measure was adapted to target “an ideal leader in a business setting” as it was theorised that a leader who matches a follower’s ideal leader as opposed to their general leader would be a more theoretically relevant target for congruence. In addition, a 10-point Likert Scale was utilised as it was theorised that some of the items may exhibit a floor effect (i.e. tyranny and masculinity) due to social desirability responding. This alternative scale has been utilised in previous research (see Koommoo-Welch, 2008). Higher scores are assumed to indicate a preference for a particular leader dimension.
**Procedure**

A website was developed to support and promote the research. This website provided information about the research in addition to a link to the survey. Participants were recruited via several methods. First, the website address along with some brief information was posted across various social media outlets inviting individuals to participate. Reposts of these invitations were encouraged to increase research visibility. Second, invitations were sent to those on industry body and university alumni e-mail distribution lists. Third, at the end of the survey, participants were encouraged to invite others to participate (snowball sampling). Fourth, printed media was posted at local outlets (e.g. libraries, shopping centres), and small printed leaflets prompting the research were also left at approximately 30 locations where verbal permission was provided (e.g. cafes, office receptions). The survey remained open for a period of about 6 weeks.

Common method bias has the potential to inflate or deflate any relationship found between variables because of the use of a single method for gathering the data (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In order to control for some of the effects of common-method bias, the survey was split into two stages. However, these issues may still remain and, therefore, were investigated via statistical means in the results. In stage one, participants completed the REIm (Norris & Epstein, 2011), the adapted Implicit Leadership Theory Questionnaire (Offerman et al., 1994) in addition to some demographics. An ID code was generated for each individual who completed stage one. After completing the first stage, participants were sent an email with their ID code two days later, which invited them to complete the second survey stage. The average time between the completion of stage one and stage two was 5.28 days ($SD = 3.88$, range 2 - 30). In stage two, participants completed the CTI
(Epstein, 2001) only. All participants had the option to receive confidential written feedback based upon their responses to the CTI (Epstein, 2001). This was offered as it was assumed this would a) increase the accuracy of responses (i.e. individuals want accurate feedback) and; b) improve the probability of participants completing both stages.

Results

Removal of defensive and inattentive participants

Two scales on the CTI (Epstein, 2001) exist to assess the validity of responses: (1) defensiveness and (2) validity. The defensiveness scale is used to assess the degree to which a person presents an overly positive image of oneself. The validity scale is used to assess careless responses and failure in comprehension. Epstein (2001) recommends that individuals scoring equal or less than -1.5 SD’s validity scale or equal to or more than 1.5 SD’s on the defensiveness scale should be removed. While this is in relation to the CTI measure, it was decided that individuals meeting these criteria would be removed (all responses) from the final data set as they may have demonstrated similar response patterns on other instruments. This resulted in 24 individuals being removed resulting in 328 individuals for analysis.

Common method bias

If a substantial amount of common method variance is present, either (a) a single factor will emerge from the component analysis, or (b) one general factor will account for the majority of the covariance among the variables (e.g., Andersson &
Bateman, 1997; Aulakh & Gencturk, 2000; Krishnan, Martin, & Noorderhaven, 2006; Podsakoff, et al., 2003; Podsakoff & Organ, 1986). Principal components analysis with direct oblimin rotation with SPSS v21.0 identified 51 components with Eigenvalues greater than 1, which accounted for 77.39% of the total variance. The first factor did not account for the majority of the variance (10.24%). Harman’s single-factor analysis which forces all items to load on a single component also indicated that a single factor (10.24%) did not account for the majority of the variance (Podsakoff et al., 2003). It was therefore concluded that no general factor arising from a common method is apparent.

**Exploratory Factor Analysis – ILT Measure**

As the current measure used an adapted version of the ILT measure and no prior assumptions or hypotheses were made regarding what factors would make up “ideal” leaders (see Finch & West, 1997), an exploratory factor analysis (EFA) rather than a confirmatory factor analysis (CFA), was undertaken to assess the underlying factor structure. A total of 17 people had not completed the adapted ILT measure. Therefore, the EFA uses a sample of 311 individuals. This equates to 7.59 subjects per item, which is higher than the general minimum rule of ‘five subjects-to-variables’ ratio (see Bentler & Chou, 1987; Bryant & Yarnold, 1995). In addition, a total of more than 300 participants is typically a good size for factor analysis (see Comrey & Lee, 1992). Factorability was undertaken through inspection of the correlations matrix among the 41 ILT items, the Kaiser-Meyer-Olkin measure of sampling adequacy, and Bartlett’s test of sphericity. All items correlated at least .3 with at least one other item, suggesting reasonable factorability. In addition, the
Kaiser-Meyer-Olkin measure of sampling adequacy was .861, above the recommended value of .6, and Bartlett’s test of sphericity was highly significant, $\chi^2(820) = 6186.49, p < .001$. The diagonals of the anti-image correlation matrix were also all over .5, supporting the inclusion of each item in the factor analysis. Given the sample size and overall indicators, factor analysis was conducted with all 41 items.

Principal components analysis was used given that the primary purpose was to identify and compute composite scores for each ILT factor (see Abdi & Williams, 2010). The Oblimin rotation was used as it was expected that the final factors would be correlated (Ferguson & Cox, 1993). During an iterative process involving several steps, a total of 18 items were eliminated because they did not contribute to a simple factor structure and failed to meet a minimum criteria of having a primary factor loading of .4 or above, and no cross-loading of .3 or above. While the Male item loaded on a component similar to the original tyranny factor identified by Offerman and colleagues (1994), a theoretical argument for its inclusion did not seem appropriate and, therefore, was removed. All items, except for Enthusiastic, loaded on the original factors identified by Offerman and colleagues (1994). The Enthusiastic item loaded on the dedication component but was retained, as it was conceptually similar to the other items. A principal-components factor analysis of the 22 items indicated five theoretically interpretable factors, which explained 61.89% of the variance. These five factors were sensitivity, tyranny, intelligence, attractiveness and dedication. All items had primary loadings over .5 and no items had cross-loadings above .3. The factor loading matrix for this final solution is presented in Table 3.1. Descriptive statistics, Cronbach’s alpha and Pearson’s correlation coefficients for all the scales are presented in Table 3.2. All scales showed
acceptable to good reliability. As the Masculinity, Strength and Charisma ILT dimensions did not emerge in the EFA, hypotheses 2, 4, 10 and 12 were not tested.

Means and standard deviations on each of the new ILT dimensions for males and females are also shown in Table 3.2.

Table 3.1.
Direct Oblimin Rotated Pattern Matrix of the 22-Item Adapted ILT Measure (n = 311)

<table>
<thead>
<tr>
<th>Items</th>
<th>Sensitivity</th>
<th>Tyranny</th>
<th>Intelligence</th>
<th>Attractiveness</th>
<th>Dedication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitive</td>
<td>.763</td>
<td>-.005</td>
<td>.047</td>
<td>-.018</td>
<td>.040</td>
</tr>
<tr>
<td>Compassionate</td>
<td>.763</td>
<td>-.145</td>
<td>-.080</td>
<td>.031</td>
<td>-.034</td>
</tr>
<tr>
<td>Sympathetic</td>
<td>.735</td>
<td>.011</td>
<td>-.100</td>
<td>-.112</td>
<td>.023</td>
</tr>
<tr>
<td>Warm</td>
<td>.730</td>
<td>.075</td>
<td>.149</td>
<td>-.060</td>
<td>-.023</td>
</tr>
<tr>
<td>Sincere</td>
<td>.527</td>
<td>-.086</td>
<td>.095</td>
<td>.101</td>
<td>-.273</td>
</tr>
<tr>
<td>Selfish</td>
<td>-.019</td>
<td>.831</td>
<td>-.034</td>
<td>.045</td>
<td>-.026</td>
</tr>
<tr>
<td>Manipulative</td>
<td>-.118</td>
<td>.814</td>
<td>.007</td>
<td>.124</td>
<td>-.035</td>
</tr>
<tr>
<td>Power-Hungry</td>
<td>.034</td>
<td>.777</td>
<td>-.112</td>
<td>.035</td>
<td>-.033</td>
</tr>
<tr>
<td>Conceited</td>
<td>-.118</td>
<td>.667</td>
<td>.040</td>
<td>-.160</td>
<td>.122</td>
</tr>
<tr>
<td>Loud</td>
<td>.119</td>
<td>.544</td>
<td>.111</td>
<td>-.153</td>
<td>-.032</td>
</tr>
<tr>
<td>Intellectual</td>
<td>-.094</td>
<td>-.080</td>
<td>.847</td>
<td>-.170</td>
<td>.126</td>
</tr>
<tr>
<td>Knowledgeable</td>
<td>-.032</td>
<td>-.072</td>
<td>.743</td>
<td>.009</td>
<td>-.121</td>
</tr>
<tr>
<td>Clever</td>
<td>.147</td>
<td>.172</td>
<td>.742</td>
<td>.021</td>
<td>-.027</td>
</tr>
<tr>
<td>Intelligent</td>
<td>.040</td>
<td>-.020</td>
<td>.739</td>
<td>.152</td>
<td>-.121</td>
</tr>
<tr>
<td>Well-dressed</td>
<td>-.019</td>
<td>-.030</td>
<td>.021</td>
<td>-.902</td>
<td>-.119</td>
</tr>
<tr>
<td>Well-groomed</td>
<td>-.032</td>
<td>-.038</td>
<td>-.066</td>
<td>-.897</td>
<td>-.162</td>
</tr>
<tr>
<td>Classy</td>
<td>.220</td>
<td>.133</td>
<td>.074</td>
<td>-.707</td>
<td>.082</td>
</tr>
<tr>
<td>Motivated</td>
<td>.063</td>
<td>.047</td>
<td>-.098</td>
<td>-.017</td>
<td>-.791</td>
</tr>
<tr>
<td>Dedicated</td>
<td>.080</td>
<td>-.041</td>
<td>.016</td>
<td>-.072</td>
<td>-.744</td>
</tr>
<tr>
<td>Goal-Oriented</td>
<td>-.103</td>
<td>.063</td>
<td>.009</td>
<td>-.160</td>
<td>-.728</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>.208</td>
<td>.024</td>
<td>.064</td>
<td>.082</td>
<td>-.660</td>
</tr>
<tr>
<td>Hard-working</td>
<td>-.103</td>
<td>-.066</td>
<td>.182</td>
<td>-.018</td>
<td>-.636</td>
</tr>
<tr>
<td>Variance Explained</td>
<td>23.95%</td>
<td>14.90%</td>
<td>9.74%</td>
<td>6.96%</td>
<td>6.34%</td>
</tr>
</tbody>
</table>

Note: Factor loadings above .300 are bolded to aid readability.
Table 3.2.
Means, Scale Reliabilities, and Inter-correlations of Scales on 22 Item Adapted ILT Measure

<table>
<thead>
<tr>
<th>Scale</th>
<th>Overall (n = 311)</th>
<th>Male (n = 91)</th>
<th>Female (n = 220)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sensitivity</td>
<td>7.83 (1.19)</td>
<td>7.88 (1.18)</td>
<td>7.81 (1.19)</td>
<td>-.12*</td>
<td>.23**</td>
<td>.27**</td>
<td>.43**</td>
<td></td>
</tr>
<tr>
<td>2. Tyranny</td>
<td>2.34 (1.23)</td>
<td>2.42 (1.27)</td>
<td>2.30 (1.22)</td>
<td>(.78)</td>
<td>.01</td>
<td>.26**</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>3. Intelligence</td>
<td>7.95 (1.27)</td>
<td>8.12 (1.03)</td>
<td>7.97 (1.12)</td>
<td>(.79)</td>
<td>.20**</td>
<td>.43**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Attractiveness</td>
<td>6.13 (2.15)</td>
<td>5.83 (2.33)</td>
<td>6.25 (2.06)</td>
<td>(.85)</td>
<td>.33**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Dedication</td>
<td>8.65 (.93)</td>
<td>8.44 (.99)</td>
<td>8.74 (.87)</td>
<td>(.80)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Cronbach’s alpha reliabilities are shown on the diagonal in brackets. All inter-correlations use the overall group.
*Indicates p < .05; **Indicates p < .01
Data screening & assumption checking

Due to the potential for outliers to influence inferential statistical techniques (Osborne & Overbay, 2004), prior to inferential analyses, data for all variables were checked. Any data point that was more than 1.5 times the Interquartile range (IQR) above or below the first or above the third quartile was classified as an outlier (see Tukey, 1977). In order to maintain statistical power, outliers were recoded (truncated) to the nearest highest/lowest non-outlier score as this method retains the relative order of scores but reduces distribution issues (see Osborne & Overbay, 2004). A total of 124 outliers across all scales were recoded. No more than 17 outliers on any single scale were recoded ($M = 3.9$ items per factor recoded). While some minor normality issues remained on some of the scales, the inferential statistics used are generally quite robust against this (Tabachnick & Fidell, 2007). The tyranny dimension, however, did violate the normality assumption strongly with a strong positive skew. Therefore, analyses including this dimension used non-parametric procedures (Allen & Bennett, 2010). In order to assess linearity and homoscedasticity, bivariate scatter plots were obtained for the remaining variables. These indicated the assumptions of both linearity and homoscedasticity had been met.

Descriptive Statistics

Descriptive statistics for the REIm at both overall group and gender are shown in Table 3.3. An independent samples $t$-test was used to compare mean rational and experiential processing style between males ($n = 100$) and females ($n = 228$). Levene’s test was significant for the rational factor ($p = .014$) indicating equal
variance assumption had been violated and, thus, an adapted $t$-test was used. The Levene’s test for all other factors did not reach significance. All dimensions except imagination showed significant differences between males and females in directions, which were aligned with the research by Norris and Epstein (2011). Males showed higher rational processing than females, $t(163.159) = 3.029, p = .003$. In contrast, females showed higher experiential processing, $t(326) = 4.639, p < .001$, intuitive processing, $t(326) = 2.142, p = .033$, and emotionality, $t(326) = 5.962, p < .001$, than males. No significant difference was observed between males and females on the imagination sub-scale, $t(326) = 1.694$, although the difference did approach significance, $p = .091$.

Table 3.3. Descriptive statistics on REIm factors for overall group and as a factor of gender

<table>
<thead>
<tr>
<th>REIm Scale</th>
<th>Overall $(n = 328)$</th>
<th>Male $(n = 100)$</th>
<th>Female $(n = 228)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rational</td>
<td>3.88 (.55)</td>
<td>4.03 (.61)</td>
<td>3.82 (.51)</td>
</tr>
<tr>
<td>2. Experiential</td>
<td>3.48 (.38)</td>
<td>3.34 (.35)</td>
<td>3.55 (.38)</td>
</tr>
<tr>
<td>3. Intuition</td>
<td>3.51 (.50)</td>
<td>3.42 (.48)</td>
<td>3.54 (.50)</td>
</tr>
<tr>
<td>4. Emotionality</td>
<td>3.32 (.56)</td>
<td>3.06 (.51)</td>
<td>3.44 (.54)</td>
</tr>
<tr>
<td>5. Imagination</td>
<td>3.63 (.55)</td>
<td>3.55 (.52)</td>
<td>3.66 (.56)</td>
</tr>
</tbody>
</table>

Except for tyranny, an independent samples $t$-test was used to compare the means between males ($n = 91$) and females ($n = 220$) on each ILT factor (see Table 3.2). No significant differences were observed on sensitivity, $t(309) = .484, p = .629$, intelligence, $t(309) = 1.14, p = .255$, or attractiveness, $t(309) = 1.580, p = .115$. However, females showed a significantly higher score than males on dedication, $t(309) = 2.717, p = .007$. There was no significant difference on tyranny between
males (Mean Rank = 162.07) and females (Mean Rank = 153.49) as indicated by a Mann-Whitney U-test, \( U = 9458.00, z = .767, p = .433 \).

Hypothesis Testing

While structural equation modelling (SEM) is a powerful and flexible statistical technique due to its ability to deal with a system of regression equations as opposed to a single or multiple regression technique, it is recommended that the sample size be more than 25 times the number of parameters to be estimate (see Nachtingall, Kroehne, Funke, & Steyer, 2003). It was estimated that the number of parameters that would have to be specified in a SEM model for the current research would be 19. Consequently, a sample of 475 would be recommended. As the current sample size does not meet this sample size requirement, a decision was made to use correlations and Hierarchical Multiple Regression for hypothesis testing.

Bivariate Pearson’s product-movement correlation coefficients were calculated between the rational and experiential scales with the four normally distributed ILT dimensions: sensitivity, intelligence, attractiveness and dedication. Due to the non-normal data, Spearman’s rho was used to assess the hypothesised relationships with tyranny. Table 3.4 presents correlations for demographics, REIm and CTI factors, against ILT factors.
Table 3.4. Correlations between REIm (n = 311), CTI (n = 273) and ILT Dimensions

<table>
<thead>
<tr>
<th>Demographic</th>
<th>ILT Dimensions</th>
<th>REIm and ILT Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender &amp;</td>
<td>Sensitivity</td>
<td>Tyranny</td>
</tr>
<tr>
<td>Male = 0 and Female = 1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.13*</td>
<td>-.04</td>
</tr>
<tr>
<td>REIm</td>
<td>Rational</td>
<td>-.02</td>
</tr>
<tr>
<td></td>
<td>Experiential</td>
<td>.33**</td>
</tr>
<tr>
<td>CTI</td>
<td>Global Constructive Thinking</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Emotional Coping</td>
<td>-.07</td>
</tr>
<tr>
<td></td>
<td>Behavioural Coping</td>
<td>.19**</td>
</tr>
<tr>
<td></td>
<td>Personal Superstitious Thinking</td>
<td>-.08</td>
</tr>
<tr>
<td></td>
<td>Categorical Thinking</td>
<td>-.10</td>
</tr>
<tr>
<td></td>
<td>Esoteric Thinking</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>Naive-Optimism</td>
<td>.10</td>
</tr>
</tbody>
</table>

Notes: *Indicates p < .05; **Indicates p < .01; †Relationships indicated by Spearman’s rho.

REIm and ILT Relationships

As predicted by hypothesis 1, a significant positive relationship was observed between rational processing and intelligence. No other significant correlations for rational processing emerged with the remaining four ILT dimensions. Hypothesis 3 was supported as shown by the significant positive relationship between experiential processing and dedication. Hypothesis 5 was not supported as indicated by the non-significant correlations between experiential processing and tyranny. Hypothesis 6 was supported as demonstrated by the significant positive relationship between experiential processing and sensitivity. Hypothesis 7 was supported as demonstrated by the significant positive relationship between the experiential system and attractiveness.
CTI and ILT Relationships

There were 38 individuals who did not complete stage two. Therefore, analyses made using the CTI are based on a sample of 273. In order to test the hypotheses concerning the CTI and ILT, bivariate Pearson’s product-movement correlation coefficients and Spearman’s rho were calculated and are also shown in Table 3.4. Surprisingly hypothesis 8, which predicted a significant negative relationship between emotional coping and sensitivity, was not supported. Hypothesis 9 was not supported as indicated by the non-significant positive correlation between emotional coping and tyranny. Hypothesis 11 was supported as shown by the significant positive relationship between behavioural coping and dedication. Hypothesis 13 was supported by the significant positive relationship between naïve-optimism and dedication. Hypothesis 14 is supported as shown by the significant positive relationship between naïve-optimism and attractiveness.

Non-hypothesised relationships

A number of other significant relationships between the CTI main scales and ILT dimensions, which were not specifically hypothesised, were also observed. First, there was a significant positive correlation between behavioural coping and sensitivity. Second, a significant positive correlation emerged between naïve-optimism and Tyranny. Third, a surprising but theoretically coherent, negative relationship was observed between global constructive thinking and intelligence. Fourth, a significant positive relationship between categorical thinking and attractiveness. Fifth, a significant negative relationship was observed between emotional coping and intelligence. Finally, a significant positive relationships were observed between esoteric thinking and attractiveness.
Hierarchical Regression Analyses

To further examine the relationships between constructive thinking, information processing with ILT dimensions, hierarchical multiple regression analyses were conducted (Thompson, 1978). Bivariate scatter plots were obtained to assess and satisfy linearity and homoscedasticity for all regressions. The variables were all demonstrated to be linearly related. Residual scatter plots also demonstrated that the assumption of homoscedasticity had been satisfied. The correlations of the variables were assessed for multicollinearity but none was detected as all correlations were below 0.9 (Tabachnick & Fidell, 2007). All analyses are based upon *n* = 273. A dummy variable was used to assess the effects of gender in the model\(^1\).

Thinking Styles and ILT Trait of Sensitivity

With Sensitivity as the dependent variable, a three-step hierarchical multiple regression was conducted. Age and gender were entered in the first step. Experiential processing was added in the second step. In step two, Behavioural coping was entered. This is because one of the sub-scales for Behavioural coping is Conscientiousness, which theoretically could be considered as congruent with preferences of sensitivity in leaders. For example, one of the items on this scale is “When I realise that I have made a mistake, I usually take immediate action to correct it”. Such actions indicate a degree of sensitivity to things occurring in their environment. The significant positive correlation between behavioural coping and sensitivity provides evidence for this. Regression statistics are shown in Table 3.5.

---

\(^1\)Male = 0 and Female = 1.
Table 3.5.
Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr^2) For Each Predictor Predicting Sensitivity Trait Preference

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>sr^2</th>
<th>R</th>
<th>R^2</th>
<th>ΔR^2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.096</td>
<td>-.037</td>
<td>-2.622</td>
<td>.001</td>
<td>.144</td>
<td>.021</td>
<td>.021^</td>
</tr>
<tr>
<td>Age</td>
<td>.013</td>
<td>.140</td>
<td>2.320*</td>
<td>.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.309</td>
<td>-.120</td>
<td>-2.038*</td>
<td>.013</td>
<td>.356</td>
<td>.126</td>
<td>.106**</td>
</tr>
<tr>
<td>Age</td>
<td>.013</td>
<td>.142</td>
<td>2.493*</td>
<td>.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiential Processing</td>
<td>.997</td>
<td>.335</td>
<td>5.706**</td>
<td>.106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.341</td>
<td>-.132</td>
<td>-2.284*</td>
<td>.016</td>
<td>.399</td>
<td>.159</td>
<td>.033**</td>
</tr>
<tr>
<td>Age</td>
<td>.011</td>
<td>.113</td>
<td>1.989*</td>
<td>.012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiential Processing</td>
<td>1.014</td>
<td>.341</td>
<td>5.901**</td>
<td>.109</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Coping</td>
<td>.026</td>
<td>.184</td>
<td>3.226**</td>
<td>.033</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates p < .05; **Indicates p < .01; ^Approaching significant p < .10

The overall regression model at step 1 only approached significance, R^2 = .21, F(2,270) = 2.857, p = .059. However, Age alone significantly contributed 2.0% to the regression model at this step. The introduction of Experiential processing in step 2 explained an additional 10.6% in Sensitivity preference variation. This increase in R^2 was significant, F(3,269) = 12.979, p < .001. Age at this step remained a significant predictor. Gender though also emerged as a significant predictor. The introduction of Behavioural Coping at step 3 further contributed a significant 3.3% in variance explained in Sensitivity trait preference, F(4,268) = 12.676, p < .001.

Gender, Age, Experiential Processing, and Behavioural coping all were significant predictors of Sensitivity preference. The most important predictor in this model was Experiential Processing, which independently explained 10.9%. This was followed by Behavioural coping which independently accounted for 3.3%. Overall, the four independent variables accounted for 15.9% of the variance in Sensitivity preference.
Thinking Styles and ILT Trait of Tyranny

With Tyranny as the dependent variable, a two-step hierarchical multiple regression was conducted. Age and gender were entered in the first step. In step two, Naïve Optimism was entered. Theoretically, naïve optimists may associate tyrannical behaviours as being adaptive for achieving team and organisational goals (see discussion for more detail). The significant positive correlation between Naïve Optimism and Tyranny observed above provides evidence for this. Regression statistics are shown in Table 3.5.

Table 3.5. Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations ($sr^2$) For Each Predictor Predicting Tyranny Trait Preference

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>$sr^2$</th>
<th>R</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.070</td>
<td>-.026</td>
<td>-.428</td>
<td>.001</td>
<td>.150</td>
<td>.022</td>
<td>.022*</td>
</tr>
<tr>
<td>Age</td>
<td>-.014</td>
<td>.006</td>
<td>-.147*</td>
<td>.022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.087</td>
<td>-.032</td>
<td>-.543</td>
<td>.001</td>
<td>.265</td>
<td>.070</td>
<td>.048**</td>
</tr>
<tr>
<td>Age</td>
<td>-.013</td>
<td>-.133</td>
<td>-2.251*</td>
<td>.018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naïve Optimism</td>
<td>.026</td>
<td>.219</td>
<td>3.724**</td>
<td>.048</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates $p < .05$; **Indicates $p < .01$; ^Approaching significant $p < .10$

The overall regression model at step 1 was significant, $R^2 = .21$, $F(2,270) = 3.096$, $p = .047$, although age alone (2.2%) significantly to the regression model at this step. The introduction of Experiential processing in step 2 explained an additional 4.8% in Sensitivity preference variation. This increase in $R^2$ was significant, $F(3,269) = 6.786$, $p < .001$. With all three independent variables entered, Age and Naïve Optimism were the only significant predictors of Tyranny preference. The most important predictor in this model was Naïve Optimism, which independently explained 4.8%. Overall, the three independent variables accounted for 7.0% of the variance in Tyranny preference.
Thinking Styles and ILT Trait of Intelligence

With Intelligence as the dependent variable, a three step hierarchical multiple regression was conducted. Age and gender were entered in the first step. Rational processing was added in the step 2. In step 3, Emotional Coping was entered. Theoretically, intelligent leaders may be seen by poor emotional copers, as being able to compensate for their increased tendency to interpret issues and problems via destructive cognitive pathways. Rational thinking, which itself is associated with intelligence (Epstein, 2001) is positively associated with leader effectiveness (Cerni et al., 2010), planning and problem solving (Epstein, 2001). Given that intelligence was found to have negative correlations with neuroticism (Ackerman & Heggestad, 1997; Furnham, Forde, & Cotter, 1998; Zeidner & Matthews, 2000), it is plausible to suggest that intelligent leaders may be appreciated by followers with poorer emotional coping as they help them to identify opportunities to minimise or mitigate current and future workplace issues. Therefore, there is a theoretical rational to enter emotional coping at this step. Even though Global Constructive Thinking emerged as having a significant negative relationship, this was not entered as it would violate the assumption of singularity (i.e. Global Constructive Thinking is, in part, made up from items on Emotional Coping; Tabachnick & Fidell, 2007). Regression statistics are shown in Table 3.7.
Table 3.7
*Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr\textsuperscript{2}) For Each Predictor Predicting Intelligence Trait Preference*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>sr\textsuperscript{2}</th>
<th>R</th>
<th>R\textsuperscript{2}</th>
<th>ΔR\textsuperscript{2}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.157</td>
<td>-.056</td>
<td>-.924</td>
<td>.003</td>
<td></td>
<td></td>
<td>.023*</td>
</tr>
<tr>
<td>Age</td>
<td>-.014</td>
<td>-.139</td>
<td>-2.312*</td>
<td>.019</td>
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<td></td>
<td></td>
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<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.003</td>
<td>-.001</td>
<td>-.016</td>
<td>.000</td>
<td></td>
<td></td>
<td>.012**</td>
</tr>
<tr>
<td>Age</td>
<td>-.009</td>
<td>-.086</td>
<td>-1.511</td>
<td>.007</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rational Processing</td>
<td>.824</td>
<td>.367</td>
<td>6.386**</td>
<td>.129</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.018</td>
<td>-.006</td>
<td>-.119</td>
<td>.000</td>
<td></td>
<td></td>
<td>.045</td>
</tr>
<tr>
<td>Age</td>
<td>.004</td>
<td>.041</td>
<td>.703</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rational Processing</td>
<td>.896</td>
<td>.399</td>
<td>7.303**</td>
<td>.150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Coping</td>
<td>-.043</td>
<td>-.330</td>
<td>-5.749**</td>
<td>.093</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates p < .05; **Indicates p < .01; ˄Approaching significant p < .10

The overall regression model at step 1 was significant, \(F(2,270) = 3.143, p = .045\). However, Age alone significantly contributed 1.9% to the regression model at this step. The introduction of Rational Processing in step 2 explained an additional 12.9% in Intelligence preference variation. This increase in \(R^2\) was significant, \(F(3,269) = 15.996, p < .001\). Age at this step though became non-significant (\(p = .132\)). The introduction of Emotional Coping at step 3 further contributed a significant 9.3% in variance explained in Intelligence trait preference, \(F(4,268) = 21.690, p < .001\). In this final model, only Rational Processing and Emotional coping remained significant predictors of Intelligence preference. The most important predictor in this model was Rational Processing, which independently explained 15.0%. Overall, the four independent variables accounted for 24.5% of the variance in Intelligence preference.
Thinking Styles and ILT Trait of Attractiveness

With Attractiveness as the dependent variable, a two-step hierarchical multiple regression was conducted. Age and Gender were entered in the first step. Experiential processing and Naïve Optimism were added in the second step as both are theorised to contribute to Attractiveness trait preference. Regression statistics are shown in Table 3.8.

### Table 3.8.

<table>
<thead>
<tr>
<th>Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr²) For Each Predictor Predicting Attractiveness Trait Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Step 1</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Step 2</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Experiential Processing</td>
</tr>
<tr>
<td>Naïve Optimism</td>
</tr>
</tbody>
</table>

*Indicates p < .05; **Indicates p < .01; ^ Approaching significant p < .10

At Step 1, the overall regression model at step 1 was not significant, \( F(2,270) = 1.634, p = .197 \). The overall regression model though did emerge as significant at step 2 with the introduction of Experiential Processing and Naïve Optimism adding a significant increase of 5.4% in Attractiveness variance explained in the overall model \( F(4,268) = 21.563, p < .001 \). However, Naïve Optimism was the only significant contributor in the final model, explaining 4.6% of the variance in Attractiveness preference. Overall, the four independent variables accounted for 6.6% of the variance of Attractiveness.
Thinking Styles and ILT Trait of Dedication

With Dedication as the dependent variable, a three step hierarchical multiple regression was conducted. Age and Gender were entered in step 1. Experiential processing was added in step 2 as, in addition to theoretically related to Dedication, it emerged as the strongest correlation above. In step 3, Behavioural Coping and Naïve Optimism were entered to see if these would provide additional explanation beyond Experiential Processing alone. Regression statistics are shown in Table 3.9.

Table 3.9.
Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr²) For Each Predictor Predicting Dedication Trait Preference

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>sr²</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
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<td>Step 1</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>2.993</td>
<td>.032*</td>
<td>.194</td>
<td>.038</td>
<td>.038**</td>
</tr>
<tr>
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<td>1.209</td>
<td>.005</td>
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<tr>
<td>Step 2</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.247</td>
<td>.119</td>
<td>1.985</td>
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<td>.306</td>
<td>.093</td>
<td>.056**</td>
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<td>.005</td>
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<td>.056*</td>
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<tr>
<td>Step 3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.235</td>
<td>.113</td>
<td>1.893</td>
<td>.012^</td>
<td>.331</td>
<td>.110</td>
<td>.016^</td>
</tr>
<tr>
<td>Age</td>
<td>.005</td>
<td>.063</td>
<td>1.070</td>
<td>.004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiential Processing</td>
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<td>.236</td>
<td>3.909</td>
<td>.051**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naïve Optimism</td>
<td>.011</td>
<td>.096</td>
<td>1.589</td>
<td>.008</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Coping</td>
<td>.006</td>
<td>.067</td>
<td>1.113</td>
<td>.004</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Indicates p < .05; **Indicates p < .01; ^Approaching significant p < .10

The overall regression model at step 1 was significant, \( F(2,270) = 5.283, p = .006 \). Gender alone significantly contributed 3.2% to the regression model at this step. The introduction of Experiential processing in step 2 explained an additional and significant 5.6% in Dedication preference variation, \( F(3,269) = 9.247, p < .001 \). Gender at this step also remained a significant contributor. The introduction of Naïve Optimism and Behavioural Coping at step 3 contributed a non-significant increase of 1.6% of variance explained. However, the overall regression model remained
significant, $F(5,267) = 6.586$, $p < .001$. The only significant predictor in the final model was Experiential processing, which independently explained 5.1%. However, Gender did approach significance ($p = .059$). Overall, the five independent variables accounted for 11.0% of the variance in Dedication preference.

**Discussion**

Using the CEST framework (Epstein, 2003; 2014), the theory that followers develop ideal ILTs that are congruent with their information processing style and the degree to which they think constructively was tested. The results observed in this study generally support this. Theoretical and practical implications are considered.

**Information Processing Style – ILT Congruence**

It was assumed that individuals seek to think, behave and communicate in ways which are congruent with their preferred information style and that when they are required to communicate outside of their preferred style, they are likely to experience negative vibes and emotions (see Berne, 1961; McCann & Higgins, 1988). Over time followers would learn to associate particular leader traits that have contributed to interactions and working environments that are congruent or incongruent with how the follower tends to processes information. Specifically, followers come to develop preferences for leader traits that are congruent with either the emotionally driven experiential system or the affect-free rational system. What is important to recognise here is that, due to the independence of the two systems and different information processing rules, traits that are congruent with one system may not be for the other. Thus, congruence is based upon the rules for each system.
As expected, high rational processors tended to prefer intelligent leaders – a non-affect laden ILT trait. Particularly important was the finding that the rational system was not significantly related to the more affect laden ILT factors (e.g. sensitivity, attractiveness, dedication). Drawing upon the congruence argument, followers with a strong rational processing style prefer the behaviours intelligent leaders tend to exhibit. Specifically, such leaders are likely to engage in familiar behaviours for the follower such as providing a logical rationale to the follower for their decisions and actions. Such behaviours facilitate communication and understanding for the follower as they are aligned with the processing preferences of these followers. Indeed previous research demonstrates that the more aligned a message is to an individual’s processing style, the more receptive that individual will be to that message (see Rosenthal & Epstein, 2000 as cited in Epstein, 2003). In addition, intelligent leaders are likely to facilitate work climates that are congruent for highly rational followers. For example, intelligent leaders are likely to provide more time and space to followers in general to consider things. Such behaviours and climates that intelligent leaders are likely to exhibit and bring about are likely to be aligned to followers with a high rational processing style.

As would be expected, ILT dimensions that appear to generally incorporate affective components such as sensitivity and dedication were more likely to be preferred by followers with a higher experiential system processing style. Sensitive leaders are likely to engage in more empathic leader-follower interactions and facilitate more positive participatory work climates (e.g. see Cummings et al., 2010; Kellett, Humphrey, & Sleeth, 2002; Rotemberg & Saloner, 1993). Experiential processing is associated with empathy and positive relationships (Pacini & Epstein,
suggesting that followers with high experiential processing styles will tend to prefer a working relationship and climate that is relationship-focused.

Similarly, the traits of dedicated leaders appear more congruent with followers who demonstrate a high experiential processing style. This suggests that dedicated leaders, with their higher levels of motivation and enthusiasm, appeal to the emotional nature of the experiential system. Indeed, individuals with a high need for affect tend to be more receptive to persuasive messages that are affect-based (Haddock, Maio, Arnold, & Huskinson, 2008). In addition, the focus on goals in dedicated leaders may help them to be future focused, which would appeal to the imaginative tendencies of high experiential processors. Specifically dedicated leaders appeal to followers’ imagination by promoting a positive and better state of reality that currently does not exist. It is important to note that transformational and charismatic leadership theories have been conceptualised as appealing to follower emotions (e.g. Uhl-Bien et al., 2014). Given that transformational and charismatic leadership theories incorporate similar traits to those on the sensitivity and dedication dimensions, the current research suggests that transformational and charismatic leaders would appeal more strongly to followers with experiential processing styles. Future research, therefore, may want to test this proposition.

Given that tyrannical leaders have the potential to trigger negative affect in followers (Schyns & Schilling, 2013) it was a little surprising that no relationships between experiential thinking and tyranny emerged. It is not immediately clear as to why no relationship may exist although two explanations are proposed. First, the original measure of tyranny (see Offerman et al., 1994) included traits more focused on domination and being demanding on others. These appear to be more targeted towards what the leader expects from their followers. The EFA conducted in the
current research dropped most of these types of items, as they did not contribute to a simple factor structure. Therefore, tyranny here may not actually reflect tyrannical behaviours per se but instead is more aligned with leader self-interest/superiority (e.g. selfish, conceited, power-hungry). Consequently, the impact of such behaviours may be less on followers than traits such as domineering and demanding. Second, it may be due to the constructiveness of the processing in the experiential system around emotions rather than a specific preference for experiential processing. This is because preferences for the experiential system does not necessary mean that the content of the processing in this system is adaptive. Thus, relationships are cancelled out due to some followers’ processing information about a tyrannical leader more adaptively but others more destructively.

As expected, followers who exhibit a high experiential processing style tended to prefer attractive leaders. High experiential processors tend to rely more on heuristic rules when making decisions (e.g. see Denes-Raj & Epstein, 1994; Denes-Raj et al., 1995; Kirkpatrick & Epstein, 1992; Pacini & Epstein, 1999a, 1999b). All things being equal, attractiveness tends to be used as a heuristic when rating others (Verhulst et al., 2010). Consequently, physically attractive and stylish leaders are likely to appeal to the processing tendencies of followers with high experiential processing as these individuals tend to be more open to, and influenced by aesthetics (Leder et al., 2004; Norris & Epstein, 2011). The regression analyses though suggests that experiential processing is less important than Naïve Optimism for predicting attractiveness preferences. As Naïve optimism is a constructive thinking dimension though, this distinction is discussed in more detail in the following subsection.
Constructive Thinking – ILT Congruence

The current study also provides evidence that followers seek traits in leaders that are congruent with their own constructive thinking. According to CEST, individuals have tendencies to process incoming information constructively or destructively which have subsequent implications on the emotions experienced and evaluations of the situation and target objects (Epstein, 1998; 2001). Such tendencies are, therefore, likely to influence how people process information regarding the leader, which would subsequently influence their preferences for leader traits.

Various elements of constructive and destructive processing tendencies were tested in the current research as operationalised in the CTI (Epstein, 2001).

There was limited evidence to suggest that poor emotional copers would seek sensitive leaders – a potentially complementary trait. This may appear somewhat inconsistent with the research conducted by Keller (1999) who found that neurotic students preferred sensitive leaders. Exploratory analyses (see Appendix E), though, did suggest that males who are poor emotional copers, especially those who were sensitive to disappointment, rejection, criticism and disapproval, did seek a sensitive leader. These differences may be due to general tendency for males to be more individualistic and competitive (Eagly & Carli, 2007; Newman, Groom, Handelman, & Pennebaker, 2008), the expectation that males should be strong, to not express their feelings or emotions (e.g. see Johnson, Murphy, Zewdie, & Reichard, 2008; Plant, Hyde, Keltner, & Devine, 2000; Williams & Best, 1990) and the tendency to define themselves in terms of their job (e.g. being the “bread-winner”; Eagly & Wood, 1991). These would place strong perceived demands on males in the work context.
For males, therefore, a non-sensitive leader would likely create more direct and indirect opportunities for a male follower to engage their destructive pathway tendencies and consequently experience negative vibes and emotions. For example, a non-sensitive leader may engage in less empathic interactions and create a more task-focused work-climate, both of which may be interpreted as reflecting a negative self-concept. They may even feel trapped in such roles due to the restrictive male role expectations and worries about loss of financial security for themselves and family if they were to leave – a version of learned helplessness (see Dweck, 1975; Seligman & Maier, 1967). In contrast, good emotional copers, who tend to value themselves and are less sensitive to criticism and disapproval, (Epstein, 2001) would likely be less affected. Indeed, in some cases, some males with good emotional coping may even associate sensitive leaders with actually undermining the achievement of work goals as they may see the actions of sensitive leaders to be unnecessary to the achievement of team/organisational goals.

While it may be surprising to observe good emotional copers tend to prefer less intelligent leaders, it aligns with the notion of congruence. Theoretically, intelligent leaders would likely be seen by poor emotional copers as being able to compensate for their increased tendency to interpret issues and problems via destructive cognitive pathways. Rational thinking, which itself is associated with intelligence (Epstein, 2001) is positively associated with leader effectiveness (Cerni et al., 2010), planning and problem solving (Epstein, 2001). Given that intelligence was found to have negative correlations with neuroticism (Ackerman & Heggestad, 1997; Furnham et al., 1998; Zeidner & Matthews, 2000), it is plausible to suggest that intelligent leaders may be appreciated by followers with poor emotional coping as they help them to identify opportunities to minimise or mitigate current and future
workplace issues. Rational leaders, therefore, would tend to reduce the experience of issues, and the length of time they remain cognitively prevalent, for such followers. In addition, the intelligent leader also fulfils these followers’ needs for a stable self-concept and for relating to others. However, their need for self-enhancement may remain frustrated.

The second key constructive thinking dimension is behavioural coping (Epstein, 2001). Followers with good behavioural coping appear to prefer dedicated leaders. Good behavioural copers tend to engage in planning, positive thinking and taking effective action (Epstein, 2001). It is, thus, an action-oriented dimension of constructive thinking. A leader who does not, appear motivated, hard-working or sets goals is, therefore, likely to frustrate the action oriented processing tendencies of a follower with high behavioural coping. Thus, the tendencies of the non-dedicated leader are incongruent with the cognitive tendencies of followers with high behavioural coping. Consequently, over time, they would be likely to attribute the lack of such leader behaviours with their experiences of frustration and in more extreme cases anger at the perceived lack of direction and action by the leader.

While not specifically hypothesised, the finding that good behavioural copers tended to prefer sensitive leaders could be considered as theoretically aligned with the notion of congruency, in particular, the congruence around the conscientiousness sub-scale. For example, one of the items on this sub-scale is “When I realise that I have made a mistake, I usually take immediate action to correct it”. Such actions indicate that high behavioural thinkers have a degree of sensitivity to things occurring in their environment. Indeed, behavioural coping is concerned with how effectively individuals overcome issues in the external world (Epstein, 1998; 2001). A sensitive leader may help in this regard. Specifically, they may be sensitive to such
a follower’s positive intentions and behaviours and, thus, be more likely to support them. In support, research has found that when leaders and followers show similar levels of conscientiousness, followers tend to engage in increased in-role behaviours (Deluga, 1998). In addition, when leaders provide support, followers tend to show increased performance in a variety of areas (e.g. Cheung & Wong, 2011; Chiaburu, Smith, Wang, & Zimmerman, 2014).

It is important to note that the finding of a positive relationship between behavioural coping and sensitivity does not appear consistent with Keller’s (1999) research, which found no significant relationship between conscientiousness and sensitivity. There are two possibilities why this may be the case. First, as per CEST, there are two self-concepts that exist independently in each system (Epstein, 2003). Thus, while these may be somewhat similar in certain areas, they do not necessarily align. For example, an individual can report being conscientious, and believe they are, but behavioural measures suggest otherwise (e.g. see the interpretation of Sprirrison & Gordy [1993] by Epstein, 2001). In support, the relationships observed in previous research between conscientiousness as measured by the CTI (Epstein, 2001) and that in the NEO (Costa & McCrae, 1989; 1992) are not so large to conclude they are measuring the same thing ($r = .67$; see Epstein, 1992). Second, Keller (1999) used a student sample and, as such would likely have less experience of business leaders that the current research sample of currently employed individuals; indeed, the average age of the current sample was over twice that reported in Keller’s research. The increased direct and indirect experiences with business leaders that highly conscientiousness individuals in the current sample would have may have contributed, over time, to stronger associations or beliefs that sensitive leaders support, or are congruent with, their tendency to think in terms of
hard work, planning, and doing one's best (see Epstein, 2001). Indeed, research shows that caring individuals also tend to be more conscientious (Epstein, 1983).

As expected, naively optimistic followers were more likely to prefer dedicated and attractive leaders. Naïve optimists tend to endorse stereotyped ways of thinking (Epstein, 2001) and thus may conceptualise an ideal leader as a culturally stereotypical leader; as one who is motivated, goal focused and dedicated (e.g. see Offermann et al., 1994) amongst other traits. Dedicated leaders, therefore, may be seen to engage in interactions and create work-environments, which are congruent with naively optimistic followers. This may also explain why naïve optimists prefer attractive leaders. Specifically, naïvely optimistic followers may be more likely to uncritically endorse the heuristic that attractiveness is an element of an effective leader (e.g. see Epstein et al., 1996; Norris & Epstein, 2011; Pacini & Epstein, 1999b). This because Naïve Optimism indicates that such heuristic reliance will be unrealistic to a situation, which differs to experiential processing that encompasses a more general preference for relying on heuristics (Epstein, 2001; Norris & Epstein, 2011). Consequently, the naively optimistic follower may be more likely to unquestionably use attractiveness as a heuristic when rating their leader when compared to a follower who simply shows a preference towards simply a general preference towards reliance on such heuristics.

Theoretical and practical implications

First, the research positions CEST as an important interpretative framework for understanding individual sense-making around leaders. Unlike other specific theoretical frameworks such as attachment theory (e.g. see Keller, 2003), the value in
CEST lies in the fact that it provides a coherent and inclusive framework of personality, which is compatible with psychodynamic, cognitive and learning theories (Epstein, 2003). For example, unlike attachment theory which is somewhat restricted to caregivers in early childhood (e.g. see Bowlby, 1969; 1980), it is the influence of all significant experiences throughout life which are seen to contribute to the general properties of schemas within the experiential system (Epstein, 1998; 2003). Alternatively other theories, which are seen as directly competing and offering differential predictions, (e.g. self-verification and self-enhancement) may actually be overcome through the CEST framework.

Second, unlike the big-five personality traits, the ways that information processing style and constructive thinking are conceptualised within CEST lends them to change (see Epstein, 2003; 2014 for a discussion on techniques). ILTs might be changed, therefore, by targeting the underpinning cognitive tendencies. If the relationships observed are causal, then theoretically it suggests that developing effective leadership (from a relationship based perspective such as leader-member-exchange theory) is not only based on developing the leader but also the follower. This has obvious practical implications in terms of leadership development programmes whereby the follower needs to be incorporated into the leadership development process. Currently, though, leadership interventions typically only focus on leaders’ behaviours without acknowledging that followers have different images of what a leader is, which subsequently influences their perceptions and evaluations around leaders (Eden & Leviathan, 1975; Lord et al., 1984; Lord & Maher, 1993). This is turn is likely to affect the quality of the leader-follower relationship (Epitropaki & Martin, 2005; van Gils et al., 2010).
Third, there are counter-intuitive implications around selection and team composition decisions. Alternative leadership theories and research suggests that dedicated (e.g. charismatic leadership), sensitive (e.g. relationship-focused) and intelligent (e.g. task-focused) leaders would be the most effective for contributing to positive team and organisational outcomes (see Day & Stogdill, 1972; Fleishman, 1953; Fleishman & Harris, 1962; Hemphill & Coons, 1957; House, 1971; Judge et al., 2004). Consequently, many leadership development programmes seek to select such leaders. The current research suggests that followers who are best suited to working with such leaders would be those who demonstrate high rational processing styles but low emotional coping. This leader-follower combination would contribute to more congruent and positive leader-follower relationships and thus to positive team and organisational level outcomes (Dulebohn et al., 2012). However, high levels of emotional coping is strongly associated with positive outcomes at the individual level (e.g. positive self-esteem, happiness, calmness, and lower levels of depression (see Epstein, 1987; Epstein et al., 1996; Norris & Epstein, 2011).

Therefore, placing followers with low emotional coping with intelligent leaders creates ethical and practical issues. Specifically, intelligence in leaders contributes to team and organisational outcomes. Therefore, choosing followers with low levels of emotional coping to work with such leaders should further improve outcomes at the team and organisational levels via better-quality leader-follower relationships. Yet, while this combination benefits the team and organisation, at the individual level the follower with poor emotional coping would tend to show high levels of destructive cognitions and negative affect.

This counter-intuitive finding can be explained through CEST (Epstein, 2003; 2014). Specifically, both systems are independent of each other and process
information by different sets of rules. What is necessarily a congruent trait for one system is not necessarily congruent with the other. However, while the two systems are independent, they do operate in parallel and are bi-directionally interactive (Epstein, 2014). Thus, compromises between them occur (Epstein, 2003; 2014) suggesting that the two systems will compromise in terms of what they seek in an ideal leader.

**Limitations**

The results of the current research must be interpreted within the context of its limitation. First, the current study utilised a cross-sectional methodology, which does not allow definitive causal statements to be made on the relationships observed and unobserved third variables may actually be involved. Second, the current study did not use an “implicit” measure of ILTs but rather an explicit measure. Previous research has found different relationships between personality variables and implicit and explicit measures of leadership styles (Schoel, Bluemke, Mueller, & Stahlberg, 2011). Some of the relationships observed, therefore, may have been influenced by social desirability responding to some items. Research using implicit measures may, therefore, demonstrate differential relationships compared to those observed in the current study.

Third, situational factors were not assessed but conceptually may have moderated the relationships observed (see Keller, 1999). However, as the target of focus was that of an ideal leader in a more generic business setting, rather than the participants own work environment (i.e. participants were asked to indicate the degree to which traits are characteristic of an ideal leader in a business setting),
would likely result in responses less influenced by a participant’s current organisation setting. Future research though may wish to consider controlling for the impact of situational factors. Fourth, the nature of the CEST focuses primarily on the experiential system (Epstein, 2003). Consequently, there is subsequently less focus on the rational system and aspects of the rational system may be considered under measured in the current study. At the outset of this research, this was an intentional imbalance as, from the perspective of CEST (Epstein, 2001; 2003), research assessing the relationships between the rational components of personality and ILT’s have already undertaken in the literature (e.g. Keller, 1999).

Fifth, the current study adopted an approach where only one ILT dimension was analysed at a time. This singular approach limits some of the interpretability as results have been interpreted around the variables themselves (Foti & Hauenstein, 2007). In contrast, a pattern approach would consider the internal coherent and consistent pattern of ILT variables that exist within followers and provide a more holistic understanding of follower ILTs (e.g. see Foti & Hauenstein, 2007). One of the other benefits of a pattern approach compared to a variable approach is that patterns of ILTs may provide more stable prediction of what contributes to effective leader-follower relationships (e.g. see Mumford et al., 2000b; Yukl, 2002). Consequently, future research may wish to adopt a pattern approach. It is important to note that the pattern approach is considered as a complementary approach to the variable approach, not as a substitute. Indeed, Foti and Hauenstein (2007) state that “the pattern approach can complement the variable approach” (p. 353). Consequently, the current results are still important for extending ILT prediction research.
CHAPTER 4

IFT Congruency: Exploring the Relationships between Leaders’ Information Processing Style, Constructive Thinking, and Implicit Followership Theories

If followers’ information-processing style and degree of constructive thinking are related to their implicit ideal leadership theories (see the previous chapter) then it seems reasonable to propose that we may also observe similar relationships between these characteristics in leaders and their Implicit Followership Theories (IFTs). IFTs refer to those schemas that contain information on the traits and behaviours of followers (Sy, 2010). From a theoretical perspective, IFTs are understood as an important missing element in helping to understand leader-follower relationship dynamics in a more holistic manner (e.g. Avolio et al., 2009; Sy, 2010; van Gils et al., 2010). This is because they act as knowledge structures that specify and organise information about the traits and behaviours of followers (Sy, 2010). Once an individual is attributed with a follower status, the observer’s perceptions and judgements are filtered through their IFT which, in turn, influences their behaviours towards that individual (Lord & Maher, 1993; Poole et al., 1989; Sy, 2010).

While empirical research on IFTs has only recently begun to emerge (e.g. Sy, 2010; Whiteley et al., 2012), similar concepts have been discussed over the decades (e.g. see Eden, 1990; Goodwin, Wofford, & Boyd, 2000; McGregor, 1960; Wofford & Goodwin, 1994). For example, McGregor (1960) delineated two types of managers – Theory X and Theory Y. Theory X managers are seen to hold more negative beliefs about the nature of employees. For these managers, employees are inherently lazy, unmotivated, will try to avoid work and are motivated for selfish reasons (e.g. money). In contrast, Theory Y managers tend to hold more positive beliefs in that they see employees as generally self-motivated and, provided the
opportunity, will seek to do well in their tasks. Actions of the manager become aligned with these beliefs (e.g. see Finman, 1973; Neuliep, 1987; 1996). For example, Theory X managers may introduce monetary rewards based upon work output and/or introduce organisational systems and processes, which closely monitor employee behaviour (McGregor, 1960). Theory Y managers though would tend to promote more democratic and trusting work environments.

It was not until recently though that an IFT measure was developed (see Sy, 2010). Six core IFT factors: (1) industry; (2) good citizen; (3) enthusiasm; (4) incompetence; (5) conformity; (6) insubordination (Sy, 2010) were found to make up most leaders’ IFTs. The first three factors were found to load on a second-order factor which Sy (2010) labelled followership prototype. The final three loaded on to a followership anti-prototype second-order factor (Sy, 2010). While the average ideal IFT appears to contain higher levels of the first three factors (Sy, 2010), it is important to recognise that, at the individual level, some leaders endorse more the anti-prototypical traits (e.g. Carsten et al., 2010; Henry, 1997; Sy, 2010). Indeed, the quantitative results of Sy (2010) indicate there are some leaders who prefer more passive and conformist follower styles. This is also supported by qualitative studies (e.g. Carsten et al., 2010; Henry, 1997). For example, Henry (1997) found that some leaders see the role of followers as simply to carry out leaders’ instructions without question – a more conformist or compliant expectation. Carsten and colleagues (2010) also found that some leaders construct followers as passive and obedient. In contrast, other leaders constructed the role of a follower as taking a more proactive role. These findings lend themselves to the question of why do leaders differentially construct the role of a follower?
This is an important consideration as IFTs have implications for leadership and organisational outcomes (Sy, 2010; Whiteley et al., 2012). For example, leaders who hold positive IFTs (i.e. *industry, enthusiasm* and *good citizen*) tend to have followers who report higher levels of well-being, an increased liking for the leader, better relationships with the leader and increased performance expectations (Sy, 2010; Whiteley et al., 2012). Sy (2010) also found that leaders’ followership prototype was positively related to their followers’ job satisfaction and trust in the leader. In contrast, leaders who held more anti-prototypical traits (i.e. *incompetence*, *conformity* and *insubordination*) were more likely to have followers report the opposite. Looking at the theoretical antecedents of leaders’ IFTs, therefore, becomes important.

However, given that IFTs have only recently moved onto the research agenda, it should not be surprising that a scarcity of studies exists on their antecedents (c.f. Derler & Weibler, 2014). The available limited research indicates that female leaders show higher preferences for good citizen traits and behaviours in followers compared to male leaders’ preferences (Derler & Weibler, 2014). The same research also found leaders’ perceptions of market conditions (i.e. dynamic vs. competitive) and internal-coordination mechanisms (e.g. degree of centralisation and formalisation) were related to preferences for specific IFTs. Kruse and Sy (2011) also found that increasing positive affect resulted in a corresponding increase in the expression of prototypical followership theories. To the author’s knowledge, though, no research has investigated whether leaders’ personality characteristics relate to their IFTs. This includes processing styles (Norris & Epstein, 2011) and constructive thinking (Epstein, 2001). It is logical to propose, however, that if followers’ processing styles and constructive thinking are related to their ideal ILTs (see the
previous chapter) then these characteristics in leaders may also be related their ideal IFTs. Specifically, leaders should develop preferences for IFTs that fit or are congruent with, their information-processing style and constructive thinking. Therefore, a brief overview of person-environment theory is now presented.

**Person-environment fit**

As noted in the previous chapter, person-environment fit (P-E fit) is typically assumed to occur when there is a compatibility, or congruence, between an individual and the work environment (Kristof-Brown et al., 2005). Although there have been broad ways of conceptualising and measuring fit (see Caplan, 1987; Judge & Ferris, 1992; 1993; Kristof-Brown et al., 2005), the *needs-supply* definition (Caplan, 1983; 1987; Kristof, 1996) is most relevant here and refers to where a follower meets or addresses a leader’s needs, values, and preferences.

**Theory Development**

Similar to the theory presented in the previous chapter, it is assumed that individuals experience positive vibes (e.g. wellbeing, calmness and positive anticipation) and emotions (e.g. happiness) when they think, behave and communicate in ways which are congruent with their information processing style and constructive thinking tendencies (see Berne, 1961; Epstein, 2003). When the environment requires or pressures an individual to deliberate, act or converse in ways that are inconsistent or incongruent with their preferred style, they will experience negative vibes (e.g. agitation, irritation, tension, frustration, disquietude,
queasiness, edginess, and apprehension) and emotions (e.g., fear, anxiety, worry; see Epstein, 2003; McCann & Higgins, 1988).

The nature (e.g. form, content, emotiveness) and frequency of communication between leaders and followers is assumed to be more underpinned, or influenced, by leaders’ own personality due to their positional power (e.g. see Scholl, Ellemers, Sassenberg, & Scheepers, 2015; Tost et al., 2013; Watson, 1982). In dyadic communication, those with the same personality traits tend to share a variety of common reference points in how they perceive, understand, and act in reaction to the same situation (Schoon, 2008; Yeakley, 1982). Consequently, the dyadic partners should be able to interact and communicate more effectively than those who do not share the same personality traits.

Given the dyadic nature of the leader-follower relationship, leaders and followers who share the same information processing style (i.e. congruent) should be able to interact and communicate more successfully and with less effort than those who do not. More congruent leader-follower interactions should result in a tendency for the leader to experience positive vibes and emotions as they are not pressured or required to communicate outside of their preferred style (see Berne, 1961; Epstein, 2003). In an incongruent leader-follower interaction, though, leaders theoretically would tend to show increased attention towards those followers who do not share the same information-processing style (e.g. see Bargh, 1982). This may be due to more time being required for leaders’ communication to be understood, be acted upon, or even agreed to, by the follower due to the differences between their cognitive frames of reference (e.g. Bradley & Herbert, 1997; Higgins, King, & Mavin, 1982; McCann & Higgins, 1988; see also descriptions of personality type interactions by Kroeger et
al., 2002). From the perspective of the current research, such outcomes would result in leaders experiencing negative vibes and emotions.

The experience by leaders of positive/negative vibes and emotions during congruent/incongruent leader-follower interactions provide the learning opportunity to associate particular follower traits and behaviours with their respective positive or negative affective experience. Consequently, over time, leaders should develop preferences (i.e. ideal IFTs) and dislikes for particular follower traits and behaviours, which correspond to these positive and negative experiences. Drawing upon these lines of reasoning, several hypotheses regarding the relationships between leaders’ information processing style and constructive thinking with their ideal IFT can be made.

**Hypothesis development: Information Processing Style and IFTs**

Those high in rational processing are deep thinkers, tend to develop clear, rational and explainable reasons for decisions, and enjoy thinking in abstract terms (Pacini & Epstein, 1999a). High rational processors are also more amenable to actuarial and objective material than high experiential processors (Rosenthal & Epstein, 2000 as cited in Epstein, 2003). They also tend to be more problem-solution focused (Epstein et al., 1996). The *incompetence* dimension of IFTs contains the items of *inexperienced* and *uneducated* (Sy, 2010). These items appear congruent, albeit in a negative manner, with the cognitive and behavioural tendencies of high rational processors. Specifically, high rational processors may have come to prefer followers who are trained and proficient in their job role and are generally more educated. Such follower traits may facilitate more informed and intelligent leader-follower interactions that are congruent with leaders who have more rational
processing styles. Consequently, this should result in leaders experiencing positive vibes and emotions. In contrast, leaders with a low rational processing style may be more cognitively motivated to develop preferences for more uneducated and inexperienced followers. This is because they are less able to question leaders’ ideas and directions due to lower job-related knowledge and general ability. In support, inexperienced followers have been found to be more susceptible to leader influence than experienced followers suggesting that inexperienced followers are less likely to question the leader (Chong & Wolf, 2009). Thus, it is hypothesised:

**Hypothesis 1**: a negative relationship between leaders’ rational thinking and preference for incompetence in followers will exist...

Individuals high on experiential processing show higher levels of empathy and are better at forming and maintaining positive social relationships (Norris & Epstein, 2011; Pacini & Epstein, 1999a). High-quality working relationships depend on a high level of trust between leaders and followers (Schriesheim, Castro, & Cogliser, 1999). Those high on experiential processing, therefore, may develop preferences for followers who show traits conducive to the building of strong, trusting and successful working relationships and friendships at work. Such outcomes appear to be associated with the IFT dimension of good citizen, which contains the items of loyal, reliable and team player (Sy, 2010). For example, synonyms of loyal and reliable include being trustworthy and dependable (Loyal, n.d; Reliable, n.d.). In addition, being a team player is also described in terms of dependability and building effective working relationships with others to achieve some goal (Driskell, Goodwin, Salas, & O’Shea, 2006). Thus, it is hypothesised:
**Hypothesis 2:** *a positive relationship between leaders’ experiential processing and their preference for good citizen will emerge...*

*Insubordinate* followers have traits such as being *bad-tempered, rude* and *arrogant* (Sy, 2010). Such traits and behaviours can be described as socially inappropriate as they break generally accepted social norms of behaviour (DeBono, Shmueli & Muraven, 2011). Breaking of social norms can increase the chance of conflict (Pruitt, 1998). Therefore, insubordination in followers may increase the chance for leader-follower conflict. Conflict has the potential to elicit negative affect (e.g. Fulk & Wendler, 1982). Affect is a core element of the experiential system (Epstein, 2003; 2014). Thus, high experiential processors, especially those high on emotionality, may develop a particular dislike for insubordinate followers as they would be more likely to elicit negative vibes and emotions in the leader. In contrast, leader-follower conflict is less likely when the latter engages in more respectful behaviours. Consequently, they are less likely to elicit negative affect in the leader. Therefore, it is hypothesised that:

**Hypothesis 3:** *a negative relationship between leaders’ experiential processing and preference for insubordination in followers will exist.*

**Hypothesis development: Constructive Thinking and IFTs**

Positive organisational outcomes require followers to be active in decision-making processes and to positively support the leader to affect change and achieve the desired goals (Chaleff, 1995; 2003; 2009; Kelly, 1988; 1992). For example, Kelly (1988; 1992) emphasised that the most effective followers are those who
demonstrate the courage to voice antithetical positions to leaders if needed (e.g. if there are issues with leaders’ actions) but in a respectful and positive way (Kelly, 1988; 1992). It is clear though that not all leaders perceive such feedback in the same way (Grant et al., 2009). Threats to self-esteem, of which someone who voices a differing opinion to oneself is a key source, can evoke anxiety in the receiver (Epstein, 2001; Eysenck, MacLeod, & Mathews, 1987; Hodges, 1968). Followers who, therefore, speak up and question the status quo and decisions of a leader have the potential to cause conflict, uncertainty and elicit negative emotions in a leader (e.g. Argyris & Schö, 1978). For example, leaders may see followers questioning their decisions as a threat to their power, status and competence (e.g. Grant et al., 2009) and, therefore, experience increased anxiety (Carver et al., 1985; Meyer & Starke, 1982; Sachs, 1982; Swann & Read, 1981). This can even motivate some leaders to avoid or dismiss the criticism or feedback and even attack the messenger’s credibility (Ilgen et al., 1979; Morrison & Milliken, 2000; Kluger & DeNisi, 1996).

Emotional coping is about how people deal with frustration, disappointment, rejection, criticism and disapproval (Epstein, 2001). Leaders with good emotional coping, therefore, may be better able to deal (i.e. cognitively and emotionally) with those followers who speak up and question them. For example, a leader with good emotional coping may be less likely to consider a follower who voices an antithetical position as a threat to self-esteem. Consequently, leaders with poor emotional coping may develop preferences for followers who simply accept and follow their decisions and directions without question as they are less likely to create cognitively and emotionally threatening situations. The conformity IFT factor, which contains the items of follows trends, easily influenced and soft-spoken, appears to lend itself to more
passive behaviours in followers which would be less likely to create such threat situations. Therefore, it is hypothesised that:

**Hypothesis 4**: *a negative relationship between leaders’ emotional coping and their preference for conformity in followers will emerge.*

Leaders who are high in behavioural coping are more likely to have automatic thoughts to events that facilitate effective action such as engaging in hard work, effort, and planning (Epstein, 2001). They also tend to focus more on achieving outcomes rather than get caught up worrying about things (e.g. deadlines; Epstein, 2001). The *industry, enthusiasm* and *conformity* IFT factors appear to be congruent with such tendencies in leaders with high behavioural coping, albeit for different reasons. The *industry* factor contains the items of *productive, hardworking* and *goes above and beyond* (Sy, 2010). Such behaviours in followers may be perceived by leaders with high behavioural coping as positive as they are interpreted to be supportive of the leader and team/organisational goals. Passive followers, in contrast, may be more likely to frustrate and even anger (non-satisfying need states) the leader (e.g. see Maier & Verser, 1982; Watson & Michaelsen, 1984). Thus, it is hypothesised:

**Hypothesis 5**: *a positive relationship between leaders’ behavioural coping and their preference for industry in followers will emerge...*

Good behavioural copers are also more confident in their abilities to be successful when taking on challenges and tend not to be pejorative, but rather focus
on the effectiveness of particular behaviours in others (Epstein, 2001). In the context of the work-environment, the effectiveness of followers’ behaviours, therefore, may become emphasised for leaders with high levels of behavioural coping. The traits and behaviours of conformist followers (i.e. follows trends, easily influenced, and soft-spoken) do not appear to lend themselves to proactivity as passivity and/or conformity can undermine organisational success (Chaleff, 1995; 2008; Crant, 2000; Kelley, 1988; Sy, 2010). For example, Crant (2000) states that effective followership requires followers to occasionally challenge the status quo through actively adapting to the current situational demands they find themselves in order to bring about improved outcomes. Given the focus on overcoming problems and being action-oriented for leaders with high levels of behavioural coping, their experiences of more passive and conformist followers, therefore, may particularly frustrate, or in some cases even anger them. This is because they may see follower passivity as contributing to undermining goal achievement. Consequently, they would have developed preferences for non-conformist followers. Thus, it is hypothesised:

**Hypothesis 6:** a negative relationship between leaders’ behavioural coping and their preference for conformity in followers will emerge.

Categorical thinkers tend to believe that others are in error for simply taking different positions to themselves (Epstein, 2001). They are also quick to experience annoyance and anger when their expectations are violated (Epstein, 2001). High categorical thinkers may develop preferences for conformist followers as such individuals would be more inclined to simply follow leaders’ directions and not question them (i.e. items of easily influenced and follow trends; Sy, 2010). This is
because non-conformist followers may be more likely to query leaders’ ideas and take a different perspective, which consequently could be perceived as a potential threat to leaders’ abilities and their self-esteem (e.g. see Argyris & Schön, 1978; Carver et al., 1985; Fuller & Marler, 2009; Grant et al., 2009; Meyer & Starke, 1982; Sachs, 1982; Swann & Read, 1981). In contrast, conformist followers would be less likely to trigger this threat reaction in leaders as they may be less likely to voice different perspectives. In support, employees with a low proactive personality (which contains some traits similar to those in the conformity factor) tend to engage in less voice behaviour and taking charge (Fuller & Marler, 2009). Therefore, it is hypothesised that:

**Hypothesis 7:** a positive relationship between leaders’ categorical thinking and their preference for conformity in followers will emerge.

Naïve optimists think in simplistic and stereotyped ways and are unrealistically optimistic about outcomes (Epstein, 2001). Consequently, they may conceptualise an ideal follower as one that is culturally stereotypical. The cultural stereotype that appears most associated with followers is that of a hard-worker who is productive and enthusiastic (Berg, 1998; Sy, 2010). The former two traits appear highly similar to the IFT factor of industry (i.e. *productive, hardworking, goes above and beyond*) while the latter enthusiasm (i.e. *excited, outgoing, happy*; Sy, 2010). Therefore, it is hypothesised that:

**Hypothesis 8:** a positive relationship between leaders’ naïve-optimism and their preference for industry in followers will emerge...
Hypothesis 9: *a positive relationship between leaders’ naïve-optimism and their preference for enthusiasm in followers will emerge.*

Followers though are also stereotypically defined in more negative terms such as *deferent, passive* and *obedient* (Berg, 1998; Carsten et al., 2010). Therefore, leaders who are naïve optimists may also seek more conformist followers. Therefore, it is also hypothesised that:

Hypothesis 10: *a positive relationship between leaders’ naïve-optimism and their preference for conformity in followers will emerge.*

**Method**

**Participants**

A total of 133 managers participated. Participants were employed in a wide variety of organisations and industries. There were 77 females (57.9%) and 56 males (42.1%). The average age was 44.27 years (*SD* = 11.06). The average length of time an individual had been employed in their organisation was 100.14 months (*SD* = 102.43). Differences between males (*M* = 43.91, *SD* = 10.12) and females (*M* = 44.53, *SD* = 11.70) on age was not significant as indicated by an independent samples *t*-test, *t*(131) = .319, *p* = .750. There was also no difference between males (*M* = 100.63, *SD* = 84.17) and females (*M* = 99.79, *SD* = 114.43) on time in current organisation, *t*(131) = .046, *p* = .963.
Measures

Implicit Followership Theory Questionnaire (Sy, 2010) – adapted. The Implicit Followership Theory Questionnaire (see Appendix C; Sy, 2010) is designed to measure an individual’s IFT. In the original version, individuals are asked to rate on a 7-point Likert scale the degree to which 18 traits are characteristic (1 = Not at all Characteristic; 7 = Extremely Characteristic) of “a follower in a business setting”. Reliability ranges between .75 (acceptable) to .91 (excellent) depending on the factor (George & Mallery, 2003; Sy, 2010). Similar to the rationale presented in the previous chapter, though, the target of focus (e.g. follower, ideal follower) can influence ratings (e.g. see Offerman et al., 1994). Therefore, the measure was adapted to target “an ideal follower in a business setting” as it was theorised that followers who match leaders’ ideal IFTs would be more theoretically relevant targets for the purpose of the current study. Similar to the ILT measure in the preceding chapter, a 10-point Likert Scale was also adopted to help overcome potential ceiling/floor effects for this change (i.e. increase ability for more nuanced responses at top and bottom of the scale).

Rational-Experiential Multimodel Inventory (REIm; Norris & Epstein, 2011). The REIm (Norris & Epstein, 2011) is a 42 item measure which asks individuals to respond on a 5-point Likert scale (1 = Definitely False; 5 = Definitely True) the degree to which they use a rational (12 items) or experiential processing style (30 items). The experiential scale consists of 3 sub-scales (10 items each) to measure its different aspects: (1) intuitive; (2) emotionality and; (3) imagination. The intuitive facet is designed to assess the ability and engagement of an individual’s use of intuitive judgements (e.g. “I often go by my instincts when deciding on a course of
action”. The emotionality sub-scale assesses the intensity, frequency, duration, and favourable attitude towards strong affect (e.g. “My emotions don’t make much difference in my life”; reversed scored). The imagination sub-scales assesses the engagement in, and appreciation of, imagination, aesthetic productions, and imagery (e.g. “Sometimes I like to just sit back and watch things happen.”) Higher scores indicate a higher preference for processing on that particular dimension. All main scales in the current study showed acceptable to excellent levels of reliability (range .70 to .88; Kline, 2000).

Constructive Thinking Inventory (CTI; Epstein, 2001). The constructive and destructive components of the experiential system were assessed by the 108-item constructive thinking inventory (CTI, Epstein, 2001). The constructive components of the experiential system include global constructive thinking, emotional coping, and behavioural coping. The destructive components are personal superstitious thinking, categorical thinking, esoteric thinking, and naïve-optimism (Epstein, 2001). The reader is referred to Table 1.3 presented in Chapter 1 for main-scale and sub-scale definitions. Participants respond on a 5-point Likert scale based on how much a statement is true of them (1 = Definitely False; 5 = Definitely True). Raw scores are entered into an electronic scoring programme (Epstein & PAR Staff, 2008) and converted to T-Scores based upon gender norms.

Procedure

The same website that was developed to support and promote the research described in Chapter 3 was used as both research studies were conducted at the same
time. Participants were also recruited via the same means. Please refer to Chapter 3’s procedure section for more information.

The two-stage procedure described in the previous chapter was used in the current study to control for some of the effects of common-method bias (see Podsakoff et al., 2003). In stage one, participants completed the REIm (Norris & Epstein, 2011), the adapted Implicit Followership Theory Questionnaire (Sy, 2010) and other demographic information. Those who completed stage one were invited two days later to complete stage two via email. In stage two, participants completed the CTI (Epstein, 2001) only. The average time between the completion of stage 1 and stage 2 was 5.05 days (SD = 3.46, range 2 - 22). Participants could choose to receive written feedback based upon their responses to the CTI (Epstein, 2001).

Results

Common method bias

To assess common method bias, a principal components analysis was used with direct oblimin rotation (see Podsakoff et al., 2003). A total of 43 components with Eigenvalues greater than 1 were identified. These accounted for 89.47% of the total variance. The first factor did not account for the majority of the variance (14.12%). Harman’s single-factor analysis indicated that a single factor did not account for the majority of the variance (14.12%). These results suggest common method was not a significant cause for concern.
Exploratory Factor Analysis – IFT Measure

As the current measure used an adapted version of the IFT measure and no prior assumptions or hypotheses were made regarding what factors would make up “ideal” followers (see Finch & West, 1997), an exploratory factor analysis (EFA) rather than a confirmatory factor analysis (CFA), was used to investigate the underlying factor structure of the ILT items. There were 7.38 subjects per item, which is higher than the general minimum rule of 5 subjects-to-variables ratio (see Bentler & Chou, 1987; Bryant & Yarnold, 1995). Hatcher (1994) also specifies that a minimum number of 100 individuals as desirable for factor analysis. All items correlated at least .3 or above with at least one other item. The Kaiser-Meyer-Olkin measure of sampling adequacy was .689, above the recommended value of .6, and Bartlett’s test of sphericity was highly significant, $\chi^2 (153) = 816.34$, $p < .001$. The diagonals of the anti-image correlation matrix were also all over .5, supporting the inclusion of each item in the factor analysis. Given the sample size and overall indicators, factor analysis was conducted with all 18 items.

As the primary purpose was to identify the key IFT factors and compute composite scores for each, principal components analysis was used (see Abdi & Williams, 2010). As the final factors were expected to be correlated (see Sy, 2010), the oblimin rotation was used to obtain a simple and interpretable factor solution (Yaremko, Harari, Harrison, & Lynn, 1986). A total of 4 items were eliminated through an iterative process as they did not contribute to either a theoretically interpretable simple factor structure and, with the exception of one item (uneducated), failed to meet a minimum criterion of having a primary factor loading of .4 or above, and no cross-loading of .3 or above. The uneducated item was retained despite cross loading onto a conformity component due to a much higher
primary loading on an incompetence component which was theoretically interpretable (see Fabrigar, Wegener, MacCallum, & Strahan, 1999).

A principal-components factor analysis of the remaining 14 items indicated five theoretically interpretable factors, which explained 68.75% of the variance. The original industry and good citizen scales found by Sy (2010) did not emerge as separate factors in the EFA. Instead, four of the original six items for these scales loaded onto a new component, which was called committed due to the nature of the loading items. These final five factors, therefore, were insubordination, committed, incompetence, conformity and enthusiasm. All items had primary loadings over .6 and, except for the uneducated item, no items had cross-loadings above .3. The factor loading matrix for this final solution is presented in Table 4.1. Descriptive statistics by overall group and gender for the new IFT factors and inter-correlations are shown in Table 4.2. Reliability of new IFT scales is also shown on the diagonals. As can be seen, there were some reliability issues with the enthusiasm component (<.6; George & Mallery, 2003; Kline, 2000). However, it did meet the minimum level of .5 suggested for research purposes (Kline, 2000). The new scale was also slightly more reliable than the original three items (.57) specified by Sy (2010). Furthermore, Cronbach’s alpha provides the lower-bound estimate of reliability (Tavakol & Dennick, 2011) Therefore, the enthusiasm component was retained to explore the hypothesised relationships. However, it is important to recognise that authors recommend at least .7 as significant random error exists when reliability is low, which may result in interpretation issues (e.g. see Bland & Altman, 1997; Tavakol & Dennick, 2011). Consequently, this scale should be interpreted with some caution due to this low reliability. As the industry and good citizen factors did not
Table 4.1.
*Direct Oblimin Rotated Pattern Matrix of the 14-Item Adapted IFT Measure (n = 133)*

<table>
<thead>
<tr>
<th>Items</th>
<th>Insubordination</th>
<th>Committed</th>
<th>Incompetence</th>
<th>Conformity</th>
<th>Enthusiasm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad-Temper</td>
<td>.869</td>
<td>-.022</td>
<td>-.012</td>
<td>.078</td>
<td>-.103</td>
</tr>
<tr>
<td>Rude</td>
<td>.793</td>
<td>-.031</td>
<td>-.107</td>
<td>-.046</td>
<td>.090</td>
</tr>
<tr>
<td>Arrogant</td>
<td>.766</td>
<td>-.015</td>
<td>.037</td>
<td>-.102</td>
<td>.032</td>
</tr>
<tr>
<td>Goes above and beyond</td>
<td>.021</td>
<td>.888</td>
<td>-.017</td>
<td>-.063</td>
<td>.086</td>
</tr>
<tr>
<td>Productive</td>
<td>-.164</td>
<td>.842</td>
<td>-.011</td>
<td>.040</td>
<td>.104</td>
</tr>
<tr>
<td>Reliable</td>
<td>-.042</td>
<td>.676</td>
<td>.037</td>
<td>.072</td>
<td>-.027</td>
</tr>
<tr>
<td>Loyal</td>
<td>.117</td>
<td>.630</td>
<td>.021</td>
<td>-.109</td>
<td>-.233</td>
</tr>
<tr>
<td>Slow</td>
<td>.142</td>
<td>.027</td>
<td>-.858</td>
<td>.236</td>
<td>.135</td>
</tr>
<tr>
<td>Uneducated</td>
<td>-.136</td>
<td>-.122</td>
<td>-.700</td>
<td>-.331</td>
<td>-.050</td>
</tr>
<tr>
<td>Inexperienced</td>
<td>.088</td>
<td>.013</td>
<td>-.610</td>
<td>-.104</td>
<td>-.242</td>
</tr>
<tr>
<td>Follows trends</td>
<td>-.010</td>
<td>.011</td>
<td>.045</td>
<td>-.867</td>
<td>-.072</td>
</tr>
<tr>
<td>Easily influenced</td>
<td>.116</td>
<td>.043</td>
<td>-.071</td>
<td>-.855</td>
<td>.099</td>
</tr>
<tr>
<td>Outgoing</td>
<td>.103</td>
<td>-.072</td>
<td>.079</td>
<td>.062</td>
<td>-.822</td>
</tr>
<tr>
<td>Excited</td>
<td>-.141</td>
<td>.137</td>
<td>-.149</td>
<td>.092</td>
<td>-.802</td>
</tr>
<tr>
<td>Variance Explained</td>
<td>24.52%</td>
<td>18.42%</td>
<td>9.50%</td>
<td>8.81%</td>
<td>7.50%</td>
</tr>
</tbody>
</table>

Note: Factor loadings above ±.300 are bolded to aid readability.
Table 4.2.

Means, Scale Reliabilities, and Inter-correlations of Scales on 18 Item Adapted IFT Measure

<table>
<thead>
<tr>
<th>IFT Factor</th>
<th>Overall (n = 133)</th>
<th>Male (n = 56)</th>
<th>Female (n = 77)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means (SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Insubordination</td>
<td>1.33 (.55)</td>
<td>1.32 (.47)</td>
<td>1.34 (.61)</td>
<td>.76</td>
<td>-.27**</td>
<td>.29**</td>
<td>.31**</td>
</tr>
<tr>
<td>2. Committed</td>
<td>8.67 (1.00)</td>
<td>8.51 (1.07)</td>
<td>8.78 (.94)</td>
<td>.76</td>
<td>-.10</td>
<td>.01</td>
<td>.27**</td>
</tr>
<tr>
<td>3. Incompetence</td>
<td>2.71 (1.24)</td>
<td>2.69 (1.20)</td>
<td>2.73 (1.27)</td>
<td>.61</td>
<td>.33**</td>
<td>.24**</td>
<td></td>
</tr>
<tr>
<td>4. Conformity</td>
<td>4.16 (2.12)</td>
<td>3.87 (1.86)</td>
<td>4.37 (2.29)</td>
<td>.73</td>
<td>.22*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Enthusiasm</td>
<td>6.48 (1.87)</td>
<td>6.91 (1.59)</td>
<td>6.16 (2.00)</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: *Indicates $p < .05$; **Indicates $p < .01$; Cronbach’s alpha reliabilities are shown on the diagonal in brackets. All intercorrelations and reliability coefficients as based on overall group data.
separately emerge in the EFA, hypotheses 2, 2a, 7, 7a, 8, 10 and 10a could not be directly tested.

**Data screening & assumption checking**

Any data point that was more than 1.5 times the Interquartile range (IQR) above or below the first or above the third quartile was classified as an outlier (see Tukey, 1977). Due to the small sample size, a decision was made to truncate to outliers to the nearest highest/lowest non-outlier score (see Osborne & Overbay, 2004). Thus the relative order of scores is maintained but distribution issues are reduced and statistical power is retained. A total of 35 outliers across all scales were recoded with a mean of 1.09 items per factor. Inspection of the histograms and Q-Q plots indicated some minor normality issues but the inferential statistics used are generally quite robust against this (Tabachnick & Fidell, 2007). *Insubordination* though showed a strong positive skew, which was not improved by an inverse log transformation (see Osborne, 2002). Therefore, hypotheses involving *insubordination* were assessed by non-parametric procedures where applicable (Allen & Bennett, 2010). Inspection of bivariate scatter plots for remaining IFT factors indicated the assumptions of both linearity and homoscedasticity had been met.

**Descriptive Statistics, Scale Reliabilities and Scale Inter-correlations**

Descriptive statistics for the REIm at both the overall group and by gender are shown in Table 4.3. An independent samples *t*-test was used to compare mean rational and experiential processing style between males (*n* = 56) and females (*n* =
Levene’s test was significant for rational processing \( (p = .005) \) indicating equal variance assumption had been violated and thus an adapted t-test was used. The Levene’s test for all other factors did not reach significance. There were no significant differences between males and females on rational processing, \( t(101.049) = 1.370, \ p = .174 \), experiential processing, \( t(131) = .696, \ p = .488 \), intuition, \( t(131) = 1.250, \ p = .214 \), and imagination, \( t(131) = .069, \ p = .945 \). Females though, showed significantly higher emotionality than males, \( t(131) = 2.101, \ p = .038 \).

Table 4.3.

<table>
<thead>
<tr>
<th>REIm Factor</th>
<th>Means (SD) Overall ((n = 133))</th>
<th>Means (SD) Male ((n = 56))</th>
<th>Means (SD) Female ((n = 77))</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rational</td>
<td>3.96 (.57)</td>
<td>4.04 (.64)</td>
<td>3.90 (.51)</td>
</tr>
<tr>
<td>2. Experiential</td>
<td>3.51 (.35)</td>
<td>3.48 (.32)</td>
<td>3.53 (.38)</td>
</tr>
<tr>
<td>3. Intuition</td>
<td>3.61 (.49)</td>
<td>3.67 (.47)</td>
<td>3.56 (.49)</td>
</tr>
<tr>
<td>4. Emotionality</td>
<td>3.29 (.54)</td>
<td>3.18 (.49)</td>
<td>3.38 (.56)</td>
</tr>
<tr>
<td>5. Imagination</td>
<td>3.62 (.60)</td>
<td>3.62 (.47)</td>
<td>3.62 (.68)</td>
</tr>
</tbody>
</table>

An independent samples t-test was used to compare the means of females \((n = 77)\) and males \((n = 56)\) on each IFT factor. Levene’s test was significant for incompetence \( (p = .035) \) and conformity \( (p = .034) \) indicating equal variance assumption had been violated. Thus adapted t-tests were used for these. No significant differences were observed on committed, \( t(131) = .212, \ p = .832 \), incompetence, adapted \( t(122.443) = .190, \ p = .850 \), or conformity, adapted \( t(129.24) = 1.400, \ p = .164 \). However, males showed higher levels on enthusiasm than females, \( t(131) = 2.315, \ p = .022 \). No significant difference was found on insubordination between males \((Mean \ Rank = 69.68)\) and females \((Mean \ Rank = 65.05)\) as indicated by a Mann-Whitney U-test, \( U = 2006.00, \ z = .783, \ p = .434 \).
**Hypothesis Testing**

As described in chapter 3, while SEM would provide a more powerful way of assessing the hypotheses, it is estimated that 14 parameters would need to be specified in the model, which would mean that the recommended sample size would be 350 (see Nachtigall et al., 2003). As the current sample size does not meet this sample size requirement, a decision was made to use correlations and Hierarchical Multiple Regression for hypothesis testing.

Bivariate Pearson’s product-movement correlation coefficients were calculated between the REIm and CTI with the four normally distributed IFT dimensions: committed, incompetence, conformity and enthusiasm. Due to the non-normal data, Spearman’s rho was used to assess relationships involving the insubordination IFT dimension. Fifteen individuals did not complete the second stage and, therefore, analyses using the CTI are based on a sample of 118 leaders. Table 4.4 presents the correlational results.

**REIm and IFT hypothesised relationships**

Hypothesis 1 was supported as indicated by a significant negative relationship between rational processing and incompetence. Hypothesis 3 was not supported as demonstrated by the non-significant negative relationship between experiential processing and insubordination.
Table 4.4: Correlations between REIm (n=133), CTI (n=118) and each IFT Dimension

<table>
<thead>
<tr>
<th>IFT Dimensions</th>
<th>Insubordination</th>
<th>Committed</th>
<th>Incompetence</th>
<th>Conformity</th>
<th>Enthusiasm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.07</td>
<td>.13</td>
<td>.02</td>
<td>.12</td>
<td>-.20*</td>
</tr>
<tr>
<td>Age</td>
<td>.03</td>
<td>.17*</td>
<td>.03</td>
<td>-.20*</td>
<td>-.03</td>
</tr>
<tr>
<td>REIm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rational</td>
<td>$.10</td>
<td>.03</td>
<td>-.32**</td>
<td>-.24**</td>
<td>-.15</td>
</tr>
<tr>
<td>Experiential</td>
<td>-.07</td>
<td>.08</td>
<td>.20*</td>
<td>.21*</td>
<td>-.02</td>
</tr>
<tr>
<td>CTI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Constructive Thinking</td>
<td>-.07</td>
<td>.06</td>
<td>-.15</td>
<td>-.39**</td>
<td>.16</td>
</tr>
<tr>
<td>Emotional Coping</td>
<td>-.06</td>
<td>.01</td>
<td>-.12</td>
<td>-.31**</td>
<td>.19*</td>
</tr>
<tr>
<td>Behavioural Coping</td>
<td>-.13</td>
<td>.15</td>
<td>-.21*</td>
<td>-.44**</td>
<td>.01</td>
</tr>
<tr>
<td>Personal Superstitious Thinking</td>
<td>-.04</td>
<td>.10</td>
<td>.17</td>
<td>.26**</td>
<td>.07</td>
</tr>
<tr>
<td>Categorical Thinking</td>
<td>-.02</td>
<td>.11</td>
<td>.32**</td>
<td>.35**</td>
<td>.09</td>
</tr>
<tr>
<td>Esoteric Thinking</td>
<td>.13</td>
<td>-.02</td>
<td>.37**</td>
<td>.20*</td>
<td>.13</td>
</tr>
<tr>
<td>naïve-Optimism</td>
<td>-.08</td>
<td>.24**</td>
<td>.13</td>
<td>.14</td>
<td>.26**</td>
</tr>
</tbody>
</table>

Notes: *Indicates p<.05; **Indicates p<.01; ^Relationships indicated by Spearman’s rho. Results reported for Enthusiasm should be interpreted with caution due to low reliability.

CTI and IFT Hypothesised Relationships

Hypothesis 4 was supported as indicated by a significant negative relationship between emotional coping and preference for followers showing conformity. Hypothesis 6 was supported as indicated by the negative relationship between behavioural coping and conformity. Hypothesis 7 was supported as shown by the positive relationship between categorical thinking and conformity. Support for hypothesis 9 was provided by the significant positive relationship between naïve-optimism and enthusiasm. Hypothesis 10 was not supported as demonstrated by the non-significant positive relationship between naïve-optimism and conformity at the group level.
Non-hypothesised REIm and CTI main scale relationships with IFT dimensions

Several non-hypothesised REIm main-scale with IFT relationships emerged. First, a significant positive correlation between experiential processing and incompetence emerged. Second, there was a significant negative relationship between rational processing and conformity. Finally, there was a significant positive relationship between experiential processing and conformity. Several non-hypothesised relationships between the CTI main-scale and IFT dimensions also emerged. First, a significant negative correlation emerged between global constructive thinking and conformity. Second, a significant positive correlation was observed between emotional coping and enthusiasm at the group level. Third, a significant negative correlation emerged between behavioural coping and incompetence. Fourth, there was a significant positive correlation between categorical thinking with incompetence. Fifth, esoteric thinking showed a significant positive correlation with both incompetence and conformity at the group level. Finally, a significant positive correlation between naïve-optimism and committed emerged.

Hierarchical Regression

To further examine the relationships between constructive thinking and information processing with ILT dimensions, hierarchical multiple regression analyses were conducted. Bivariate scatter plots were obtained to assess and satisfy linearity and homoscedasticity for all regressions. The variables were all demonstrated to be linearly related. Residual scatter plots also demonstrated that the assumption of homoscedasticity had been satisfied. The correlations of the variables
were assessed for multicollinearity but none was detected as all correlations were below 0.9 (Tabachnick & Fidell, 2007). All analyses are based upon \( n = 118 \). A dummy variable was used to assess the effects of gender in the model\(^1\). As no significant relationships between any of the independent variables and insubordination emerged, no regression model was calculated.

*Information Processing/Constructive Thinking and IFT Trait of Committed With Committed as the dependent variable, a two-step hierarchical multiple regression was conducted. Age and Gender were entered in Step 1. Naïve Optimism was added in Step 2 as, it emerged as a significant predictor at the correlational stage. There is also a theoretical rationale for its inclusion. Specifically, naïve optimists tend to endorse stereotyped ways of thinking (Epstein, 2001). Consequently, they may conceptualise an ideal follower as one that is culturally stereotypical; as one who is hard working and committed (e.g. see Engle & Lord, 1997; Sy, 2010) amongst other traits. Committed followers, therefore, may be seen to engage in interactions and create work-environments, which are congruent with the processing tendencies of naively optimistic leaders. Regression statistics are shown in Table 4.5.*

\(^1\)Where male = 0 and female = 1.
Table 4.5.

Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr²) For Each Predictor Predicting Committed Trait Preference

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>sr²</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
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</table>

*Indicates p < .05; **Indicates p < .01; ˄ Approaching significant p < .10

The overall regression model at Step 1 was significant, F(2,115) = 3.691, p = .028. Age alone significantly contributed 5.4% to the regression model at this step. The introduction of Naïve Optimism in Step 2 explained an additional and significant 4.7% in Dedication preference variation, F(3,114) = 4.578, p = .005. Age at this step also remained a significant contributor. Overall, the three independent variables accounted for 10.8% of the variance in Committed.

**Information Processing/Constructive Thinking and IFT Trait of Incompetence**

With Incompetence as the dependent variable, a two-step hierarchical multiple regression was conducted. Age and Gender were entered in Step 1. Rational processing was added in Step 2 as it is both theoretically related to incompetence as well as emerging as having a significant relationship in the correlational analyses. In Step 3, Categorical Thinking, Esoteric Thinking, Behavioural Coping and Experiential Processing were entered to explore whether these added any additional explanation to the variance in Incompetence. Regression statistics are shown in Table 4.6.
Table 4.6.  
Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr²) For Each Predictor Predicting Incompetence Trait Preference

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*Indicates p < .05; **Indicates p < .01; ^Approaching significant p < .10

The overall regression model at Step 1 was non-significant, $F(2,115) = .619$, $p = .540$. The introduction of Rational Processing in Step 2 explained an additional and significant 12.2% in Incompetence preference, $F(3,114) = 5.800$, $p = .001$. In Step 3, the addition of Categorical Thinking, Esoteric Thinking, Behavioural Coping and Experiential Processing explained an additional and significant 12.2% in Incompetence preference, $F(7,110) = 4.770$, $p < .001$. However, the only significant predictors in the final model were Rational Processing and Esoteric Thinking, which independently explained 3.2% and 4.0% of the variance in Incompetence. It should be noted that categorical thinking did approach significance ($p = .050$). Overall, the seven independent variables accounted for 23.3% of the variance in Incompetence.
Information Processing/Constructive Thinking and IFT Trait of Conformity

With Conformity as the dependent variable, a five-step hierarchical multiple regression was conducted. Age and Gender were entered in Step 1. Emotional coping, behavioural coping and categorical thinking were added in Step 2 as they were all theoretically related to incompetence as well as emerging as having a significant relationship in the correlational analyses. In Step 3, rational processing was entered. While not specifically presented in the introduction, theoretically, it may be that less conformist followers, who are harder to influence and are more likely to question the status quo (e.g. see Blass, 2009; Milgram, 1965), logically are more likely to critique leaders’ ideas and be more willing to stand up to them. Such behaviours in followers may appeal to leaders with high rational processing styles due to their preferences for in-depth thinking and enjoyment of taking on challenging issues (Epstein, 1998; Norris & Epstein, 2011). Specifically, non-conformist followers would be more likely to critique and provide feedback on leaders’ ideas, which provides input to the rational system to process – a positive communication experience for the rational system. In support, the correlational analysis demonstrated a significant negative relationship between rational processing and conformity. In Step 4, the remaining variables, which had shown a significant correlational relationship with conformity were entered to explore whether these added any additional explanation to the variance in Conformity. Regression statistics are shown in Table 4.7.
Table 4.7.
Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr²) For Each Predictor Predicting Conformity Trait Preference

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<td>* .023</td>
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</table>

*Indicates p < .05; **Indicates p < .01; ˄ Approaching significant p < .10

The overall regression model at Step 1 only approached significance,

\[ F(2,115) = 2.925, p = .058. \] The introduction of Emotional Coping, Behavioural Coping and Categorical Thinking in Step 2 explained an additional and significant 21.8% in Incompetence preference, \[ F(5,112) = 8.143, p < .001. \] The key contributors at this step were Behavioural Coping and Categorical Thinking, which independently explained 9.3% and 4.7% in Conformity variance explained respectively. Emotional coping did not emerge as a significant contributor in this model. In Step 3, the
addition of rational processing added a non-significant .3% ($p = .513$) of variance explained, $F(6,111) = 6.823, p < .001$. In Step 4, the addition of Experiential Processing, Personal Superstitious Thinking and Esoteric Thinking added a non-significant 3.6% increase in Conformity variance explained. The final model revealed only Behavioural Coping (7.3%) and Categorical Thinking (6.3%) were significant independent contributors, although both Age ($p = .063$) and Personal Superstitious Thinking ($p = .082$) did approach significance. Overall, the final model 30.6% of the variance in Conformity.

Information Processing/Constructive Thinking and IFT Trait of Enthusiasm

With Enthusiasm as the dependent variable, a three-step hierarchical multiple regression was conducted. Age and Gender were entered in Step 1. Naïve Optimism was added in Step 2. In Step 3, Emotional Coping was entered to explore whether this added any additional variance explained. Regression statistics are shown in Table 4.8. The overall regression model at Step 1 was significant, $F(2,115) = 3.485, p = .034$. Gender was the only significant contributor though at Step 1, independently explaining 5.6% of the variance in Enthusiasm. The introduction of Naïve Optimism in Step 2 explained an additional and significant 5.8% in Incompetence preference, $F(3,114) = 4.931, p = .003$. Gender also remained a significant contributor at this step, independently contributing 4.9% in variance explained. In Step 3, Emotional Coping explained a non-significant increase of 2.7% in Enthusiasm variance explained, $F(4,113) = 4.685, p = .002$. In this final model, Gender and Naïve Optimism were the only remaining significant predictors which independently explained 4.5% and 5.3% of the variance in Enthusiasm respectively. Overall, the final model accounted for 14.2% of the variance in Enthusiasm. It
should be noted here though that the results reported for Enthusiasm should be interpreted with some caution due to low reliability.

Table 4.8. Unstandardised (B) and Standardised (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr²) For Each Predictor Predicting Enthusiasm Trait Preference

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*Indicates p < .05; **Indicates p < .01; ^Approaching significant p < .10

Discussion

The current study extends theory on leader IFT development. The primary focus was to ascertain whether leaders develop preferences for traits and behaviours in followers that are congruent with their information processing style (Norris & Epstein, 2011) and degree of constructive thinking (Epstein, 1998; 2001). There was general support for this proposition. The discussion presents theoretical and practical implications of the findings.

Information Processing Style – IFT Congruence

Leaders are understood to develop preferences for traits and behaviours in followers that have contributed to their experience of positive vibes and emotions
(see Epstein, 2003). In contrast, they learn to disfavour those that have historically resulted in the experience of negative vibes and emotions. Leader-follower interactions, therefore, are conceptualised as learning contexts. Specifically, when followers’ traits and behaviours facilitate leaders to think, behave and communicate in ways that are congruent (implicitly or explicitly) with their information processing style, they experience positive affect (see Berne, 1961; McCann & Higgins, 1988). Alternatively, they experience negative affect when the traits and behaviours of followers require leaders’ to process information and communicate in ways not aligned to their information processing style. In both contexts, leaders learn to associate the specific follower traits and behaviours with these positive and negative affective experiences.

As hypothesised, leaders with a high rational processing style tended to prefer more competent followers (or more specifically less incompetent followers). Incompetence includes traits such as uneducated and inexperienced. More experienced followers and those who are educated are likely to hold more job-related knowledge and a general cognitive ability to support increased performance and creativity in their job role (Amabile, 1998; Quiñones, Ford, & Teachout, 1995; Tierney & Farmer, 2002; Weisberg, 1999). Such traits in followers will probably be more congruent with the cognitive and behavioural tendencies of leaders with high rational processing styles. For example, more experienced and educated followers should be better at providing a leader with valuable insights and perspectives into job/task related issues and decisions than less competent followers. Consequently, rational leaders would develop preferences for competent followers.

Interestingly, leaders with a high rational processing style tended to prefer less conformist followers. Whilst not specifically hypothesised, this finding is still
aligned with the notion of congruence. Specifically, it is likely that less conformist followers, who are harder to influence and are more likely to question the status quo (e.g. see Blass, 2009; Milgram, 1965), logically are more likely to critique leaders’ ideas and be more willing to stand up to them. Such behaviours in followers may appeal to leaders with high rational processing styles due to their preferences for in-depth thinking and enjoyment of taking on challenging issues (Epstein, 1998; Norris & Epstein, 2011). Specifically, non-conformist followers would be more likely to critique and provide feedback on leaders’ ideas, which provides input to the rational system to process – a positive communication experience for the rational system. Consequently, leaders with high rational processing styles may be inclined to develop ideal IFTs that are congruent with the ability for followers to challenge leaders’ positions and decisions. Thus, followers can help leaders think more deeply about issues (e.g. provide new evidence or alternative perspectives). Consequently, the leader-follower relationship for leaders with high rational processing is about reinforcing their rational processing preferences. However, it is important to recognise that rational processing provided no significant increase in explaining conformity preference beyond Behavioural coping and Categorical Thinking when it was entered into the hierarchical regression analyses.

Unexpectedly, leaders with high experiential processing tend to show a preference for less competent followers. Experiential processing is associated with the development and maintenance of effective relationships (Norris & Epstein, 2011). It may be that the nature of more competent followers increases the chance for leader-follower conflict. Specifically, competent followers show increased general and job-related knowledge which, while positive in some regards, can result in an amplified opportunity for the follower to identify and voice issues and
problems with the decisions, ideas, and directions of their leader. This is due to more nuanced job/task understanding and a general cognitive ability to think through problems. This can increase the chance of leader-follower conflict (Argyris & Schöen, 1978) and, thus, the potential to experience negative vibes and emotions during such interactions (e.g. Carver et al., 1985; Meyer & Starke, 1982; Sachs, 1982; Swann & Read, 1981). Consequently, leaders with high experiential processing styles may come to develop preferences for less competent followers who would tend not to question or create opportunities for such conflict and instead maintain a positive working relationship.

Interestingly, leaders with high experiential processing styles also tended to prefer more conformist followers. This was not initially expected, but may be due to how these leaders tend to interpret the actions conformist followers. Specifically, given the importance of emotionality in the experiential system, leaders who experience strong emotions may be especially susceptible to interpreting the actions of non-conformist followers as a potential threat (e.g. triggers their competitiveness; e.g. see Burris, 2012). For example, less conformist followers may be more likely to offer conflicting viewpoints to the leader and be harder to influence. Therefore, leaders who tend to experience strong emotions, may show an increased chance that non-conformist followers will engage in behaviours that have the potential to trigger a threat reaction in them. This can result in the experience of intense negative affect (e.g. frustration, anger, anxiety, and fear) for the leader. Consequently, they would tend to develop preferences for more conformist followers who are less likely to psychologically threaten them. However, while both incompetence and conformity both showed significant positive relationships with experiential processing provided, they provided no significant increase in explaining either incompetence or
Conformity preferences when entered into their respective hierarchical regression analyses suggesting that other variables are more important from a theoretical perspective.

**Constructive Thinking – IFT Congruence**

Perhaps the most striking findings of the current study were those related to leaders’ preferences for conformist followers. The broad finding that leaders with high levels of global constructive thinking, especially the constructive dimensions of emotional and behavioural coping, tend to prefer less conformity in their followers appears to be quite important for the wider leadership and followership theoretical fields. Effective followership (Kelley, 1988; 1992; 2008), courageous followership (Chaleff, 1995; 2003; 2008; 2009) and proactive behaviour literature (Crant, 2000) all propose that the followers’ willingness to challenge leaders is one of the key dimensions of effective followership. However, leaders do not interpret such behaviours in the same way and limited theory and research exists as to why this is the case (see Grant & Ashford, 2008; Grant et al., 2009).

One explanation the current study lends itself to is that leaders who are more constructive thinkers are generally more cognitively and emotionally open (i.e. “courageous” in the language of Chaleff [2009]) to those followers who are willing to speak up and question the status quo (i.e. non-conformist/proactive). Given the cognitive and interpretative processes involved in constructive thinking (see Chapter 1 and Epstein, 1998 for overview), leaders with good constructive thinking may be less likely to process the actions of proactive followers along a destructive pathway which would generally result in the experience of negative vibes and emotions – a
negative need state (see Epstein, 1998; 2014). In contrast, leaders who tend to process information along more constructive pathways would be more protected from the experience of such negative affect. Indeed, previous research has found that even if the actions of a proactive employee are intended to benefit their organisation, some leaders see these actions as personally threatening and/or as an act of defiance (Burris, 2012). The current research, therefore, positions CEST (Epstein, 1998; 2003) as a potential theoretical framework for understanding how and why cognitive and emotional tendencies in leaders may stifle or support proactive followership behaviours.

The fact that leaders with poor emotional coping tended to prefer conformist followers reinforces the above theoretical position. Followers who question such leaders’ actions, and offer alternative perspectives, have the potential to elicit doubt, anxiety, fear or confusion in them (Argyris & Schön, 1978; Carver et al., 1985; McCann & Higgins, 1988; Meyer & Starke, 1982; Sachs, 1982; Swann & Read, 1981). These behaviours also have the potential to trigger conflict between the leader and follower (Argyris & Schön, 1978). All of these are unsatisfying need states for these leaders (i.e. the need to reduce unpleasant feelings; Epstein, 2014). Therefore, it appears leaders with poor emotional coping may be more likely to interpret the behaviours of non-conformist followers as a threat and consequently trigger the experience of negative affect. Thus, they would develop preferences for more conformist followers.

Given that emotional coping is concerned with how effectively individuals deal with the inner world of feeling (Epstein, 1998), the focus of emotional coping from the perspective of leaders is more about the level of perceived internal threat being triggered by non-conformist followers (e.g. see Grant et al., 2009).
Behavioural coping though is concerned with how effectively individuals overcome issues in the external world (Epstein, 1998; 2001). From the perspective of leaders’ (whose role tends to be focused on achieving performance goals), therefore, the content of processing may be more about the degree of perceived external threat attributed to a follower for potentially undermining the achievement of valued outcomes. In the context of conformist followers, leaders with good behavioural coping may, through these experiences, attribute the passivity of conformist followers as a threat to undermining valued team or organisational goals. Proactive personality literature generally supports these premises (e.g. Erdogan & Bauer, 2005; Fuller & Marler, 2009; Zhang, Wang, & Shi, 2012). For example, Zhang and colleagues (2012) found that followers who exhibited lower levels of proactive personality in comparison to their leader showed lower quality relationships and poorer work outcomes. Furthermore, the congruence between leaders and followers in terms of their proactive personality resulted in a tendency to share the goal of improving the work-environment.

Similar to how conformist followers are seen, it may be that an incompetent follower may be perceived by leaders with good behavioural coping as a threat to achieving valued team/organisational goals. This is due to the followers’ lack of experience, job-related and/or general knowledge and tendency to be more indolent. These behaviours may particularly frustrate leaders who are action-oriented and focused on solving problems (i.e. good behavioural copers). Indeed, meta-analytical research has found that work experience is positively related to both objective and subjective measures of job performance (Quiñones et al., 1995). Furthermore, as previously mentioned, when followers show lower levels of proactive behaviours compared to their leader, the latter reports a lower quality relationship and poorer
follower performance (Zhang et al., 2012). These findings suggest that judgements around the followers’ performance are based on the leaders’ own problem-focused and behavioural action tendencies. Consequently, interactions between leaders with good behavioural coping with incompetent/competent followers over time would become associated with their experience of negative/positive vibes due to their ability to support/not support the achievement of valued team/organisational outcomes. This would result in a learned preference for more competent followers.

As expected, leaders with high levels of categorical thinking tended to prefer more conformist followers. Categorical thinkers tend to make more broad generalisations about groups of people (Epstein, 1998; 2001). Clear distinctions between one’s own group and another can result in an individual seeing other groups as a potential threat (Epstein, 2001). Categorical thinkers also experience irritation and anger more rapidly when things do not match their expectations and tend to see others who hold different perspectives as in fault (Epstein, 1998; 2001). In the context of the leader role, leaders with high categorical thinking may result in non-conformist followers being perceived as in error and/or as a potential threat source. In either case, these are likely to bring about a degree of irritation, frustration, anger or anxiety for leaders with high categorical thinking – negative need states (see Epstein, 1998). Leaders with high categorical thinking, therefore, would tend to develop preferences for conformist followers as they would be more inclined to simply follow the directions of leaders and not question the status quo (i.e. easily influenced and follow trends). The proactive followership literature as already described generally supports this proposition (i.e. all things being equal, proactive behaviour can be interpreted by leaders in different ways; see Argyris & Schön, 1978; Fuller & Marler, 2009; Grant & Ashford, 2008; Grant et al., 2009; Zhang et
al., 2012). Indeed, unlike their positive intention, some managers can interpret followers’ proactive behaviours quite negatively (e.g. see Argyris & Schön, 1978; Carver et al., 1985; Fuller & Marler, 2009; Grant et al., 2009; Meyer & Starke, 1982; Sachs, 1982; Swann & Read, 1981). This suggests that the general trust leaders have in people is a potential key factor in how effective follower behaviours will be perceived by them (e.g. see Chaleff, 1995; 2003; 2008; Kelley, 1988). These findings are also aligned with the descriptions of Theory X and Theory Y managers (see McGregor, 1960). Specifically, that Theory X managers are less trusting of their employees to do the right thing compared to Theory Y managers.

Leaders with high categorical thinking also showed increased endorsement for less competent followers. More experienced followers and those who are educated are likely to hold more job-related knowledge and a general cognitive ability, which support an increase in performance and creativity (Amabile, 1998; Quiñones et al., 1995; Tierney & Farmer, 2002; Weisberg, 1999). As previously discussed, one of the potential outcomes of this is an amplified opportunity for followers to identify issues and problems with the decisions and ideas of their leader. Consequently, competent followers may be more likely to question leaders and their directions due to their more nuanced understandings of, and ability to break down into their component parts, tasks and problems. As already noted, categorical thinkers also tend to see others in error when they hold different perspectives and are quicker to experience irritation and anger (Epstein, 1998; 2001). Interactions with more competent followers, therefore, provide the opportunity for them to take a different perspective to the leader. Consequently, leaders with high categorical thinking may tend to perceive such followers as in error, which consequently results in the experience of negative affect (e.g. frustration and/or anger).
As expected, naively optimistic leaders tended to endorse preferences for enthusiastic followers. Naïve optimists tend to endorse commonly accepted ideas and beliefs and are generally highly-spirited individuals who like people and are liked by others (Epstein, 1998). Naïvely optimistic leaders thus would tend place a stronger emphasis on positive relationships in the working environment. The enthusiasm factor contains items that appear to support the development of positive relationships (i.e. outgoing and excited). Specifically, the nature of enthusiasm bears a resemblance to descriptions of extraverts (see Costa & McCrae, 1997; Eysenck & Eysenck, 1975). Extraverts are described as enjoying human interaction and being enthusiastic, talkative and outgoing. Extraversion is positively related to lower levels of conflict (Barrett & Pietromonaco, 1997) and with having more positive relationships both inside (Robertson & Kinder, 1993) and outside of work (Lopes, Salovey, & Straus, 2003; White, Hendrick, & Hendrick, 2004). Enthusiastic followers, therefore, are likely to be seen as supporting the development of positive leader-follower working relationships. These outcomes would be congruent with the valued behaviours of naively optimistic leaders. Consequently, such leaders would tend to develop preferences for enthusiastic followers. Due to the low reliability observed on the enthusiasm dimension though, it is possible that alternative explanations exist. For example, naively optimistic leaders may specifically prefer outgoing followers rather than enthusiastic followers per se, on the assumption that these two traits are not necessarily underpinned by the same enthusiasm construct.

While not as strong as the other results, it appears relevant to mention here that strong emotional copers also tend to prefer enthusiasm in their ideal followers. The internal focus of emotional coping (Epstein, 2001) may indicate that poor emotional copers tend to associate an enthusiastic follower as a threat. Emotional
coping is positively related to extraversion (Epstein, 1983) and strongly negatively correlated with neuroticism (Epstein, 1992). As noted above, the enthusiasm IFT factor is similar to the traits that describe extraverted individuals (see Costa & McCrae, 1997; Eysenck & Eysenck, 1975). Extraverted individuals tend to be more forceful and use more assertive conflict resolution styles (Boora & Shanti, 2010; Vestewig & Moss, 1976). Neurotic individuals, in contrast, are less assertive (Vestewig & Moss, 1976) and tend to use more avoidant conflict styles as they see conflict as a threatening event and consequently experience high levels of anxiety and fear (Rahaman, Mollah, & Uddin, 2010). Hence, for leaders with poor emotional coping, the more assertive and intense nature of enthusiastic followers could be particularly threatening and anxiety provoking. Consequently, over time, leaders with poor emotional coping would come to develop preferences for less enthusiastic followers. However, it is important to note that, most likely due to a small sample size, emotional coping only approached significance in the regression analyses suggesting that Naïve Optimism may be more theoretically relevant.

It was interesting to find that leaders who are low in esoteric thinking tend to prefer competent followers. Indeed, the finding that esoteric thinking independently contributed beyond rational thinking to predicting preferences for incompetence in followers is important when one recognises that high esoteric thinkers tend to be less likely to use engage their rational system to critically consider issues (Epstein, 1998). This reduced engagement of critical faculties would help to explain their preference for leaders who are less competent. Specifically, a competent follower would be more likely to question a leader’s decisions and action due to increased knowledge via education and experience, which would likely increase the need for the leader to engage their rational system to critically assess the follower’s input. From the
perspective of a leader with high esoteric thinking, this would not align with their preferences or tendencies for non-rational thought. Consequently, they would tend to develop preferences for incompetent followers who are less likely to be in a position (in terms of knowledge and confidence) to question them.

**Further theoretical and practical implications**

There are a number of additional theoretical and practical implications of the current findings. First, Kruse and Sy (2011) demonstrated that manipulating affect can influence the expression of IFTs. Specifically, increased positive affect increased people’s expression of prototypical followership theories. However, given the more transient nature of affect, these changes are likely to be somewhat short-lived. Consequently, once the affect has worn off, people are likely to revert to their original IFTs. From the perspective of CEST though, affect is an outcome of underlying cognitive processes occurring in the experiential system (Epstein, 1998; 2003; 2014). Changes in these underlying cognitive processes, therefore, should provide more stable and long-lasting changes in IFTs. This is because they change the underlying cognitive processes that contribute to a leader’s affective experiences. The CEST personality framework and the findings by Kruse and Sy (2011) in the context of the current study suggest that targeting the cognitive processes in the experiential system would result in respective changes to leaders’ IFTs. In support, Cerni and colleagues (2010) have shown that developmental interventions targeting the improvement of information processing style and constructive thinking in leaders can increase subordinate rating of transformational leadership. Other research has further demonstrated a positive relationship between leaders’ prototypical followership theories and transformational leadership (Duong, 2011). These two
studies are highly suggestive that manipulation of the cognitive processes in the experiential system is casually linked to leaders’ IFTs.

Second, similar to Chapter 3, the findings here have implications for team composition decisions. Situational leadership (Blanchard, 1985; Blanchard et al., 1985; Chemers, 1997; Hersey & Blanchard, 1969; 1977; Northouse, 2007) and the path-goal theory of leadership (Chemers, 1997; House, 1971; 1996; House & Mitchell, 1975) argue that leaders need to adapt to the personality and ability of followers to bring about the best outcomes. For example, situation leadership models argue for the need to adapt their use of directive (or task behaviours) and supportive (or relationship) behaviours based upon followers’ maturity (psychological and job) levels (Chemers, 1997; Graeff, 1983; Northouse, 2007). Job maturity, defined as the follower’s level of experience, knowledge and understanding of the task (Chemers, 1997), appears to be quite similar in nature to the incompetence IFT trait (i.e. uneducated, inexperienced, slow). This suggests that high rational leaders would be less suited to those followers with low job maturity as they would show lower experience, knowledge and understanding of a task all of which are less preferred in a rational leader.

Related to above are implications for relationship based perspectives of leadership (e.g. leader-member-exchange, see Dansereau et al., 1975; Graen & Uhl-Bien, 1995; relational view of leadership, see Hollander, 1971; 1992; 2012). These theories generally recognise the leader as a specific individual in a relationship with their followers and that leadership is the process which occurs between them. Both IFTs and ILTs act as a framework for interpreting the behaviours of followers and leaders respectively and for guiding behaviours in relation to them (see Lord & Maher, 1993; Sy, 2010; Whiteley et al., 2012). The current theory argues that leaders
IFTs and followers ILTs, develop, in part, through their experiences with followers and leaders respectively. These experiences though are filtered through their cognitive tendencies (i.e. information processing style and degree of constructive thinking). Furthermore, these tendencies influence how people generally respond to daily events, including those in the workplace. This, therefore, conceptually positions CEST and implicit leadership and followership theories within a potentially important theoretically framework for understanding how relationships between leaders and followers develop.

**Limitations**

Due to the similarities in theory and research design between the current and previous study, the current research has similar limitations. First, the use of explicit measures to assess implicit theories have been acknowledged as a potential issue in that the measure used to assess the concept are not aligned (Uhlmann et al., 2012). The core issue is that an individual’s awareness of what is being measured can influence how they respond. Consequently, relationships measured using implicit measures may be different to those found here. It is important to note though that Epitropaki and colleagues (2013) recently stated that “both indirect and direct measures can advance our understanding of how controlled and uncontrolled processing shapes leader–follower processes and outcomes” (p.866). Indeed, the use of a general working population made the use of an indirect measure less suitable from a logistical perspective. Therefore despite the potential methodological mismatch, the current study still is relevant and important. Future research though may wish to use an implicit IFT measure to assess whether similar findings emerge.
Second, situational factors were not assessed but conceptually may have moderated the relationships observed (e.g. see Derler & Weibler, 2014). However, it would seem that the use of a more abstract target (i.e. ideal follower in a business setting) would be less influenced by their current organisation culture. Indeed, as the current findings emerged in a diverse set of currently employed managers using two reliable and valid personality measures, the results would appear as potentially generalisable to a variety of business settings.

Third, while adequate for the analyses undertaken, the sample size was somewhat low. Therefore, some of the relationships may be obscured due to a lack of power to detect significant relationships. Fourth, as CEST focuses primarily on the experiential system (Epstein, 2003), the contributions of the rational system could be considered somewhat under-represented. As noted in the previous chapter though, from the perspective of CEST (Epstein, 2001; 2003), research assessing the relationships between the rational components of personality and ILT’s have already undertaken in the literature (e.g. Keller, 1999).

Fifth, the singular variable approach, which was adopted limits some of the interpretability of the findings (Foti & Hauenstein, 2007). Instead a pattern approach could provide more insight as it can be considered as offering a more holistic understanding of leader IFTs (e.g. see Foti & Hauenstein, 2007). Specifically, the pattern of the relationships between the IFT dimensions that a leader holds rather than any one specific IFT dimension. As noted in the previous chapter, this can be considered a complementary approach to the variable approach, not as a substitute (Foti & Hauenstein, 2007). Consequently, the current results are still important for extending ILT theory and research. However, future research may wish to consider a pattern approach.
CHAPTER 5

Leaders’ Information Processing Style and Constructive Thinking as Follower

LMX Antecedents: The Moderating Influence of Followers’ Implicit Ideal Leadership Theory

In Chapter 3 it was found that followers’ information processing style and constructive thinking are related to their implicit ideal leadership theories (herein shortened to IILT for simplicity). In Chapter 4, it was found that leaders’ information processing style and constructive thinking are related to their implicit ideal followership theories (herein shortened to IIFT for simplicity). The theoretical approach adopted in these studies was that IILTs and IIFTs, in part, through followers’ and leaders’ experiences with leaders and followers respectively. Specifically, experiences between leaders and followers are filtered through each of their own information processing tendencies (Norris & Epstein, 2011) and the different factors of constructive thinking (e.g. emotional coping; Epstein, 2001). It is assumed that individuals experience positive vibes and emotions when such interactions are experienced in ways that are congruent with their information processing style and constructive thinking tendencies (see Berne, 1961; Epstein, 2003). In contrast, they experience negative vibes or emotions when interactions require or pressure them to deliberate, act or converse in ways which are not congruent with these aspects of the self (e.g. see Epstein, 2003; McCann & Higgins, 1988). These emotional experiences provide the learning opportunity for both leaders and followers to associate particular follower or leader traits and behaviours with their experience of positive or negative affective experiences which results in the development of leaders’ IIFTs and followers’ IILTs.
Given the notion of leader-follower interaction in this theoretical underpinning, the findings presented in the previous two chapters are important when viewed through relationship based perspectives of leadership (e.g. leader-member exchange; see Dansereau et al., 1975; Graen & Uhl-Bien, 1995). Drawing upon leader-member exchange, a relationship oriented theory of leadership (see Dansereau et al., 1975; Graen et al., 1973; Graen & Uhl-Bien, 1995), the next two chapters seek to test two general models for understanding how leader and follower information processing styles and constructive thinking relate to follower and leader perceptions of the relationship respectively. In addition, given that implicit followership and leadership theories act as frameworks for interpreting the behaviours of followers and leaders respectively and for guiding behaviours in relation to them (see Lord & Maher, 1993; Sy, 2010; Whiteley et al., 2012), these models also seek to understand whether these relationships are moderated by leaders’ IIFTs or followers’ IILTs. This is based on the assumption these will influence how followers and leaders perceive, encode and interpret the dyadic partners behaviours.

**Leader-Member Exchange (LMX) Theory**

Leader-follower relationships have been observed as “central to organizational functioning” (Dulebohn et al., 2012, p. 1744). Consequently, Leader-Member Exchange (LMX) with its focus on leader-follower relationships has garnered much research attention in the leadership domain and has gone through many theoretical refinements (Graen & Uhl-Bien, 1995). LMX is a social exchange perspective as it assumes a give-and-take of valued emotional and tangible resources.
between a leader and follower (Blau, 1964; Graen & Scandura, 1987; Liden, et al., 1997; Sparrowe & Liden, 1997). It explicitly recognises that followers are a heterogeneous group who can perceive, interpret and react in very different ways to the same things and that managers can act in different ways with each follower (Dansereau et al., 1975; Graen et al., 1973). Specifically, LMX takes the position that leaders and followers negotiate different types of exchange relationships which fall on a continuum from low-quality or purely contractual based (e.g. giving of specified monetary reward in exchange for completion of agreed tasks) to high-quality relationships characterised by mutual trust, professional respect, liking and reciprocal influence (Dienesch & Liden, 1986; Gerstner & Day, 1997; Liden & Maslyn, 1998). Followers who have low-quality relationships with leaders are seen as the ‘out-group’ whereas those with high-quality relationships are seen as the ‘in-group’ (Liden & Maslyn, 1998). While the latter group of followers have better relationships, leaders have correspondingly higher performance and loyalty expectations (Hollander & Offermann, 1990).

According to LMX theory, effective leadership occurs when the relationship moves to a mature level (Graen & Uhl-Bien, 1991). The Leadership Making Model (Graen & Uhl-Bien, 1991; 1995) provides both a description of how leaders and followers move into this mature stage in addition to prescribing how leaders can improve each individual leader-follower dyadic relationship to bring this about (Graen & Uhl-Bien, 1995). According to this model, the relationship goes through three stages: (1) stranger stage; (2) acquaintance stage; and (3) mature partnership stage (Graen & Uhl-Bien, 1995). The stranger stage occurs when leaders and followers first meet. The lack of knowledge each holds on the other results in interactions based more upon their respective jobs and social roles – a more
transactional or contractual exchange of resources. An initial ‘offer’ from either party (but typically leaders due to their more powerful position) is made at the end of the stranger stage to improve the work-relationship (Graen & Uhl-Bien, 1995). If accepted and reciprocated by the partner, then the relationship moves into the acquaintance stage.

During the acquaintance stage, there is a continuing exchange of resources or contributions between leaders and followers but these move beyond simple contractual exchanges to include more socially valued resources (e.g. emotional support; Graen & Uhl-Bien, 1991; 1995). However, the resources are still somewhat limited as each party is essentially continuing to test the other’s commitment to the relationship. Assuming each is committed, these continuing exchanges help to positively reinforce the relationship by meeting each other’s needs. In other words, when one member of the dyad addresses the other’s needs then this will be reciprocated as per the norm of reciprocity (Blau, 1964).

During the mature partnership stage, the limited exchanges observed in the acquaintance stage become highly established (Graen & Uhl-Bien, 1995). The relationship is highly interdependent and of high-quality (Dienesch & Liden, 1986; Gerstner & Day, 1997; Liden & Maslyn, 1998). Leaders and followers show high levels of interest in helping each other meet their needs and goals. Each party though must continue to perceive the other as equally or exceeding the individuals’ own contributions to the relationship otherwise the relationship may become jeopardised (see Buunk, Doosje, Jans, & Hopstaken, 1993; Walster, Walster, & Berscheid, 1978). This applies to all the Leadership Making Model stages. This has the consequence that not all leader-follower relationships will reach the mature
partnership level as partners may not reciprocate (or, at least, be perceived to reciprocate) each other’s contribution.

There is now substantial evidence demonstrating that mature leader-follower partnerships contribute to positive individual and organisational outcomes (e.g. Dulebohn et al., 2012; Erdogan & Liden, 2002). When high-quality relationships exist, there is less turnover, increased performance evaluations, increased organisational commitment in both followers and leaders, less job stress, and greater innovation and creativity (Dulebohn et al., 2012; Duchon, Dunegan, & Uhl-Bien, 1992; Erdogan & Liden, 2002; Graen & Uhl-Bien, 1995; Judge & Ferris, 1993; Liden et al., 1993). In addition, followers work harder (Basu & Green, 1997; Duchon et al., 1986), engage in more effective communication (Fairhurst, 1993; Fairhurst & Chandler, 1989), show increased organisational commitment (Nystrom, 1990) and increased performance (Dulebohn et al., 2012; Seers & Graen, 1984). Furthermore, many of these outcomes are observed across different cultures and nations (Anseel & Lievens, 2007; Eden, 1993; Erdogan et al., 2006; Schyns et al., 2005; Wakabayashi & Graen, 1984), which demonstrates that relationship quality is a highly generalisable construct (van Gils et al., 2010). Given the wide-ranging important organisational outcomes, it becomes important to understand LMX’s antecedents.

Relative to its outcomes, LMX antecedents have been less researched (Mahsud et al., 2010). A recent meta-analysis by Dulebohn and colleagues (2012) identified several follower characteristics, which were related to LMX. The competence and ability of followers were positively related to their reported LMX. Followers’ personality traits of agreeableness, conscientiousness, extraversion, internal locus of control, and positive affectivity were also all found to positively relate to their perceptions of LMX quality. Such traits/behaviours are likely to be
viewed by leaders as positive and productive as they help leaders move towards valued goals (e.g. meeting sales targets). Correspondingly, leaders seek to further develop and maintain positive relationships with these types of followers to retain these benefits. In support, conscientiousness is one of the most reliable indicators of job performance (Barrick & Mount, 1991), while agreeableness is associated with helping behaviours, cooperation (Graziano et al., 2007) and reciprocity (Perugini et al., 2003). Conscientiousness and agreeableness in followers, therefore, are likely to increase leaders’ respect and trust resulting in more effective working relationships. Leader characteristics that were found to positively influence follower LMX include extraversion, agreeableness, transformational leadership and contingent reward behaviour (Dulebohn et al., 2012). Follower ILTs have also been found to predict their LMX rating (e.g. Bass & Avolio, 1989; Eden & Leviatan, 1975; 2005; Lord et al., 1984; Rush et al., 1977; Schyns & Meindl, 2005; Uhl-Bien et al., 2014).

**Linking Cognitive Experiential Self Theory and LMX**

Although the above demonstrates links between leaders and followers’ personality traits and LMX, no research to the author’s knowledge has considered whether information processing style or the experiential aspects of personality relate to LMX. There are, however, theoretical reasons to believe that both leaders’ and followers’ information processing styles (Norris & Epstein, 2011) and the degree they think constructively (Epstein, 2001) should be linked to LMX. A person’s information processing style and constructive thinking have significant influences on individuals’ subsequent behaviours across a wide range of contexts and situations due to these factors having wide-ranging connections throughout the self-concept
(see Epstein, 2003; 2014). Indeed, Cognitive-Experiential Self Theory (CEST) states that most of our behaviours are influenced by the schemas in the experiential system (Epstein, 1994; 2001).

Consequently, the general stability of these personality constructs should have a strong influence on the general behaviours that are manifested in leader-follower relationships. In support, previous research demonstrates links between information processing style and constructive thinking with specific leader and follower behaviours (e.g. Cerni et al., 2012; Curtis & Lee, 2013). For example, leaders with high rational information processing and good behavioural coping tend to use more rational influencing tactics and more effective conflict handling techniques (e.g. integrating ideas; Cerni et al., 2012; Curtis & Lee, 2013). Such behaviours will be observed and evaluated by their dyadic counterpart in the leader-follower relationship. Therefore, it is proposed that leaders’ and followers’ information processing style and constructive thinking will predict their dyadic partner’s perception of relationship quality.

However, implicit leadership theory (ILT; Eden & Leviathan, 1975; Lord & Maher, 1990; 1993) and implicit followership theory (IFT) (Sy, 2010) stipulate that the observer of the behaviour (i.e. the dyadic counterpart) will draw upon their implicit theories of leaders and followers to guide these observations and evaluations. This suggests that followers and leaders may evaluate the same behaviours in their dyadic counterpart quite differently due to differences in role expectations. This in turn would likely result in different judgements of the same relationship from the perspective of leaders and followers. Yet this explicit recognition is not typical in the LMX literature. In fact, a particularly pertinent issue in LMX literature is that relationship quality has typically been measured from the
followers’ perspective on the assumption that this relationship will be similarly experienced by both leaders and followers (van Gils et al., 2010; Wilson et al., 2010). This is unsurprising given that such an approach is aligned with the premise in LMX theory that the relationship is experienced similarly by both leaders and followers (van Gils et al., 2010). However, research strongly suggests that both parties typically experience the same relationship in substantially different ways (Gerstner & Day, 1997; Sin et al., 2009; van Gils et al., 2010; Wilson et al., 2010;). For example, meta-analytical research demonstrates that correlations between leaders’ and followers’ LMX are actually quite low (.29-.37; Gerstner & Day, 1997; Sin et al., 2009). If the assumption that the relationship is experienced similarly by leaders and followers is correct, then a much stronger correlation should be expected. As the evidence does not support this, it becomes important to theorise what may be contributing to the difference.

van Gils and colleagues (2010) argue that the key issue concerns what is exchanged between leaders and followers. They state “both dyadic partners are likely to perceive the contribution each person makes to the relationship based on their expectations for the particular role of the person” (p. 339). Both ILTs and IFTs are based in role theory as they specify, and organise information around, the traits and behaviours of both leaders and followers and serve to guide the observers’ interpretations of their respective actions, what a perceiver attends to, what they encode and the information they retrieve when recalling leader or follower related information (Eden & Leviathan, 1975; Epitropaki & Martin, 2004; 2005; Lord & Maher, 1990; 1993; Lord et al., 1984; Phillips & Lord, 1982; Poole et al., 1989; Sy, 2010). van Gils and colleagues (2010), therefore, draw upon ILTs and IFTs as potential constructs to explain LMX disagreement. Specifically, IFTs and ILTs
should influence how leaders and followers perceive, interpret and behave when interacting with their dyadic counterpart.

While van Gils and colleagues (2010) are correct to draw attention to the role IFTs and ILTs play in influencing both the leaders and followers perception of the dyadic relationship, they do not appear to explicitly consider the target schema (e.g. leader, ideal leader, follower, ideal follower) the perceiver will draw upon to guide their observations, expectations and interpretations. ILT and IFT ratings differ depending on the target schema used (Offerman et al., 1994; Sy, 2010). For example, the targets of leaders and supervisors are typically rated as more tyrannical than the target of effective leaders (Offerman et al., 1994). These differences should, therefore, influence how they perceive and make subsequent judgements of the observed leader or follower (see Bass & Avolio, 1989; Lord et al., 1984; Rush et al., 1977). Consequently, it is necessary to theorise what the target of the ILT or IFT schema is used in everyday work-setting as this is likely to have implications on the LMX rating by the perceiver.

It is proposed that both leaders and followers will, in general, draw upon their IIFT or IILT respectively rather than a more general implicit followership or leadership theory to perceive, interpret, and evaluate their dyadic counterpart. IIFTs or IILTs would be more likely to take into consideration the personal preferences of the follower or leader which a more general ILT or IFT would not. This is suggested by the theory and findings presented in Chapters 4 and 5 which imply that an individual leader’s or follower’s ideal dyadic partner (i.e. their IIFT or IILT respectively) would account for their own personal cognitive-emotional tendencies (i.e. their information processing style and degree of constructive thinking). In contrast, the more universal targets of a “leader” or “follower” would theoretically
be less likely to take these preferences into account as the focus is more on the cultural/stereotypical beliefs of what leaders tend to be in general (see Lord et al., 1984; Offerman et al., 1994). In an everyday leader-follower relationship, given that both leaders and followers are interdependently influencing each other’s thoughts, emotions and behaviours (Hollander, 1992), the use of an ideal leader or ideal follower target appears to be more likely to be drawn on when making judgements about their dyadic partner.

Based on the theory and research presented above, the remainder of this chapter and following chapter present two studies which seek to: (1) explore whether leaders and followers information processing styles and degree of constructive thinking relate to their partner’s (i.e. follower or leader respectively) LMX rating; and (2) see whether these relationships are moderated by followers’ IILTs and leaders’ IIFTs respectively. Conceptually, this is presented in Figures 5.1a and 5.1b. Drawing on person-environment fit (P-E fit) theory (see previous chapters; Kristof-Brown et al., 2005), at the most basic level it is anticipated that follower IILTs and leader IIFTs which are aligned or are congruent with their dyadic partners information processing style and constructive thinking will result in the hypothesised relationships (specific hypotheses based on these general models are outlined below and in the next chapter) emerging as stronger. To aid readership, the current chapter focuses on the how leaders’ information processing styles and constructive thinking relate to their followers’ LMX perceptions and whether the followers’ IILT moderates this relationship (see Figure 5.1a). The following chapter focuses on how followers’ information processing styles and constructive thinking relate to their leaders’ LMX and whether the leaders’ IIFT moderates this (see Figure 5.1b).
Drawing upon the general moderation model proposed in Figure 5.1a, specific hypotheses for leaders’ information processing and constructive thinking dimensions and their relationships to followers’ LMX are expanded on below. To maintain a consistent theoretical approach across all studies in this dissertation, the IILT dimensions observed in Chapter 3 were used in this study. These dimensions included Sensitivity, Tyranny, Intelligence, Attractiveness and Dedication. Table 5.1 reintroduces the reader to the 22 items found to make up these dimensions.
Table 5.1. *Implicit Ideal Leadership Theory Dimensions and Items from Exploratory Factor Analysis conducted in Chapter 3*

<table>
<thead>
<tr>
<th>Ideal ILT Factor</th>
<th>Items in Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>Sensitive; Compassionate; Sympathetic; Warm; Sincere</td>
</tr>
<tr>
<td>Tyranny</td>
<td>Selfish; Manipulative; Power-Hungry; Conceited; Loud</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Intellectual; Knowledgeable; Clever; Intelligent</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>Well-dressed; Well-groomed; Classy</td>
</tr>
<tr>
<td>Dedication</td>
<td>Motivated; Dedicated; Goal-Oriented; Enthusiastic; Hard-working</td>
</tr>
</tbody>
</table>

**Hypothesis development: Leader Information Processing and Follower LMX**

High rational processors are deep thinkers, tend to develop clear, rational and explainable reasons for decisions, and enjoy thinking abstractly (Pacini & Epstein, 1999a). High rational processors also tend to be more problem-solution focused (Epstein et al., 1996). Being problem-solution focused is vital for leaders to overcome complex social problems, which arise in organisations (Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000a). Rational processing, therefore, may help to support leaders in navigating the complex organisational social environment in order to bring about more effective and positive working relationships. In support, leaders with high rational information processing styles correspondingly use rational influencing tactics and integrative conflict handling techniques (Cerni et al., 2012; Curtis & Lee, 2013). Leaders who adopt integrative conflict handling styles tend to have followers who report higher quality relationships with the leader (Green, 2008). Leader rational information processing, therefore, should be positively related to followers’ LMX.

As per the general moderation model presented, the items, which make up the intelligence dimension of IILTs (see Table 5.1) appear to be most aligned with valuing (or not) the behavioural tendencies of leaders with high levels of rational processing (e.g. rational decision making and communication tactics). In support,
followers with high levels of rational processing tend to prefer more intelligent leaders (see Chapter 3) suggesting preferences for similar traits and behaviours as themselves. Therefore, it is hypothesised that:

**Hypothesis 1:** a significant positive relationship will exist between leaders’ rational processing and followers’ LMX...

**Hypothesis 1a:** ...and this relationship will be stronger for followers’ with higher preferences for leader intelligence.

High experiential processors tend to be superior at forming and maintaining positive social relationships (Norris & Epstein, 2011; Pacini & Epstein, 1999a). Empathy is an important aspect of developing relationships in all contexts including those at work as it helps individuals to take another’s perspective and re-experience their emotions (Katz, 1963; Yukl, 1998). Empathy importantly requires imagination as this helps an individual take another’s perspective (Kellett et al., 2002; Rudebeck, 2002). Imagination is a component of experiential processing (Norris & Epstein, 2011). Therefore, high experiential processing in leaders may help improve leader-follower relationships. In support, the strongest correlates of follower LMX tend to occur when leaders use more relationship-oriented behaviour such as supporting and developing their followers (Yukl & Fu, 1999; Yukl, O’Donnell, & Taber, 2009).

The ILLT dimension that appears to contain those items most congruent with valuing or emphasising relationship based leader behaviour is sensitivity (see Table 5.1). This is because the leaders’ traits and behaviours associated with sensitivity
(e.g. compassionate, warmth, sincerity) are highly similar to those proposed in conceptualisations of empathy (see Davis, 1983). Consequently, the behavioural tendencies of leaders with high experiential processing styles should be more congruent with those followers who endorse high levels of sensitivity in their ideal leader. It is, therefore, hypothesised that:

**Hypothesis 2**: a significant positive relationship will exist between leaders’ experiential thinking and followers’ LMX...

**Hypothesis 2a**: …and this relationship will be stronger for followers with higher preferences for leader sensitivity.

**Hypothesis development: Leader Constructive Thinking and Follower LMX**

As noted in previous chapters, emotional coping is a core dimension of constructive thinking and is about how individuals deal with frustration, disappointment, rejection, criticism and disapproval (Epstein, 2001). These are typical situations that most leaders will face in the workplace. Examples include frustration and disappointment at not achieving a sales target or having a proposal rejected by a client. Good emotional copers tend to be able to cope with these situations without excessive distress (Epstein, 2001). In contrast, poor emotional copers will tend to take these personally, allow them to undermine their sense of worth and/or dwell on them to a disproportionate degree. For example, leaders with poor emotional coping may interpret feedback from one of their followers as reflecting their (in)competence rather than as a potential source of help. Indeed, in
some cases, they may simply avoid or dismiss follower feedback due to the negative impacts on the self (e.g. see Grant et al., 2009; Ilgen et al., 1979; Kluger & DeNisi, 1996; Menon, 2001; Morrison & Milliken, 2000). High levels of emotional coping, therefore, should help support leaders to develop high-quality relationships as they should be able to manage their emotional experiences more effectively when interacting with others (e.g. low anxiety and an increased focus on the needs of the follower). In support, research demonstrates that good emotional copers tend to develop more favourable relationships (Epstein & Meier, 1989). They are also more optimistic and less introverted (Epstein, 1992) that in turn are both associated with higher levels of LMX (Murphy & Ensher, 1999). Furthermore, high levels of neuroticism, of which emotional coping has strong positive relationships with, is positively related to an avoidant conflict management style (Antonioni, 1998; Epstein, 2001). Those who use an avoidant conflict management style tend to experience increased relationship conflict and stress (Friedman, Tidd, Currall, & Tsai, 2000) which is likely a result of their sensitivity to threat.

The traits and behavioural tendencies of leaders with poor emotional coping as described above may be less likely to be perceived by followers seeking leader sensitivity as congruent with this ideal. This is primarily because such traits and behaviours in these leaders are unlikely to promote or support positive and supportive interpersonal interactions/communication (e.g. see Cheek & Melchior, 1990; Daly & Stafford, 1984; Melchior & Cheek, 1990; Strand, 2006). For example, leaders who tend to avoid or dismiss followers’ input and feedback are unlikely to be ascribed as sensitive or compassionate as they do not seek to take account of followers’ views and feelings. In support, employee voice literature demonstrates that being able to feel heard and supported can help people manage their tasks and
feelings more effectively (Garon, 2012; Wood, 2008). Furthermore, followers (especially males) who endorse high sensitivity in their ideal leader tend to show lower levels of emotional coping themselves (see Chapter 3). This is suggestive that they tend to seek compensatory leader traits and behaviours to overcome the follower’s low self-esteem and tendency to experience negative affect. The more avoidant and pessimistic tendencies of leaders with poor emotional coping are unlikely to provide this compensatory requirement or support. Consequently, the proposed positive relationship between leader emotional coping and followers’ LMX may be moderated by the degree to which followers endorse sensitivity in their ideal leader.

**Hypothesis 3**: a significant positive relationship will exist between leaders’ emotional coping and followers’ LMX...

**Hypothesis 3a**: …and this relationship will be stronger for followers with higher preferences for leader sensitivity.

High behavioural copers are more likely to have automatic thoughts to events, which facilitate effective action such as engaging in hard work, effort, and planning (Epstein, 2001). They also tend to be positive, optimistic thinkers who focus more on achieving outcomes rather than worrying about things such as deadlines (Epstein, 1992; 1998; 2001). Furthermore, they tend to be non-judgmental and instead focus on the effectiveness of particular behaviours in others (Epstein, 1998; 2001). In leaders, all these traits and behaviours are likely to support the
development of positive and supportive working relationships with their followers.

For example, being non-judgmental is a key factor in helping facilitate others to express their true positions and feelings without fear of being judged (e.g. see Chan & Treacy, 1996; May, Gilson, & Harter, 2004; Nembhard & Edmondson, 2006; Rogers, 1959; Walumbwa & Schaubroeck, 2009). This openness and safety should help followers develop trust in their leaders (e.g. see Colquitt, Scott, & LePine, 2007; Gao, Janssen, & Shi, 2011; Mayer, Davis, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Behavioural coping is also associated with an integrative style of conflict-handing (Cerni et al., 2012) which, in turn, is associated with higher-quality relationships (Green, 2008). In addition, positivity and optimism have been found to support leaders’ ability to communicate effectively, empathise with their team, and facilitate a climate of innovation and creativity (Dulebohn et al., 2012; Prati, Douglas, Ferris, Ammeter, & Buckley, 2003; Scott & Bruce, 1994). Given these links, high behavioural coping in leaders may support the development and maintenance of high-quality relationships with followers.

It would seem logical to expect that the optimistic and action-oriented nature of leaders with high levels of behavioural coping would, in particular, appeal to those followers who endorse high levels of dedication in their ideal leader (see Table 5.1). For example, the items of motivated and enthusiastic would align with the positive and optimistic nature of leaders with high behavioural coping. Alternatively, a leaders’ tendency to be conscientious would likely resonate with the dedicated and hard-working items. The increased tendency for such leaders to be non-judgmental, though, is also likely to appeal to followers who endorse high levels of sensitivity in their ideal leaders. This is because being non-judgmental should facilitate psychologically safe environments in which followers can voice their needs and
provide input (e.g. see Botero & Dyne, 2009; LePine & van Dyne, 2001). The proposed relationship between leaders’ behavioural coping and followers’ LMX, therefore, should be moderated by the degree to which followers endorse both dedication and sensitivity in their ideal leaders. Based upon the above, it is hypothesised that:

Hypothesis 4: a significant positive relationship will exist between leaders’ behavioural coping and followers’ LMX...

Hypothesis 4a and 4b: ...and this relationship will be stronger for followers with higher preferences for leader dedication and sensitivity.

Categorical thinkers believe there is only one right way to do something – their way (Epstein, 1998; 2001; Epstein & Meier, 1989). Consequently, they tend to see others in error for simply taking a different position. They are also quick to experience annoyance and anger when their expectations are violated (Epstein, 1992; 2001) and tend to be more judgmental, intolerant and uncaring towards others (Epstein, 1992; 2001). Given such tendencies, it was unsurprising that leaders with high categorical thinking tend to seek more conformist followers (i.e., do not question the status quo) as they are less likely to question or criticise their leaders. In contrast, followers who do question or criticise would tend to elicit negative vibes and emotions in these leaders that are negative need states (see Chapter 4). Such behavioural tendencies and negative follower beliefs are unlikely to promote the
development and maintenance of high-quality leader-follower relationships for a number of reasons.

First, the ability to trust others is an important factor in interpersonal cooperation (Kramer & Tyler, 1996; Lewicki, Tomlinson, & Gillespie, 2006; McAllister, 1995) and the resolution of conflict (Deutsch, 1973; Lewicki et al., 2006). It also helps individuals take risks and accept vulnerability (Gao et al., 2011). Therefore, leaders who tend to be generally distrustful of people should be less likely to develop high-quality leader-follower relationships. Second, those who are judgmental are unlikely to promote a psychologically or emotionally safe environment in which others can express their true positions or feelings due to anxiety and fear of being judged (Chan & Treacy, 1996; May et al., 2004; Nembhard & Edmondson, 2006; Rogers, 1959; Walumbwa & Schaubroeck, 2009). Finally, the tendency for leaders with high categorical thinking to endorse conformity (see Chapter 4) is unlikely to promote positive and supportive interactions and work-environments for followers (e.g. see theory and research on Theory X and Y managers; Finman, 1973; McGregor, 1960; Neuliep, 1987; 1996). In support, leaders who hold more anti-prototypical follower beliefs, of which conformity in one element, tend to have followers who report lower levels of LMX (Sy, 2010). Based on these reasons, high categorical thinking in leaders is likely to undermine the development of a high-quality leader-follower relationship as perceived by the follower.

This relationship may be moderated by the degree to which followers endorse sensitivity in their ideal leader. From the perspective of such a follower, the behavioural tendencies of leaders with high categorical thinking as described above are unlikely to be perceived or judged as congruent with their preferences. For
example, leaders who are intolerant, uncaring and cognitively/emotionally closed to others’ needs and perspectives are likely to be perceived quite negatively by someone who seeks compassion and warmth in their ideal leader. It is, therefore, proposed that:

**Hypothesis 5**: a significant negative relationship will exist between leaders’ categorical thinking and followers’ LMX...

**Hypothesis 5a**: …and this relationship will be stronger for followers with higher preferences for leader sensitivity.

Naïve optimists think in positive and optimistic ways but which differs from positive thinking as it is unrealistic (Epstein, 2001). Positivity, though, is one of the most effective communication techniques for influencing others (Cameron, 2008; Norman, Avolio, & Luthans, 2010) and is a highly valued personal attribute in general society (Collinson, 2012). Indeed, positivity and optimism can help leaders construct powerful and attractive visions of the future which can help reassure and calm followers into thinking that ‘everything will be ok’ (Peters & Austin, 1985). The positivity associated with naïve-optimism, therefore, should help support the leader develop positive leader-follower relationships. In support, naïve-optimists tend to be well liked and are popular in politics (Epstein, 1998; 2014). Naïve optimists also tend to think in simplistic and stereotyped ways (Epstein, 2001). For example, they may believe that everyone should try to look happy despite feeling sad or that all people are good at heart. Such beliefs in leaders are likely to reinforce
positive leader-follower interactions as they help promote positivity and optimism. In support, naïve-optimism, especially the sub-scale of pollyanna-ish thinking, is positively associated with positive affective traits such as happiness and extraversion while negatively related to negative affect and neuroticism (Epstein, 1992 as cited in Epstein, 2001). Consequently, there should be a positive relationship between leaders’ naïve-optimism and LMX.

This relationship may be moderated by followers who endorse high levels of attractiveness in their ideal leader. Leaders with high levels of naïve-optimism appear to engage in behaviours which could be interpreted as impression management. Impression management is a goal-directed behaviour which aims to influence the perceptions held by others by regulating and controlling what information is disseminated during social interactions (Leary & Kowalski, 1990). For example, the tendency to believe that everyone should try to look happy despite feeling sad suggests that how one presents oneself may be important. Visual appearance and outward behaviours are key factors in how people make implicit and explicit judgements about others (Adam & Galinsky, 2012; Johnson, Schofield, & Yurchisin, 2002; Rosenberg, Kahn, Tran, & Le, 1991; Slepian, Ferber, Gold, & Rutchick, 2015). The IILT trait of attractiveness includes the items of well-dressed, well-groomed, and classy (see Table 5.1). These appear to be congruent with the theorised self-presentation tendencies of leaders with high levels of naïve-optimism. Consequently, followers who endorse high levels of attractiveness in their ideal leader should see such leaders more positively than those who endorse lower levels.

In addition to attractiveness, the proposed relationship may also be moderated by dedication. It may be that the positivity of leaders with high levels of naïve-optimism is congruent to some degree with those expectations of followers
who endorse high levels of dedication in their ideal leader. For example, these leaders may say all the right things and appear enthusiastic, motivated and even provide a positive vision of the future which motivates followers who seek high levels of dedication. For followers, such behaviours, therefore, would likely resonate with their preferences for motivated and enthusiastic leaders. Based upon the above, it is hypothesised that:

**Hypothesis 6**: a significant positive relationship will exist between leaders’ naïve-optimism and followers’ LMX...

**Hypothesis 6a & 6b**: …and this relationship will be stronger for followers with higher preferences for leader attractiveness and dedication.

**Method**

**Participants**

Data was collected from employees and their line managers. These participants came from a small boutique legal firm, a local branch of a national union as well as direct participation (i.e. direct participation by individual managers who then invited their team members to participate). The legal firm was recruited through professional contacts of the researcher. The national union requested to participate via a website, which had been set up to support the organisational participation (i.e. promote the research and provide information), which was advertised via professional social media (e.g. LinkedIn) and university alumni email distribution lists, in addition to professional contacts of the researcher. In regard to direct
participation, managers and their direct-reports were also eligible to participate. Where managers indicated they would like to participate, they were asked to send an invite to their direct reports, which contained a link to a survey specifically developed for direct reports. The final sample consisted of 106 followers (68.9% female, 31.1% male) and 26 line leaders (65.4% male, 34.6% female). Average follower age was 39.40 (SD = 11.09; range 18-62). Average leader age was 41.27 (SD = 8.93; range 26-67). The average length of time a follower and leader had been working together was 39.09 months (SD = 46.57 range 1-300).

Measures - Leader

Rational-Experiential Multimodel Inventory (REIm; Norris & Epstein, 2011). The REIm (Norris & Epstein, 2011) is a 42 item measure which asks individuals to respond on a 5-point Likert scale (1 = Definitely False; 5 = Definitely True) the degree to which they use a rational (12 items) or experiential processing style (30 items). The experiential scale consists of 3 sub-scales (10 items each) to measure its different aspects: (1) intuitive; (2) emotionality and; (3) imagination. The intuitive facet is designed to assess the ability and engagement of an individual’s use of intuitive judgements (e.g. “I often go by my instincts when deciding on a course of action”). The emotionality sub-scale assesses the intensity, frequency, duration, and favourable attitude towards strong affect (e.g. “My emotions don’t make much difference in my life”; reversed scored). The imagination sub-scales assesses the engagement in, and appreciation of, imagination, aesthetic productions, and imagery (e.g. “Sometimes I like to just sit back and watch things happen.”) Higher scores indicate a higher preference for processing on that particular dimension.
Constructive Thinking Inventory (CTI; Epstein, 2001). The constructive and destructive components of the experiential system were assessed by the 108-item constructive thinking inventory (CTI, Epstein, 2001). The constructive components of the experiential system include global constructive thinking, emotional coping, and behavioural coping. The destructive components are personal superstitious thinking, categorical thinking, esoteric thinking, and naïve-optimism (Epstein, 2001). The reader is referred to Table 1.3 presented in Chapter 1 for main-scale and sub-scale definitions. People respond on a 5-point Likert scale how much a statement is true of them (1 = Definitely False; 5 = Definitely True). Raw scores are entered into an electronic scoring programme (Epstein & PAR Staff, 2008) and converted to T-Scores based upon gender norms.

Measures - Follower

Implicit Leadership Theory Questionnaire (Offerman et al., 1994) – adapted. The current study used the Implicit Leadership Theory Questionnaire utilised in the previous studies. Individuals were asked to rate on a 10-point Likert scale (1 = Not at all Characteristic; 10 = Extremely Characteristic) the degree to which the traits were characteristic of “their ideal leader in a business setting”. However, for the reasons described in the introduction, only the 22 items that loaded on the five IILTs dimensions (sensitivity, tyranny, intelligence, attractiveness and dedication; see Table 5.1) were used. Higher scores are assumed to indicate a preference for a particular leader trait/behaviour.
Multi-dimensional Leader-Member Exchange Questionnaire (LMX-MDM; Liden & Maslyn, 1998). The Multidimensional Leader-Member Exchange Questionnaire (LMX-MDM; Liden & Maslyn, 1998; see Appendix D) is an extensively used measure of LMX. Followers are asked to respond on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) on how much they agree a statement reflects their perception of four separate, but interrelated, dimensions in the exchange relationship with their leader: (1) affect; (2) loyalty; (3) contribution and; (4) professional respect. Affect refers to the affection felt for a leader or follower based primarily upon interpersonal attraction as opposed to professional values. An example item is “I like my supervisor very much as a person”. Loyalty refers to the belief that the other member of the dyad will express public support for them. An example item is “My supervisor would come to my defence if I were attacked by others”. Contribution refers to the perceptions held by the individual of the support and involvement they give to the relationship beyond their contractual obligations. An example item is “I do work for my supervisor that goes beyond what is specified in my job description”. Professional respect refers to the perceived reputation of the other member of the dyad. An example item is “I admire my supervisor’s professional skills”. All sub-scales contain 3 items. An overall LMX score was calculated by taking the average of all 12 items. Higher scores indicate higher quality relationships. It should be noted that the name of a follower’s actual leader was presented as opposed to the generic word of “supervisor”.
**Procedure & Analytical Approach**

The same two-stage procedure used in the previous two studies (Chapters 3 and 4) was used to help control for the effects of common-method bias (see Podsakoff et al., 2003). In stage one, leaders completed the REIm (Norris & Epstein, 2011) while followers completed the adapted Implicit Leadership Theory Questionnaire (Offerman et al., 1994). Both also completed some demographic items. Leaders and followers who completed stage one were invited two days later to complete stage two via email. In stage two, leaders completed the CTI (Epstein, 2001) while followers completed the LMX questionnaire (Liden & Maslyn, 1998). The average time for leaders between the completion of stage one and stage two was 4.65 days ($SD = 3.11$, range 2-14). The average time for followers between the completion of stage one and stage two was 3.98 days ($SD = 2.65$, range 2-14). Both leaders and followers could choose to receive written feedback based upon their responses to the REIm (Norris & Epstein, 2011) and CTI (Epstein, 2001). In addition, in instances where at least 5 followers rated a leader, the leader could also choose to receive leadership feedback based upon their followers’ responses to the LMX-MDM (Liden & Maslyn, 1998).

Despite recognising that the organisational behaviour occurs within a complex and dynamic organisational system, a key issue in the academic literature is a general failure to account for the multi-level dynamics of these systems (Hitt, Beamish, Jackson, & Mathieu, 2007). Organisations are typically hierarchical in nature with individuals being nested in work-groups, which in turn are nested in departments and so on (Hofmann & Gavin 1998). It is important, therefore, to recognise and account for how these levels influence the dependent variable(s).

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1 For simplicity, the current study chooses to examine only two levels (i.e. follower and leader).
Specifically, the extent that individuals (i.e. followers) within a group (i.e. work team) share common experiences (i.e. with the same leader), we would expect their scores on the outcome variable (i.e. LMX) to be correlated across members of the group, which violates the independence assumption of many statistical models (Bauer, Preacher, & Gil, 2006; Hofmann, 1997). Therefore typical analytical assessment techniques (e.g. regression, path-analysis) are likely to result in biased model estimates (Geiser, Bishop, Lockhart, Shiffman, & Grenard, 2013).

Specifically, standard errors of the model parameters are likely to be underestimated due to an overestimation of effective sample size caused due to clustering of the data. This increases the chance of Type I errors (Luke, 2004). HLM7 is a statistical modelling programme capable of appropriately analysing cross-sectional, multi-level data (Raudenbush, Bryk, Cheong, Congdon, & Toit, 2011).

**Results**

For each manager, there was an average of 4.08 followers reporting to them. As data was collected from multiple sources (i.e. managers and followers) and across two stages separated by at least 2 days, common method bias was not assumed to be an issue (see discussion by Podsakoff et al., 2003). Any data point that was more than 1.5 times the Interquartile range (IQR) above or below the first or above the third quartile was classified as an outlier (see Tuckey, 1977). Due to the small sample size, outliers were truncated to the nearest highest/lowest non-outlier score (see Osborne & Overbay, 2004). Thus, statistical power is retained as no individuals are dropped in the analyses, but distribution issues are reduced. A total of 6 outliers across all scales were recoded with a mean of .16 items per factor. Inspection of the
histograms and Q-Q plots indicated some minor normality issues but the inferential statistics used are generally quite robust against this (Tabachnick & Fidell, 2007). Table 5.2 presents means, standard deviations, and scale reliabilities for all leader and follower variables used in the current study. All main scales showed acceptable to excellent levels of reliability (range .74 to .92; Kline, 2000). While some of the correlations on the CTI were very high (e.g., emotional coping and behavioural coping \( r = .88 \)), due to licencing restrictions, it was not possible to conduct a confirmatory factor analysis to assess whether the items produced the expected factor structures. Based on previous research (see Epstein, 2001; Epstein & Meier, 1989), it is assumed for current purposes that these factors can be treated as theoretically separate.

**Hypothesis Testing**

The first step in the analysis was to determine if there were systematic between-cluster variances in the dependent variable (i.e., follower LMX) by calculating an inter-class correlation (ICC; Luke, 2004). An ICC ranges from 0 to 1.00 and is a measure of the degree of dependence of observations (Geiser et al., 2013). For current purposes, 0 would indicate that LMX ratings are independent of the leader – an unlikely scenario given the nature of the study. In contrast, higher ICCs would indicate LMX ratings are dependent on the leader. An alternative interpretation is that the ICC is the expected correlation between LMX scores for two individuals who report to the same leader (Geiser et al., 2013). The ICC indicated that 40.2% of the variance in follower LMX was between groups. While there are no firm rules around the degree to which to interpret this figure, Aguinis,
Gottfredson and Culpepper (2013) state that ICC’s as small as .10 may indicate level
two variables explain variance across groups. Given the observed ICC was above
this threshold, multi-level modelling was seen as suitable for assessing the
hypotheses.

A similar statistical process to that described by Harris, Harvey and Kacmar
(2011) was used. A single leader’s information processing style or constructive
thinking dimension was used as the predictor variable for multiple followers.
Consequently, there is no within-leader variance in the predictor variable (i.e. all
ICCs are 1.0). All variance is between supervisors. Each hypothesis test was
modelled separately. To test a specific hypothesis, three statistical steps were
undertaken. In the first step, the level two variable (i.e. relevant leader information
processing dimension or constructive thinking dimension) was entered to test main
effect hypotheses (i.e. hypotheses 1 to 6). In the second step, the proposed moderator
was entered. This was included as previous research suggests that individuals use
their ILTs to “fill in” the blanks when rating leaders (e.g. Bass & Avolio, 1989; Eden
& Leviatan, 1975; 2005; Lord et al., 1984; Rush et al., 1977; Schyns & Meindl,
2005; Uhl-Bien et al., 2014). Consequently, followers’ IILTs may also predict their
LMX score. In the third step, a cross-level interaction variable was formed by
multiplying the level two and proposed level one moderator variables. Significant
findings at this step would support the presence of a moderating effect (i.e.
hypotheses 1a to 6b). Grand centring was undertaken on all independent and
moderator variables (see Aiken & West, 1991; Geiser et al., 2013; Hofmann &
Gavin, 1998). In each approach, $R^2$ is interpreted as the proportional reduction in
prediction error over a comparison model (Luke, 2004). Specifically, it is the
percentage change in the variance in the residuals between the tested and comparison
model on the assumption that better models should decrease the variance in the residuals. Where interactions were flagged as significant, simple slopes (as recommended by Muthen, 2015) were plotted at both one standard deviation above and below the mean of the proposed moderator and independent variable to investigate whether the moderation effect was in the expected direction (see Aiken & West, 1991; Schubert & Jacoby, 2004; Stone & Hollenbeck, 1989).

Hypotheses Related to Leaders’ Information Processing Dimensions

The results of the HLM analysis investigating hypotheses 1 (main effect of leader rational processing) and 1a (moderating effect of follower intelligence IILT) are presented in Table 5.3. As can be seen in step one, rational processing was not significantly related to follower LMX. Consequently, hypothesis 1 was not supported. Step two demonstrates that follower intelligence IILT was not significantly related to their LMX rating. Step three also demonstrates that there was no significant interaction between leader rational processing and follower intelligence. Therefore, hypothesis 1a was not supported.
Table 5.2.  
Descriptive statistics, inter-correlations and scale reliabilities for all manager (n=26) and follower (n=106%) main variables used in the study.

|                     | Mean | SD  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  |
|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| **Manager Variables** |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| REIm                |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 1. Rational         | 4.03 | .48 | .84 | .10 | .46**| .50**| -.65**| .46**| .03 | .05 | .14 | .16 | .24* |     |
| 2. Experiential     | 3.59 | .36 | .74 | -.05| .23* | -.29**| .55**| -.08| -.02| .04 | .05 | .20* |     |
| Constructive Thinking |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 3. Emotional Coping | 48.15| 14.67| N/A^| .88**| -.77**| .35**| -.06| .31**| .26* | .27**| .39**|     |     |
| 4. Behavioural Coping | 47.58| 9.45| N/A^| -.78**| .51**| -.08| .21* | .24* | .17 | .38**|     |     |     |
| 5. Categorical Thinking | 37.62| 8.48| N/A^| -.50**| .07 | -.20*| -.29**| -.23*| -.40**|     |     |     |
| 6. Naïve-Optimism | 38.65| 7.49| N/A^| .06 | .11 | .01 | .09 | .41**|     |     |     |     |     |
| **Follower Variables** |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| IILT%               |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 7. Sensitivity      | 7.55 | 1.49|     | .85 | .38**| .31**| .45**| .17 |     |     |     |     |     |
| 8. Intelligence    | 7.52 | 1.75|     | .89 | .52**| .68**| .16 |     |     |     |     |     |     |
| 9. Attractiveness  | 5.35 | 2.43|     | .89 | .61**| .05 |     |     |     |     |     |     |     |
| 10. Dedication      | 8.42 | 1.19|     | .89 | .20 |     |     |     |     |     |     |     |     |
| LMX                 |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 11. Overall         | 5.59 | 0.94|     | .92 |     |     |     |     |     |     |     |     |     |     |

*Note that descriptive statistics for the IILT dimensions are based upon responses from 100 followers rather than 106.  
^Reliabilities cannot be calculated due to the Constructive Thinking Inventory (Epstein, 2001) being a controlled test. It is therefore assumed that these scales are reliable.
The results of the HLM analysis investigating hypotheses 2 (main effect of leader experiential processing) and 2a (moderating effect of follower sensitivity IILT) are presented in Table 5.4. As can be seen, in step one, experiential processing was not significantly related to follower LMX. Consequently, hypothesis 2 was not supported. Step two suggested that follower sensitivity IILT was not significantly related to their LMX rating although it did approach significance. Step three also demonstrates no significant interaction between leader experiential processing and follower sensitivity. Therefore, hypothesis 2a was not supported.
The lack of significance between experiential processing and LMX was surprising given the integral links between the experiential system and the development of positive relationships (e.g. Norris & Epstein, 2011; Pacini & Epstein, 1999a). As previously described, imagination is an important factor in empathy (Katz, 1963; Yukl, 1998) which, in turn, is key to developing effective relationships (Kellett et al., 2002; Rudebeck, 2002). Imagination is a sub-dimension of experiential processing. Therefore, an exploratory analysis was undertaken using the imagination sub-scale (M = 3.60, SD = .64, reliability = .76). This analysis is presented in Table 5.5. As can be seen, imagination emerged as a significant positive predictor of follower LMX. Therefore, some partial support was found for hypothesis 2. There was also a significant interaction between leaders’ imagination and followers’ sensitivity IILT. To explore this, simple slopes analysis was undertaken and is presented in Figure 5.2. It was observed that the slope at 1SD beneath the mean of the moderator was not significant (t = 7.35, p = .464). The slope at 1SD above the mean though was significant (t = 3.801, p < .001). This provides partial support for hypothesis 2a.

Table 5.5.

| Exploratory Hierarchical linear modelling for interaction between leaders’ imagination and followers’ sensitivity for predicting followers’ LMX |
|---------------------------------|-----------------|-----------------|-----------------|
| Independent Variable            | Baseline        | Step 1          | Step 2          |
| Imagination (A)                 | .392*           | .460**          | -.800           |
| Moderator Sensitivity (B)       | .122*           |                | -.538^          |
| Interaction Term A×B            |                |                | .163*           |
| Level 1 variance of residuals   | .481            | .434            | .406            |
| Variance change                 | N/A             | .047            | .028            |
| ΔR2                             | N/A             | .098            | .065            |

^p<.10; *p<.05; **p<.01
**Figure 5.2.** Moderating effect of follower sensitivity IILT (1±SD) on the relationship between leader imagination (1±SD) and follower LMX.

**Hypotheses Related to Leaders’ Constructive Thinking Dimensions**

The results of the HLM analysis investigating hypotheses 3 (main effect of leader emotional coping) and 3a (moderating effect of follower sensitivity IILT) are presented in Table 5.6. As can be seen, in step one, emotional coping was positively related to follower LMX and was significant. Consequently, hypothesis 3 was supported. Step two demonstrated that follower sensitivity IILT was positively related to their LMX rating and was significant. Step three also demonstrates that there was a significant interaction between leader emotional coping and follower sensitivity. To determine support for the interaction hypothesis, simple slopes analysis was undertaken and is presented in Figure 5.3. It was observed that the slope at 1SD beneath the mean of the moderator was not significant (t = .600, p = .550).
The slope at 1SD above the mean though was significant ($t = 5.948, p < .001$). This provides support for hypothesis 3a.

Table 5.6. *Hypotheses 3 and 3a - Hierarchical linear modelling results predicting followers’ LMX with leaders’ emotional coping and followers’ sensitivity as moderator*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Coping (A)</td>
<td></td>
<td>.027**</td>
<td>.029**</td>
<td>.024**</td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity (B)</td>
<td></td>
<td>.121*</td>
<td></td>
<td>-.596*</td>
</tr>
<tr>
<td>Interaction Term</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A×B</td>
<td></td>
<td></td>
<td></td>
<td>.012**</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.481</td>
<td>.449</td>
<td>.417</td>
<td>.384</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>.032</td>
<td>.032</td>
<td>.033</td>
</tr>
<tr>
<td>∆R2</td>
<td>N/A</td>
<td>.067</td>
<td>.071</td>
<td>.079</td>
</tr>
</tbody>
</table>

*p<.10; *p<.05; **p<.01

*Figure 5.3. Moderating effect of follower sensitivity IILT (1±SD) on the relationship between leader emotional coping (1±SD) and follower LMX.*

The results of the HLM analysis investigating hypotheses 4 (main effect of leader behavioural coping) and 4a (moderating effect of follower dedication IILT)
are presented in Table 5.7. As can be seen, in step one, behavioural coping was positively related to follower LMX and was significant. Consequently, hypothesis 4 was supported. Step two demonstrates that follower dedication was not significantly related to their LMX rating. Step three though demonstrates a significant interaction between leader behavioural coping and follower dedication. To determine support for the interaction hypothesis, simple slopes analysis was undertaken and is presented in Figure 5.4. It was observed that the slope at 1SD beneath the mean of the moderator was not significant \((t = .672, p = .503)\). The slope at 1SD above the mean though was significant \((t = 5.848, p < .001)\). This provides support for hypothesis 4a.

Table 5.7.

*Hypotheses 4 and 4a - Hierarchical linear modelling results predicting followers’ LMX with leaders’ behavioural coping and followers’ dedication as moderator*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural Coping (A)</td>
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<td>.030**</td>
<td>-.240**</td>
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<tr>
<td>Moderator Dedication (B)</td>
<td>.133</td>
<td></td>
<td>-1.608**</td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td></td>
<td>.033**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.481</td>
<td>.439</td>
<td>.407</td>
<td>.315</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>.042</td>
<td>.032</td>
<td>.092</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>.087</td>
<td>.073</td>
<td>.226</td>
</tr>
</tbody>
</table>

\(^{^*}p<.10; \ ^{*}p<.05; \ ^{**}p<.01\)
The results of the HLM analysis investigating hypothesis 4b (moderating effect of follower sensitivity ideal ILT on the proposed relationship between leader behavioural coping and follower LMX) is presented in Table 5.8. As already shown above, step one revealed a significant, positive relationship between leader behavioural coping and follower LMX. Step two suggested that follower sensitivity IILT was positively and significantly related to their LMX rating. Step three also demonstrates that there was a significant interaction between leader behavioural coping and follower sensitivity. To determine support for the interaction hypothesis, simple slopes analysis was undertaken and is presented in Figure 5.5. It was observed that the slope at 1SD beneath the mean of the moderator was not significant ($t = .427, p = .671$). The slope at 1SD above the mean though was significant ($t = 5.529, p < .001$). This provides support for hypothesis 4b.
Table 5.8. 
Hypothesis 4b - Hierarchical linear modelling results predicting followers’ LMX with leaders’ behavioural coping and followers’ sensitivity as moderator

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural Coping (A)</td>
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<td>.035**</td>
<td>-.147**</td>
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<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity (B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td></td>
<td></td>
<td></td>
<td>.023**</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.481</td>
<td>.439</td>
<td>.410</td>
<td>.344</td>
</tr>
<tr>
<td>Variance change</td>
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<td>.042</td>
<td>.029</td>
<td>.066</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>.087</td>
<td>.066</td>
<td>.161</td>
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*^p<.10; *p<.05; **p<.01

Figure 5.5. Moderating effect of follower sensitivity IILT (1±SD) on the relationship between leader behavioural coping (1±SD) and follower LMX.

The results of the HLM analysis investigating hypotheses 5 (main effect of leader categorical thinking) and 5a (moderating effect of follower sensitivity IILT) are presented in Table 5.9. As can be seen, in step one, categorical thinking was negatively related to follower LMX and was significant. Consequently, hypothesis 5 was supported. Step two also shows that follower sensitivity IILT was positively and
significantly related to their LMX rating. Step three further demonstrates a significant interaction between leader categorical thinking and follower sensitivity.

To determine support for the interaction hypothesis, simple slopes analysis was undertaken and is presented in Figure 5.6. It was observed that the slope at 1SD beneath the mean of the moderator was not significant (t = .402, p = .688). The slope at 1SD above the mean though was significant (t = 5.222, p < .001). This provides support for hypothesis 5a.

Table 5.9.
Hypotheses 5 and 5a - Hierarchical linear modelling results predicting followers’ LMX with leaders’ categorical thinking and followers’ sensitivity as moderator

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorical Thinking (A)</td>
<td>-.041*</td>
<td>-.044**</td>
<td>.148*</td>
<td></td>
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<td>Moderator Sensitivity (B)</td>
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<td>.862**</td>
<td></td>
<td></td>
</tr>
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<td>Interaction Term A×B</td>
<td>.481</td>
<td>.444</td>
<td>.414</td>
<td>.361</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
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<td>.037</td>
<td>.030</td>
<td>.053</td>
</tr>
<tr>
<td>Variance change</td>
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<td>.068</td>
<td>.128</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>.037</td>
<td>.030</td>
<td>.053</td>
</tr>
</tbody>
</table>

*p<.10; *p<.05; **p<.01

The results of the HLM analysis investigating hypotheses 6 (main effect of leader naïve-optimism) and 6a (moderating effect of follower attractiveness IILT) are presented in Table 5.10. As can be seen, in step one, naïve-optimism was positively related to follower LMX but only approached significance. Consequently, hypothesis 6 was rejected. Step two also suggests that follower attractiveness IILT did not significantly contribute to predicting their LMX rating. However, step three demonstrates a significant interaction between leader naïve-optimism and follower attractiveness. To determine support for the interaction hypothesis, simple slopes
Moderating effect of follower sensitivity (IILT) on the relationship between leader categorical thinking (1±SD) and follower LMX. Analysis was undertaken and is presented in Figure 5.7. It was observed that the slope at 1SD beneath the mean of the moderator was not significant (t = .726, p = .470). The slope at 1SD above the mean though was significant (t = 4.405, p < .001). This provides support for hypothesis 6a.

Table 5.10. 
*Hypotheses 6 and 6a - Hierarchical linear modelling results predicting followers’ LMX with leaders’ naïve-optimism and followers’ attractiveness as moderator*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naïve-Optimism (A)</td>
<td>.039^</td>
<td>.039^</td>
<td>-.093*</td>
<td></td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractiveness (B)</td>
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<td></td>
<td>-.928**</td>
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</tr>
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<td>Interaction Term</td>
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<td></td>
<td></td>
<td>.022**</td>
</tr>
<tr>
<td>A×B</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.481</td>
<td>.439</td>
<td>.440</td>
<td>.389</td>
</tr>
<tr>
<td>Variance change</td>
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<td>.042</td>
<td>-.001</td>
<td>.051</td>
</tr>
<tr>
<td>AR2</td>
<td>N/A</td>
<td>.087</td>
<td>-.002</td>
<td>.116</td>
</tr>
</tbody>
</table>

^p<.10; *p<.05; **p<.01
The results of the HLM analysis investigating hypotheses 6b (moderating effect of follower dedication IILT on the relationship between leader naïve-optimism and follower LMX) are presented in Table 5.11. As demonstrated previously, in step one, naïve-optimism was positively related to follower LMX but only approached significance. Step two also demonstrates that follower dedication IILT did not significantly contribute to their LMX rating. However, step three demonstrates a significant interaction between leader naïve-optimism and follower dedication. To determine support for the interaction hypothesis, simple slopes analysis was undertaken and is presented in Figure 5.8. It was observed that the slope at 1SD beneath the mean of the moderator was not significant ($t = .585, p = .560$). The slope at 1SD above the mean though was significant ($t = 4.015, p < .001$). This provides support for hypothesis 6b.
Table 5.11.  
Hypothesis 6b - Hierarchical linear modelling results predicting followers’ LMX with leaders’ naïve-optimism and followers’ dedication as moderator

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naïve-Optimism (A)</td>
<td></td>
<td>.039^</td>
<td>.037</td>
<td>-.171*</td>
</tr>
<tr>
<td>Moderator Dedication (B)</td>
<td></td>
<td>.138</td>
<td>-.940*</td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
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<td></td>
<td></td>
<td>.026**</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
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<td>.439</td>
<td>.409</td>
<td>.396</td>
</tr>
<tr>
<td>Variance change</td>
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<td>.042</td>
<td>.030</td>
<td>.013</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>.087</td>
<td>.068</td>
<td>.032</td>
</tr>
</tbody>
</table>

^p<.10; *p<.05; **p<.01

Figure 5.8. Moderating effect of follower dedication IILT (1±SD) on the relationship between leader naïve-optimism (1±SD) and follower LMX.

Discussion

Based on the recognition that leaders and followers do not usually experience their dyadic relationship in the same way (see Gerstner & Day, 1997; Sin et al., 2009; van Gils et al., 2010; Wilson et al., 2010), the current chapter began by introducing a general theoretical framework which integrated CEST (Epstein, 1998,
2003), ILTs (Lord & Maher, 1993) and IFTs (Sy, 2010) to help explain leader and follower LMX ratings. At the most basic, information processing style and constructive thinking were theorised to play influential roles in the interactions between leaders and followers. This is due to these constructs spreading widely throughout an individual’s self-concept and thus influencing a wide range of people’s behaviours across a variety of contexts and situations (Epstein, 2014). This, therefore, should include interactions between leaders and followers.

Given the different roles of leaders and followers, the general model also drew upon existing ILT and IFT theory (see Lord & Maher, 1993; Sy, 2010) to propose that each member of the leader-follower dyad would evaluate the other’s behaviour and actions from different perspectives. Specifically, it was proposed that followers and leaders would draw upon their IILT or IIFT respectively when making judgements and evaluations of the dyadic partner as these would take account some of the observer’s personal preferences and tendencies (i.e. their information processing style and constructive thinking). Drawing on a theoretical basis of person-environment fit (see Kristof-Brown, 1996; Kristof-Brown et al., 2005), it was generally proposed that leaders’ or followers’ who have information processing styles or constructive thinking traits which are congruent with their dyadic partners’ IILT or IIFT should act to increase this partners’ LMX rating.

The remainder of chapter explored one-half of this proposal. Specifically, how leaders’ information processing style and level of constructive thinking relate to followers’ perceptions of LMX and whether followers’ IILT moderate this. In general, while some hypotheses did not emerge, the results provide support for the moderation model presented in Figure 5.1a. Theoretical and practical implications of this part of the model are discussed below.
Leaders’ information processing and followers’ LMX

It was surprising that no significant positive relationship emerged between leader rational processing and follower LMX, although it was in the expected direction. Furthermore, intelligence did not emerge as a moderator between leaders’ rational processing and followers’ perceptions of the quality of the leader-follower relationship. This appears to contradict research conducted in the transformational leadership domain which has found that a positive relationship between leaders’ rational processing and their own ratings of transformational leadership (Cerni et al., 2008; King, 2012). However, the findings do align with more recent research in this area which demonstrates that this relationship does not emerge when transformational leadership is rated from followers’ perspectives (Simoens, 2014).

One potential explanation is that rational processing is not seen or experienced in the same way by followers as it is leaders. Indeed, other ratings of an individual’s rational processing tend to be lower than self-ratings (Norris & Epstein, 2011) suggesting that rational processing in leaders does not necessarily lend itself to ‘intelligent’ behaviours when viewed from the perspective of followers. For example, the more delayed and considered approach of highly rational leaders may be interpreted as confusion or indifference to an issue from the perspective of followers. Such behaviours, therefore, may not necessarily lead to follower attributions that such leaders are intelligent. Instead, the perception of ‘intelligent’ leader behaviours by followers may be more aligned with the tendencies described in global constructive thinking – that of flexible thinkers who can adapt to meet the needs of the situation (Epstein, 2001; 2014). From the perspective of followers, therefore, it may be the processing occurring in leaders’ experiential systems which is more important due to its impact on a wide range of leader behaviours. This is
aligned with the notion in CEST that the experiential system processes information much more rapidly than the rational system and, thus, tends to influence initial behaviour (Epstein, 2003; 2014), which would include that occurring in leader-follower interactions.

For leaders, though, it appears that rational processing is important. Rational system is logical and deals more in abstraction than the experiential system (Norris & Epstein, 2011). It is also a delayed system that acts to correct initial errors made by the experiential system (Pacini & Epstein, 1999a; 1999b; Epstein, 2003). High rational processors tend to take the time to consider things. From the perspective of leaders, such processing most likely helps them to deal with issues and problems they experience in the work-place. Consequently, this would explain the positive relationship which emerges between rational processing and self-rating of transformational leadership (see Cerni et al., 2008; King, 2012).

Leaders’ experiential processing did not positively predict followers’ LMX. In addition, followers’ sensitivity IILT did not moderate this relationship. Given its fundamental associations with the development of positive interpersonal relationships (Norris & Epstein, 2011; Pacini & Epstein, 1999a), this was surprising. Exploratory analysis, though, revealed that higher levels of imagination did tend to result in followers reporting higher quality relationships with their leaders. Furthermore, this relationship was stronger for followers who endorsed higher levels of sensitivity in their ideal leader. Imagination, therefore, appears to, at least partly, contribute to leader behaviours that are congruent with followers who seek sensitivity in their ideal leader. This is likely due to the fact that imagination is an important element of empathy as it helps an individual to take the perspective of another so that they can understand how they may be affected (Gaesser, 2013).
These findings are generally aligned with other research, which identifies empathy as an important factor in effective leadership (e.g. see Bass, 1985; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008).

The sensitivity IILT factor contains items (see Table 5.1) which are similar to descriptions of empathy. From the perspective of followers who seek high sensitivity in their ideal leader, the ability of leaders to empathise with their needs and perspectives would be very important. For example, such followers would likely appreciate leaders who are sensitive to their work-loads, their personal needs, emotional issues and career goals. This is not to say that those who generally endorse low levels of sensitivity in their ideal leader do not also seek empathy. Indeed, as observed in the current study most people endorse relatively high levels of sensitivity in their leaders. However, the results demonstrate that LMX ratings are not just dependent on how leaders act but also on how followers interpret these behaviours.

**Leaders’ constructive thinking and followers’ LMX**

In a similar vein to the discussion above around leader imagination, emotional coping in leaders also appears to help them be more open to their followers’ perspectives and needs. Specifically, high levels of emotional coping appears to help leaders focus on the validity of followers’ criticism, input or perspective rather getting caught up in the impact of such negative feedback on their own self-esteem resulting in attempts to defend themselves (e.g. the leader feels their competence is “attacked” resulting in psychological and/or behavioural defences being marshalled directly or indirectly towards the follower; e.g. see Grant et al.,
This aligns with findings in Chapter 5 in which leaders with high levels of emotional coping tended to endorse lower levels of conformity in their ideal followers. It was suggested that leaders with good emotional coping are generally more cognitively and emotionally open to those followers who are willing to speak up and question the status quo (see also Burris, 2012; Chaleff, 2009).

The openness and non-defensiveness of leaders with high levels of emotional coping appear to be particularly congruent with followers who endorse high sensitivity in their ideal leader. Specifically, it appears to buffer leaders from engaging in cognitive/behavioural defence mechanisms which in turn provides an increased internal cognitive/emotional space for the leader to focus their attention on the follower (e.g. open to alternative perspectives and needs of the follower even if they may not be aligned with that of the leader; e.g., Bushman & Baumeister, 1998; Rubin & Hewstone, 1998). This is a more indirect approach to empathy than that described for imagination. However, the resultant behaviours would tend to be more valued (i.e. more congruent) with the traits and behaviours that followers with high sensitivity seek in leaders compared to those who endorse low levels of sensitivity.

As expected, leaders’ behavioural coping positively predicted followers’ LMX. This finding can be partly interpreted through the broaden-and-build theory of positive emotions (Fredrickson, 1998; 2001; 2003; Fredrickson & Branigan, 2005). According to this theory, positive emotions help broaden people’s awareness, thinking and actions which result in increased personal and social resources (Fredrickson, 2003). These resources act as a repertoire of skills and knowledge from which they can adapt to new contexts in the future. In other words, positive emotions contribute to a “‘upwards spiral’ towards optimal functioning and enhanced
emotional wellbeing” (Fredrickson, 2003, p.169). While the resources which can be generated are varied (e.g. see Isen & Daubman, 1984; Isen & Means, 1983), some of the most important for current purposes include a tendency to be more open to information (Estrada, Isen, & Young, 1997), to take account of others’ needs to a greater degree (Waugh & Fredrickson, 2006), and being more open to diverse ideas, options (Kahn & Isen, 1993) and critical feedback (Raghunathan & Trope, 2002). Common to each of these is an increased attention and openness to others needs’ and perspectives which may be contrary to the individuals own. In the context of the current study, therefore, it appears that the leaders with good behavioural coping helps them be more open to the needs of, and input from, followers. The result is an increased opportunity to address these needs and input. Given such tendencies, it is not surprising, therefore, that leaders with high behavioural coping skills were particularly valued by followers who seek high levels of sensitivity in their ideal leader. This is likely due to the increased value that such followers place on leader empathic behaviours.

As predicted the relationship between leaders’ behavioural coping and followers’ LMX was also moderated by the followers’ dedication IILT. High levels of behavioural coping in leaders should help support them engage in planning and taking quick, considered and effective action to overcome workplace problems and issues (Epstein, 2001). Leaders with high behavioural coping would also tend to be less preoccupied with overcoming problems and instead ‘just get on with it’ (i.e. positive thinking; see Epstein, 2001). Furthermore, broaden-and-build theory and research would suggest that leaders with good behavioural coping would hold an increased pool of knowledge and skills to apply to novel workplace problems (see Estrada et al., 1997; Fredrickson, 1998; 2001; 2003; Fredrickson & Branigan, 2005;
Kahn & Isen, 1993). Such proactive behaviour in a leader, in addition to an increased skill and knowledge base to draw upon, is likely to be highly valued by followers who endorse high levels of dedication (e.g. dedicated; enthusiastic; hard-working), which consequently increases positive beliefs about the leader and their relationship with them. In contrast, leaders who are not motivated or hard-working are likely to frustrate such followers resulting in a more negative perception of the leader and the relationship.

Unsurprisingly, the cognitive and behavioural tendencies of leaders with high categorical thinking do not tend to facilitate the development of positive and supportive leader-follower relationships. This is further undermined for followers who endorse high levels of sensitivity in their ideal leader. Specifically, the negative impact of leaders’ categorical thinking appears to be stronger for followers who endorse high levels of sensitivity in their ideal leader. Categorical thinkers tend to see others who hold different perspectives to themselves as in error, be somewhat less trusting of others and more judgmental (Epstein, 1998; 2001). They are also quick to experience anger and annoyance when things do not go according to their expectations (Epstein, 1998). Being closed to alternative perspectives, judgmental and quick to anger is unlikely to facilitate a psychologically safe work environment for followers to engage in proactive communication behaviours (e.g. followers express constructive suggestions for change; Botero & Dyne, 2009; LePine & van Dyne, 2001). This is because these followers may feel threatened by the reactions (e.g. anger, frustration) of leaders with high levels of categorical thinking to their input and/or feedback (see Chan & Treacy, 1996; May et al., 2004; Nembhard & Edmondson, 2006; Rogers, 1959; Walumbwa & Schaubroeck, 2009). Alternatively, followers may perceive that providing input and/or feedback is simply a waste of
time and energy as it will not be considered or acted upon (e.g. see Ellis & Dyne, 2009). In both cases, leader-follower communication is undermined.

In support, communication issues have consistently been shown to undermine the development of positive and effective working relationships and environments (e.g. see Garon & Ringl, 2004; Gwartney-Gibbs & Lach, 1994; Keashly, Trott, & MacLean, 1994). In addition, leaders with higher levels of categorical thinking tend to seek higher levels of conformity in followers (see Chapter 4). High levels of conformity beliefs are associated with an increased likelihood that leaders will resort to using more directive control techniques (e.g. close supervision and extrinsic rewards) inherent to their more powerful and authoritative position to gain compliance (see Finman, 1973; Neuliep, 1987; 1996; McGregor, 1960). Such approaches tend to be associated with lower levels of LMX (Şahin, 2012). Taken as a whole, it appears that categorical thinking, as defined in CEST (Epstein, 2001), contributes to leaders having negative beliefs about the nature of followers which results in more judgmental, less open and less trusting relationships as seen from followers’ perspectives. For most followers, these would be negative experiences, but for those who endorse high levels of sensitivity in their ideal leader, these behaviours appear to be experienced particularly negatively.

The non-significant but positive main effect relationship between leaders’ naïve-optimism and followers’ LMX warrants some discussion. Exploratory analyses (see Appendix F) suggest that this non-significance may be due to differences in the nature of the naïve-optimism sub-scales when interpreted in the context of the work-environment and work relationships. Over-optimism is about unrealistic optimism and can result in individuals failing to acknowledge potential problems and unpleasant realities (Collinson, 2012; Epstein, 1998; 2014).
Consequently, they are at an increased risk of failing to take action as they simply expect that all issues will work out. For example, these leaders may underestimate how much a project will cost or how long it will take to finish. Therefore, in the context of the work-environment, over-optimism in leaders may tend to be seen somewhat negatively from the perspective of followers. For example, feedback from followers about issues or problems may fail to be recognised or even acknowledged.

However, stereotypical thinking and pollyanna-ish thinking are about positive, albeit unrealistic and simplistic, beliefs. Such beliefs may help support the development of leader-follower relationships as they help reinforce positive expectations of how they and others should behave during their interactions. Indeed, pollyanna-ish thinking is the sub-scale which shows the strongest relationships with caring, agreeableness and positive affect (Epstein, 1983) all of which should support positive and supportive interactions with followers. Consequently, the different elements of naïve-optimism should be considered in isolation to each other, rather than as a whole, when seeking to understand what is contributing to followers’ perceptions of LMX. This conclusion is aligned to Epstein (2014) who states that “the positive and the unrealistic components of naïve-optimism cancel each other out with respect to adjustment” (p.168).

While there was no main effect of naïve-optimism, it appears that naïve-optimism in leaders is important for followers who endorse high levels of attractiveness and dedication as expected. Naïve optimists appear to engage in behaviours that are similar to those falling under certain areas of impression management (e.g. appearing happy even when one feels sad). In particular, how they appear to others. Consequently, these leaders are likely to control their visual appearance and presentation such as their clothing. For followers who endorse high
levels of attractiveness, such tendencies of leaders are likely to be congruent with followers who endorse high levels of attractiveness. For followers who endorse high levels of dedication, it appears that the positivity and optimism of such leaders appeal to their desire for their ideal leader to be motivated and enthusiastic.

**Other comments and practical implications**

Whilst not focused upon in the introduction, the current research also aligns with other research that has demonstrated links between follower ILTs and LMX (e.g. Bass & Avolio, 1989; Eden & Leviatan, 1975; 2005; Lord et al., 1984; Rush et al., 1977; Schyns & Meindl, 2005; Uhl-Bien et al., 2014). Specifically, those who endorsed sensitivity in their ideal leader tended to rate the relationship with the leader more highly. Shondrick and Lord (2010) draw upon adaptive resonance theory (see Grossberg, 2013) to describe an information processing approach whereby resonance (i.e. where an external stimulus such as a leader is matched to a specific cognitive category) creates difficulty in distinguishing between the ILT and the actual leader’s behaviours. Specifically, when the leader category is made salient for the follower, they actively processes and manipulate information about that leader through the information and characteristics contained in their ILT. The result is essentially that followers use their ILTs to “fill in” the blanks when rating leaders (e.g. Bass & Avolio, 1989; Eden & Leviatan, 1975; 2005; Lord et al., 1984; Rush et al., 1977; Schyns & Meindl, 2005; Uhl-Bien et al., 2014). In the current case therefore, it appears that when the leader is cued in the mind of a follower, the follower’s sensitivity ILT positivity contributes to LMX rating as the actual traits and behaviours of the leader are distorted through the follower’s sensitivity ILT.
(e.g. remembering sensitive leader behaviours as occurring when none have actually occurred).

While broaden-and-build theory of positive emotions originally focused primarily on how positive emotions help broaden attention (e.g. Fredrickson, 1998; 2001), more recent additions to this theoretical framework recognise that negative emotions narrow one’s attention; to the extent to which negative emotions can lead to downward spirals (Garland et al., 2010; Rathunde, 2000). Such downward spirals result in attention turning towards the self and rigid, defensive behaviours being marshalled (Garland et al., 2010). Some of the findings and discussion presented in regards to leaders’ information processing and constructive thinking can be summarised through this extended conceptualisation. Specifically, it can be conceptualised that low levels of constructive thinking (i.e. emotional and behavioural coping) and high levels of destructive thinking, in general\(^1\), narrow leaders’ attentions away from their followers’ needs and perspectives. Instead, leaders’ focuses move inwards as they seek to protect themselves from perceived attacks on themselves and their capabilities (e.g. follower providing feedback and input on a leader's ideas or direction) and/or the experience of negative vibes and emotions (e.g. high categorical thinker acting in ways to remove their annoyance or anger). From the perspective of Chaleff (2009), such leaders are not courageous to the input and feedback of followers.

The current findings have important implications with regards to how practitioners approach leadership. It is important to remember the distinction

\(^1\) It should be noted that naïve-optimism is more complex due to its inherent links with the experience of positive affect yet less objectively conscientious behaviour (Epstein, 2001; 2014) which may undermine positive leader-follower relationship development as described in-text. Therefore naïve-optimism should be interpreted somewhat more cautiously.
between the terms ‘leader’ and ‘leadership’ as these have practical implications for how we approach leadership in the workplace. Leader development is focused only on leaders themselves with the aim of changing their cognition or behaviour to match a specific leadership model (Day, 2001). In contrast, leadership development is contextually based as it recognises the wider environment in which leadership occurs including the follower, task and organisational culture. Most current mainstream approaches are typically leader development initiatives and are not actually leadership development as they are normally described or marketed (Day, 2001). Focusing on only one-half of the leadership equation fails to recognise that followers have different perspectives of an ideal leader and that the same leader behaviours may be interpreted and evaluated in very different ways by followers. Indeed, LMX theory specifically states that followers are not a homogeneous set of individuals who react and act in the same ways (Dansereau et al., 1975; Graen et al., 1973). Practitioners, therefore, may benefit from adopting a true leadership development approach, which specifically incorporates followers as well as leaders.

In addition to developing leaders’ information processing styles and constructive thinking (see Cerni et al., 2010), this approach would bring followers’ attention to their active role in leadership. Specifically, how their IILTs influence their judgements of, and relationships with, leaders and the potential reasons for this (e.g. see Chapter 3; see also Lord & Maher, 1993; Sy, 2010; Whiteley et al., 2012).

Bringing attention to followers’ IILT and the reasons why they may hold a particular IILT may be beneficial as by Kruse and Sy (2011) demonstrating that IFTs can be changed by manipulating an individual’s affective state. Theoretically, this should also apply to the manipulation of IILTs. However, due to the more transient nature of affect, these changes are likely to be somewhat short-lived. From the
perspective of CEST though, affect is an outcome of underlying cognitive processes occurring in the experiential system (Epstein, 1998; 2003; 2014). Changes in these underlying cognitive processes, therefore, should provide more stable and long-lasting changes in followers’ ILTs. By targeting change to both followers’ IILT and leader cognitive processes, the research would suggest that followers’ LMX can be improved. This should result in a variety of positive individual, team, and organisational outcomes (see meta-analysis by Dulebohn et al., 2012).

**Limitations**

As with all studies, consideration of limitations must be made. First, it is important to acknowledge that an alternative interpretation could generally be applied to the current findings. Specifically, as followers’ IILTs are related to their information processing styles and constructive thinking (see Chapter 3), it is possible that it is a congruence between followers’ and leaders’ information processing styles and constructive thinking that is contributing to followers’ LMX rating rather than the congruence between the leader’s information processing styles and constructive thinking and the followers IILT. Indeed, research demonstrates that when leaders and followers are congruent in terms of various personality factors, followers are more likely to report higher LMX (see Schaubroeck & Lam, 2002; Strauss, Barrick, & Connerley, 2001; Zhang, et al., 2012). To extend upon the current research, therefore, incorporating the followers’ information processing style and constructive thinking would help to tease these relationships apart. Three outcomes could be expected from this. First, it is the congruence between leaders and followers’ information processing style and constructive thinking only, which contribute to
their LMX rating. Second, the interpretation applied to the current research (i.e. congruence between the leader’s information processing style and constructive thinking with the follower’s IILT. Third, and probably most likely, that both congruence between leaders and followers’ information processing style and constructive thinking, in addition to congruence between the leader’s information processing style and constructive thinking with the follower’s IILT independently contribute to the follower’s LMX rating.

Second, the somewhat small sample size may have reduced the power to find significant relationships. Nevertheless, as the current study utilised quite a broad sample of leaders and followers across a wide range of industries and jobs, the fact that significant results were observed and were all in the expected directions provides respectable evidence that the proposed general model is suitable for understanding how personality and social roles influence working relationships. Furthermore, the broad range of participants suggests the results are somewhat generalisable to a wide range of organisational settings.

Third, the use of an explicit measure to assess an implicit construct has been acknowledged as a potential issue in that the measure and the construct are not aligned (Uhlmann et al., 2012). However, Epitropaki and colleagues (2013) note that both explicit and implicit measures are useful for understanding the role of leadership schemas in the workplace. Therefore, the findings of the current study still are relevant and important. Future research though may wish to use an implicit measure to further investigate whether similar relationships emerge.
CHAPTER 6

Followers’ Information Processing Style and Constructive Thinking as Leader

LMX Antecedents: The Moderating Influence of Leaders’ Implicit Ideal Followership Theory

In the previous chapter, it was argued that the information processing style and constructive thinking of leaders and followers are antecedents to followers’ and leaders’ perceptions of the leader-follower relationship respectively. Drawing upon implicit leadership theory (ILT; Eden & Leviathan, 1975; Lord & Maher, 1990; 1993) and implicit followership theory (IFT; Sy, 2010), it was further argued that followers and leaders will draw upon their implicit ideal leadership (IILT) and implicit ideal followership theories (IIFT) respectively when interpreting and evaluating their dyadic partners’ behaviours. This was on the basis that these would, in part, account for the observers’ characteristics and preferences – namely their information processing style (Norris & Epstein, 2011) and constructive thinking (Epstein, 2001).

Corresponding to these arguments, two general research models were developed (see Figures 5.1a and b) to help explain why leaders and followers do not typically experience their relationship in the same way (Gerstner & Day, 1997; Sin et al., 2009). The previous chapter focused on testing the propositions of one of these models. Specifically, how leaders’ information processing styles and constructive thinking related to followers’ LMX perceptions and whether the latters’ IILT moderated these relationships (see Figure 5.1a). It was found that leaders’ imagination and a variety of constructive thinking dimensions were related to followers’ LMX. Furthermore, followers’ IILTs moderated these relationships. The
results were interpreted as demonstrating that follower LMX ratings are not only dependent on leaders’ behaviours but also on how followers’ interpret these.

This chapter focuses on the second model (see Figure 5.1b). Specifically, how followers’ information processing styles and constructive thinking relate to leaders’ LMX and whether the latters’ IIFTs moderate this. As the theory presented in the previous chapter also underpins the current chapter, the reader is referred to the first half of the introduction of Chapter 5 for a more detailed overview. However, as there has been much less focus on what resources followers provide to leaders (Wilson et al., 2010), this chapter begins with a consideration of what resources leaders may value in order to aid hypothesis development.

What Resources Can Leaders Receive From Followers?

The dyadic nature of the leader-follower relationship requires us to consider what leader needs may be met (or not) from the resources that may (or may not) be provided by followers. Unfortunately, as noted above, unlike resources that leaders provide to followers, there has been much less theory and research on what followers can provide to leaders (Wilson et al., 2010). According to Foa and Foa (1974; see also Wilson et al., 2010) though there are six general categories of resources, which can be exchanged in social relationships: (1) money; (2) goods; (3) services; (4) status; (5) information; and (6) affiliation. Given that LMX is a social-exchange based theory (see Blau, 1964; Graen & Scandura, 1987; Liden et al., 1997; Sparrowe & Liden, 1997), these six general categories were seen as a suitable basis for identifying what resources leaders may receive from followers and, therefore, served to guide main effect hypothesis development.
As per the moderation theory presented in the previous chapter, we must also consider how the leaders’ IIFT may serve to moderate the perceived value of these resources (see discussion by Foa & Foa, 1974). The IIFT dimensions observed in Chapter 4 were used to facilitate interpretation. These dimensions are shown in Table 6.1 and include insubordination, committed, incompetence, conformity and enthusiasm. These were conceptualised as potential moderators when developing the hypotheses presented below.

Table 6.1.
*IIFT Factors and Items from EFA conducted in Chapter 4*

<table>
<thead>
<tr>
<th>IIFT Factor</th>
<th>Items in Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insubordination</td>
<td>Bad-Temper; Rude; Arrogant</td>
</tr>
<tr>
<td>Committed</td>
<td>Goes above and beyond; Productive; Reliable; Loyal</td>
</tr>
<tr>
<td>Incompetence</td>
<td>Slow; Uneducated; Inexperienced</td>
</tr>
<tr>
<td>Conformity</td>
<td>Follows Trends; Easily Influenced</td>
</tr>
<tr>
<td>Enthusiasm</td>
<td>Outgoing; Excited</td>
</tr>
</tbody>
</table>

**Hypothesis development**

**Followers’ Information Processing and Leaders’ LMX**

While leaders’ rational thinking was not related to followers’ LMX rating (see Chapter 5), there is a theoretical reason to consider that followers’ rational information processing will relate to leaders’ LMX. High rational processors are deep thinkers, tend to develop clear, rational, and explainable reasons for decisions, and enjoy thinking abstractly (Norris & Epstein, 2011; Pacini & Epstein, 1999a). Correspondingly, high rational processors are more likely to adopt a rational influencing style (Cerni et al., 2012). A rational processing style in followers, therefore, should help support them present rational and logical arguments when interacting with leaders. According to Oc and Bashshur (2013), the use of rational
arguments and evidence by followers is the most effective approach when attempting to persuade leaders. This is due to the followers assumed closeness to important and relevant information to the situation under focus. Therefore, followers’ rational information processing should be positively related to leaders’ perceptions of followers’ competence and thus improve the leader-follower relationship. In support, use of rational persuasion tactics by followers is related to better performance assessments (Higgins, Judge, & Ferris, 2003) and promotability (Thacker & Wayne, 1995). High rational processors also tend to be more problem-solution or action focused (Epstein et al., 1996). From the perspective of leaders, such tendencies are likely to be evaluated positively (i.e. valued) as it may help the leader move towards their own goals (e.g. increase sales, more efficient processes). This suggests that followers’ rational information processing would be positively related to leaders’ LMX ratings.

As per the moderation model presented in Figure 5.1b (see Chapter 5), this relationship may be moderated by the degree to which leaders endorse conformity in their ideal follower. The research undertaken in Chapter 4, and the wider literature, strongly suggests that a sizeable minority endorse conformity as part of followers’ roles (see Grant et al., 2009; McGregor’s, 1960; Sy, 2010). Followers that like to think about things, present logical and coherent arguments, and take a more active role (i.e. a high rational processor), does not appear to be congruent with leaders who endorse passive follower beliefs. Instead, such tendencies appear to be more congruent with leaders who believe that their ideal follower should question the status quo and be confident in standing up to them when required. Consequently, it can be hypothesised that:
**Hypothesis 1:** a significant positive relationship will exist between followers’ rational processing and leaders’ LMX...

**Hypothesis 1a:** ...and this relationship will be stronger for leaders who prefer non-conformity in their followers.

The experiential system is more strongly associated with the development and maintenance of positive social relationships (Norris & Epstein, 2011; Pacini & Epstein, 1999a). Empathy is an important aspect of developing relationships in all contexts, including those at work, as it helps individuals to take another’s perspective and re-experience their emotions (Katz, 1963; Yukl, 1998). Imagination, a component of experiential processing (Norris & Epstein, 2011), is an important factor in this process (Kellett et al., 2002; Rudebeck, 2002; Smyth, 1996). High levels of experiential processing, therefore, should increase the opportunity and ability for followers to address the role and socio-emotional needs of leaders. This should subsequently improve leaders’ perceptions of their relationship with these followers.

This relationship may be moderated by the degree to which leaders’ endorse insubordination in their ideal follower. The items that make up the insubordination IIFT factor (see Table 6.1) appear to be congruent, or more specifically incongruent, with the development of positive and supportive working relationships. For example, employees who are arrogant tend to exhibit higher levels of dominance and anger and lower levels of agreeableness (Johnson et al., 2010). In addition, they are less likely to engage in organisational citizen behaviours (Johnson et al., 2010). Each of these traits and behaviours is associated with poorer relationship outcomes (e.g. see
Ilies et al., 2007; Kassing, 2000; Russell & Fehr, 1994). Leaders who endorse relatively high levels of insubordination in their ideal follower, therefore, may place less value on followers’ attempts to build more positive leader-follower relationships compared to those who endorse low levels. Consequently, the behavioural tendencies of followers with high experiential processing styles should be more congruent with those leaders who endorse lower levels of insubordination in their ideal follower.

The proposed relationship between followers’ experiential processing and leaders’ LMX may also be moderated by the degree to which leaders’ endorse commitment in their ideal follower. The items that make up the committed IIFT factor (see Table 6.1) appear to be aligned with some of the potential behavioural tendencies of followers with high experiential processing. Specifically, followers with high experiential processing, especially those who show high levels of imagination, should show an increased ability to empathise with the needs and goals of leaders and subsequently adapt their behaviours to address them. From the perspective of leaders, this is likely to be experienced quite positively (e.g. leader is understood; work goals are addressed; anticipation of needs). The result is that these followers are perceived as more competent and supportive. Consequently, the leaders’ perception of the relationship improves. In support, the receiving of respect from followers is related to improved leader-follower relationships and organisational outcomes (Clarke & Mahadi, 2015). Based on the above, it is hypothesised that:

**Hypothesis 2:** a significant positive relationship will exist between followers’ experiential processing and leaders’ LMX...
Hypothesis 2a and b: ...and this relationship will be stronger for leaders who prefer low levels of insubordination and high levels of commitment in their followers.

Followers’ Constructive Thinking and Leaders’ LMX

Emotional coping relates to how individuals deal with frustration, disappointment, rejection, criticism and disapproval (Epstein, 2001). Like leaders, followers may have to deal with negative situations on a regular basis in the workplace. For example, they may receive a poor performance review by their leader (i.e. experience of criticism) or their leader does not listen to their advice (i.e. frustration). Poor emotional copers would tend to interpret these events via destructive pathways (e.g. takes the criticism personally; Epstein, 2001). In contrast, good emotional copers would tend to interpret these situations via constructive pathways (e.g. do not catastrophise or take criticism personally). Drawing upon broaden-and-build theory (Fredrickson, 1998; 2001; Garland et al., 2010; Rathunde, 2000), in addition to the findings and argument presented in the previous chapter, emotional competence in followers should increase their ability to focus their attention externally (e.g. is criticism valid?) and improve the pool of skills and resources on which they can draw upon to solve novel issues and problems. In other words, followers’ increased openness and non-defensiveness should increase opportunities to develop a more positive working relationship with leaders. In contrast, low emotional coping in followers should result in an increased use of psychological and behavioural defence mechanism (e.g. feels their competence is “attacked” resulting in psychological and/or behavioural defences being marshalled directly or indirectly towards the leader).
In support, research demonstrates that good emotional copers tend to develop more favourable relationships (Epstein & Meier, 1989). Furthermore, high levels of negative affect, of which emotional coping has strong negative relationships (Epstein, 1987b as cited in Epstein, 2003), is associated with a tendency for individuals to focus on the negative aspects of others and themselves (Levin & Stokes, 1989; Watson & Clark, 1984), poorer social skills and lower trust (Raja, Johns, & Ntalianis, 2004). Each of these is likely to undermine the development of a positive and supportive leader-follower relationship (e.g. see Bernerth, Armenakis, Field, Giles, & Walker, 2007). Based on the above, we should expect a positive relationship between followers’ emotional coping and leaders’ LMX ratings.

This relationship may be moderated by the degree to which leaders endorse conformity in their ideal followers. The openness and non-defensiveness that followers with high levels of emotional coping may exhibit should help increase opportunities for finding new ways of doing things. For example, it may facilitate more creative approaches to issues and/or an increased openness to learning (e.g. see Amabile, Barsade, Mueller, & Staw, 2005; Bledow, Rosing, & Frese, 2013; Naquin & Holton, 2002). In support, positive affect is positivity related to employee self-directed, proactive behaviour while negative affect is negatively related (Ashforth, Sluss, & Saks, 2007; Fritz & Sonnentag, 2007). For leaders who seek conformity in their ideal follower, a follower who exhibits these behavioural tendencies may be less likely to be seen in a positive manner. In contrast, these behavioural tendencies should be less congruent with those leaders who endorse high levels of conformity. Based upon the above, it is hypothesised that:
**Hypothesis 3**: a significant positive relationship will exist between followers’ emotional coping and leaders’ LMX...

**Hypothesis 3a**: ...and this relationship will be stronger for leaders who prefer low levels of conformity in their followers.

High behavioural copers tend to be more proactive when confronted with everyday issues and seek to achieve realistic solutions through careful planning and doing their best (Epstein, 1992; 1998; 2001). Kelley (1988) states that one of the key dimensions of effective followers is the ability to take the initiative in decision-making and be active in helping leaders achieve their goals. Therefore, leaders are likely to show favourable views toward followers who are proactive (e.g. see Green, 1988 as cited by Epstein, 2003; Nadeau, 1994 as cited by Epstein, 2003). In support, followers’ proactivity is positively associated with increased performance as rated by managers (Rank et al., 2007; Thompson, 2005).

The tendency for high behavioural copers to be optimistic and positive (Epstein, 2001) is also likely to help followers’ address the more socio-emotional needs of leaders. Positivity is a key factor in the development and maintenance of social relationships as it helps individuals focus on the positive aspects of themselves and others (Naquin & Holton, 2002). Indeed, positivity and optimism have been shown to help support individuals communicate more effectively and empathise with others, which are key elements in the development of relationships (Dulebohn et al., 2012; Prati et al., 2003; Scott & Bruce, 1994). Consequently, we would expect followers with high levels of behavioural coping to support the development of a positive working relationship with their leaders.
The generally positive and proactive nature that followers with high behavioural coping would exhibit is likely to be particularly valued by leaders who endorse high levels of enthusiasm (see items in Table 6.1). In contrast, leaders who endorse low levels of enthusiasm may see such behavioural tendencies in followers somewhat more negatively. In addition, the relationship may be moderated by the degree leaders endorse commitment. The items that make up the committed IIFT dimension appear to be congruent with the behavioural tendencies of followers with high behavioural coping (e.g. goes above and beyond, productive, reliable). Based upon the above, it is hypothesised that:

**Hypothesis 4**: a significant positive relationship will exist between followers’ behavioural coping and leaders’ LMX...

**Hypothesis 4a and b**: ...and this relationship will be stronger for leaders who prefer enthusiasm and commitment in their followers.

Categorical thinkers tend to think that their way is the only way and that others are in error for taking alternative perspectives (Epstein, 1998; 2001; Epstein & Meier, 1989). When their beliefs are challenged, they are also prone to experience frustration, annoyance and anger (Epstein, 1992; 2001). In addition, they tend to be more critical, callous and less trusting in their social interactions (Epstein, 1992; 2001). Such tendencies are unlikely to support the ability to develop positive and supportive working relationships with leaders and other employees (e.g. see Chan & Treacy, 1996; Katz, 1963; May et al., 2004; Nembhard & Edmondson, 2006;
Rogers, 1959; Walumbwa & Schaubroeck, 2009; Yukl, 1998). For example, trust is an important factor for interpersonal cooperation and the resolution of conflict (Deutsch, 1973; Kramer & Tyler, 1996; Lewicki et al., 2006; McAllister, 1995). Accordingly, less trusting followers are unlikely to develop positive relationships with leaders.

For the same reasons, they are unlikely to develop supportive and effective working relationships with other team and organisational members. The ability to cooperate with others though is an important antecedent in positive organisational outcomes (e.g. see Chakraborti, Boonyasai, Wright, & Kern, 2008; Hoegl, Parboteeah, & Gemuenden, 2003; Morgeson, Reider, & Campion, 2005). Bringing about and maintaining a high level of team functioning, therefore, should on average be a key focus for most leaders (Zaccaro, Rittman, & Marks, 2001). Consequently, categorical thinking in followers is likely to undermine both directly (e.g. more insensitive follower-leader interactions) and indirectly (e.g. complaints from other team members to the leader) leaders’ relationships with them.

The items that make up the insubordinate IIFT dimension (see Table 6.1) appears to be somewhat congruent with the behavioural tendencies of high categorical thinkers as described within CEST (Epstein, 2001). In other words, leaders who endorse insubordination in their ideal follower may value the more callous and critical nature of followers with high categorical thinking. The proposed negative relationship between followers’ categorical thinking and leaders’ perceptions of the relationship, therefore, may be moderated by the degree to which leaders endorse insubordination. Specifically, leaders who endorse high levels of insubordination should perceive relationships with such followers more positively. In contrast, leaders who endorse low levels are likely to take a particularly negative
view of these followers. Consequently, a poorer leader-follower relationship would be perceived. Based upon the above, it is hypothesised that:

**Hypothesis 5: a significant negative relationship will exist between followers’ categorical thinking and leaders’ LMX...**

**Hypothesis 5a: ...and this relationship will be stronger for leaders who prefer low levels of insubordination in their followers.**

**Method**

**Participants**

The same participants from the previous study were used in the current study (i.e. small boutique legal firm, a local branch of a national union, in addition to direct participation). Data was collected from employees and their line managers. However, in some cases, leaders had not rated the follower who had specifically participated. Therefore, there was a reduction in the number of dyadic relationships over the previous study. The final sample consisted of 77 leader-follower dyads which consisted of 77 followers (68.8% female, 31.2% male) and 18 direct-line leaders (61.1% male, 38.9% female). Unfortunately, due to time and logistical constraints, more participants could not be recruited. Average follower age was 41.16 ($SD = 10.09$; range 20-62). Average leader age was 41.83 ($SD = 9.20$; range 26-67). The average length of time a follower and leader had been working together was 42.30 months ($SD = 48.28$; range 1-300).
Measures - Follower

Rational-Experiential Multimodel Inventory (REIm; Norris & Epstein, 2011). The REIm (Norris & Epstein, 2011) is a 42 item measure which asks individuals to respond on a 5-point Likert scale (1 = Definitely False; 5 = Definitely True) the degree to which they use a rational (12 items) or experiential processing style (30 items). The experiential scale consists of 3 sub-scales (10 items each) to measure its different aspects: (1) intuitive; (2) emotionality and; (3) imagination. The intuitive facet is designed to assess the ability and engagement of an individual’s use of intuitive judgements (e.g. “I often go by my instincts when deciding on a course of action.”) The emotionality sub-scale assesses the intensity, frequency, duration, and favourable attitude towards strong affect (e.g. “My emotions don’t make much difference in my life”; reversed scored). The imagination sub-scales assesses the engagement in, and appreciation of, imagination, aesthetic productions, and imagery (e.g. “Sometimes I like to just sit back and watch things happen.”) Higher scores indicate a higher preference for processing on that particular dimension.

Constructive Thinking Inventory (CTI; Epstein, 2001). The constructive and destructive components of the experiential system were assessed by the 108-item constructive thinking inventory (CTI, Epstein, 2001). The constructive components of the experiential system include global constructive thinking, emotional coping, and behavioural coping. The destructive components are personal superstitious thinking, categorical thinking, esoteric thinking, and naïve-optimism (Epstein, 2001). The reader is referred to Table 1.3 presented in Chapter 1 for main-scale and sub-scale definitions. People respond on a 5-point Likert scale how much a statement is true of them (1 = Definitely False; 5 = Definitely True). Raw scores are entered into
an electronic scoring programme (Epstein & PAR Staff, 2008) and converted to T-Scores based upon gender norms.

**Measures - Leader**

**Implicit Followership Theory Questionnaire (Sy, 2010) – adapted.** The current study used the Implicit Followership Theory Questionnaire (Sy, 2010) utilised in the previous studies. Individuals were asked to rate on a 10-point Likert scale (1 = Not at all Characteristic; 10 = Extremely Characteristic) the degree to which the traits were characteristic of “their ideal follower in a business setting”. However, for the reasons described in the introduction, only the 14 items that loaded on the five ILLTs dimensions (insubordination, committed, incompetence, conformity and enthusiasm; see Table 6.1) were used. Higher scores are assumed to indicate a preference for a particular follower dimension.

**Multi-dimensional Leader-Member Exchange Questionnaire (LMX-MDM; Liden & Maslyn, 1998).** The Multidimensional Leader-Member Exchange Questionnaire (LMX-MDM; Liden & Maslyn, 1998) is an extensively used measure of LMX. Leaders are asked to respond on a 7-point Likert scale (1 = Strongly Disagree; 7 = Strongly Agree) how much they agree a statement reflects their perception of four separate, but interrelated, dimensions in the exchange relationship with a particular follower: (1) *affect*; (2) *loyalty*; (3) *contribution* and; (4) *professional respect*. Affect refers to the affection felt for the follower based primarily upon interpersonal attraction as opposed to professional values. An example item is “I like this follower very much as a person”. Loyalty refers to the
belief that the follower of the dyad will express public support for the leader. An example item is “This follower would come to my defence if I were attacked by others”. Contribution refers to the perceptions held by leaders of the support and involvement they give to the relationship beyond their contractual obligations. An example item is “I do work for this follower that goes beyond what is specified in my job description”. Professional respect refers to the perceived reputation of the follower. An example item is “I admire this follower’s professional skills”. All subscales contain 3 items. An overall LMX score was calculated by taking the average of all 12 items, which was used as the dependent variable in the current study. Higher scores indicate higher quality relationships. It should be noted that the name of a leader’s actual follower was presented as opposed to the generic word of “follower”.

**Procedure & Analytical Approach**

The same two-stage procedure described in the previous chapters was used. In stage one, followers completed the REIm (Norris & Epstein, 2011) while leaders completed the adapted Implicit Followership Theory Questionnaire (Sy, 2010). Both also completed some demographic items. Leaders and followers who completed stage one were invited two days later to complete stage two via email. In stage two, followers completed the CTI (Epstein, 2001) while leaders completed the LMX questionnaire (Liden & Maslyn, 1998). The average time for followers between the completion of stage one and stage two was 4.10 days ($SD = 2.90$, range 2-14). The average time for leaders between the completion of stage one and stage two was 5.11 days ($SD = 3.79$, range 2-14). For the reasons described in the previous chapter, a
similar multi-level analytical approach using HLM 7 (Raudenbush et al., 2011) was used. The reader is directed to the previous chapter for more information.

Results

For each manager in this sample, there was an average of 4.23 followers who reported to them. Any data point that was more than 1.5 times the Interquartile range (IQR) above or below the first or above the third quartile was classified as an outlier (see Tuckey, 1977). Due to the small sample size, outliers were truncated to the nearest highest/lowest non-outlier score, which allows the relative order of scores and statistical power to remain but reduces distribution issues (see Osborne & Overbay, 2004). A total of 10 outliers across all factors used in the current study were recoded (M = 1.11, SD = 1.97 items per factor). Inspection of the histograms and Q-Q plots indicated some minor normality issues but the inferential statistics used are generally quite robust against this (Tabachnick & Fidell, 2007). Table 6.2 presents means, standard deviations, and scale reliabilities for all manager and follower variables. Except for enthusiasm IIFT scale, all main scales showed acceptable to excellent levels of reliability (range .73 to .96; Kline, 2000). As can be seen, though there were some reliability issues with the enthusiasm component (<.6; George & Mallery, 2003; Kline, 2000). However, it did meet the minimum level of .5 suggested for research purposes (Kline, 2000) and was similar to the reliability observed in Chapter 4. Furthermore, Cronbach’s alpha provides the lower-bound estimate of reliability (Tavakol & Dennick, 2011) Therefore, the enthusiasm component was retained to explore the hypothesised relationships. However, it is important to recognise that some authors recommend at least .7 as significant
random error exists when reliability is low, which may result in interpretation issues
(e.g. see Bland & Altman, 1997; Tavakol & Dennick, 2011).

**Hypothesis Testing**

The first step in the analysis was to determine if there were systematic
between-cluster variances in the dependent variable (i.e., leader LMX) by calculating
an inter-class correlation (ICC; Luke, 2004; Woltman, Feldstain, MacKay, &
Rocchi, 2012). The ICC indicated that 37.9% of the variance in leader LMX was
between managers. Given the observed ICC was above the recommended threshold
of .1 (Aguinis et al., 2013), a decision was made to use multi-level modelling for
analyses.

A similar process for analysing the data to that outlined in the previous
chapter was undertaken (see also Harris et al., 2011). Specifically, three statistical
steps were applied to assess each hypothesis. In the first step, the predictor was
entered to test main effect hypotheses (i.e. hypotheses 1 to 5). The proposed
moderator was entered in the second step to assess whether leaders’ LMX ratings are
influenced by their IIFTs (e.g. see g. Bass & Avolio, 1989; Eden & Leviatan, 1975;
2005; Lord et al., 1984; Rush et al., 1977; Schyns & Meindl, 2005; Uhl-Bien et al.,
2014). In the third step, a cross-level interaction variable was formed by multiplying
the predictor and proposed moderator variables. Significant findings at this step
would support the presence of a moderating effect (i.e. hypotheses 1a to 5a). Grand
centring was undertaken on all independent and moderator variables (see Aiken &
Table 6.2.
Descriptive statistics, inter-correlations and scale reliabilities for all manager (n = 18) and follower (n = 77) main variables.

<table>
<thead>
<tr>
<th>Follower Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>REIm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. Rational</td>
<td>3.88</td>
<td>.57</td>
<td>(.90)</td>
<td>-.01</td>
<td>-.10</td>
<td>.33**</td>
<td>-.10</td>
<td>.22^</td>
<td>.12</td>
<td>-.05</td>
<td>.14</td>
<td>.25*</td>
</tr>
<tr>
<td>2. Experiential</td>
<td>3.40</td>
<td>.36</td>
<td>(.76)</td>
<td>.06</td>
<td>.27*</td>
<td>-.01</td>
<td>-.02</td>
<td>-.10</td>
<td>-.10</td>
<td>.23*</td>
<td>.24*</td>
<td></td>
</tr>
<tr>
<td>Constructive Thinking</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>3. Emotional Coping</td>
<td>50.97</td>
<td>9.98</td>
<td>(N/A^4)</td>
<td>.25*</td>
<td>-.68**</td>
<td>-.09</td>
<td>.10</td>
<td>.07</td>
<td>.03</td>
<td>.32**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Behavioural Coping</td>
<td>50.30</td>
<td>6.10</td>
<td>(N/A^4)</td>
<td>-.11</td>
<td>.13</td>
<td>.09</td>
<td>-.25*</td>
<td>-.05</td>
<td>.38**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Categorical Thinking</td>
<td>41.44</td>
<td>8.91</td>
<td>(N/A^4)</td>
<td></td>
<td>.15</td>
<td>.04</td>
<td>-.15</td>
<td>-.24*</td>
<td>-.36**</td>
<td></td>
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<tr>
<td>Leader Variables</td>
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<tr>
<td>IIFTs</td>
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<td></td>
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</tr>
<tr>
<td>6. Committed</td>
<td>8.72</td>
<td>1.08</td>
<td>(.79)</td>
<td>.18</td>
<td>.02</td>
<td>-.12</td>
<td>.22^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Enthusiasm</td>
<td>6.42</td>
<td>1.58</td>
<td>(.55)</td>
<td>.16</td>
<td>-.19^</td>
<td>.13</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>8. Conformity</td>
<td>3.19</td>
<td>1.58</td>
<td>(.73)</td>
<td>.26*</td>
<td>-.23*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Insubordination</td>
<td>1.48</td>
<td>.99</td>
<td>(.96)</td>
<td>.21^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>LMX</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10. Overall</td>
<td>5.68</td>
<td>.74</td>
<td>(.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Notes: Cronbach’s alpha reliabilities are shown on the diagonal in brackets.
*p < .05; **p < .01; ^p < .10

^Reliabilities cannot be calculated due to the CTI (Epstein, 2001) being a controlled test. It is therefore assumed that these scales are reliable.
As described in the previous chapter, $R^2$ in multi-level modelling is interpreted as the proportional, or percentage change, in the variance in the residuals between the tested and comparison model (Luke, 2004). Simple slopes using single-level analyses (as recommended by Muthen, 2015) were plotted at both one standard deviation above and below the mean of the proposed moderator and independent variable to investigate whether a significant moderation was in the expected direction (see Aiken & West, 1991; Schubert & Jacoby, 2004; Stone & Hollenbeck, 1989).

*Hypotheses Related to Follower Information Processing Dimensions*

The results of the HLM analysis investigating hypotheses 1 (main effect of follower rational processing) and 1a (moderating effect of leader conformity IIFT) are presented in Table 6.3. As can be seen in step one, followers’ rational processing was positively related to leaders’ LMX and was significant. Consequently, hypothesis 1 was supported. Step two demonstrates that leaders’ conformity IIFT was not significantly related to their LMX rating. Step three also demonstrates no significant interaction between followers’ rational processing and leaders’ conformity. Therefore, hypothesis 1a was not supported.
The results of the HLM analysis investigating hypotheses 2 (main effect of follower experiential processing) and 2a (moderating effect of leader insubordination IIFT) are presented in Table 6.4. As can be seen, in step one, while followers’ experiential processing was positively related to leaders’ LMX it only approached significance ($p = .08$). Consequently, hypothesis 2 was not supported. Step two demonstrates that leaders’ insubordination IIFT was positively related to their LMX rating and was significant. However, step three demonstrates no significant interaction between followers’ rational processing and leaders’ conformity. Therefore, hypothesis 1a was not supported.
The results of the HLM analysis investigating hypothesis 2b (moderating effect of leader enthusiasm IIFT) are presented in Table 6.5. Specifically, step three demonstrates no significant interaction between followers’ experiential processing and leaders’ enthusiasm. Therefore, hypothesis 2b was not supported.

Table 6.5.
Hypothesis 2b - Hierarchical linear modelling results predicting leaders’ LMX with followers’ experiential processing and leaders’ committed IIFT as moderator

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiential (A)</td>
<td>.394*</td>
<td>.400*</td>
<td></td>
<td>-1.292</td>
</tr>
<tr>
<td>Moderator Committed (B)</td>
<td>.132</td>
<td>.504</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td>.187</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.293</td>
<td>.279</td>
<td>.279</td>
<td>.272</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>.014</td>
<td>.000</td>
<td>.007</td>
</tr>
<tr>
<td>AR^2</td>
<td>N/A</td>
<td>.048</td>
<td>.000</td>
<td>.025</td>
</tr>
</tbody>
</table>

*^p<.10; *p<.05; **p<.01

The lack of significance using the experiential main scale was similar to that observed in the study in Chapter 5. On the basis that imagination is an important factor in empathy (Katz, 1963; Yukl, 1998) which, in turn, is key to developing effective relationships (Kellett et al., 2002; Gaesser, 2013; Rudebeck, 2002) a decision was made to investigate the experiential sub-scale of imagination (M = 3.50, SD = .60, reliability = .758) on leaders’ LMX in addition to whether the two proposed moderators of the experiential main scale (insubordination and committed) would instead moderate this sub-scale relationship.

As can be seen in Table 6.6, imagination emerged as a significant positive predictor of leaders’ LMX in step one. Therefore, some partial support was found for hypothesis 2. Step two demonstrates that leaders’ committed IIFT was not significantly related to their LMX rating. Step three demonstrates no significant interaction between followers’ imagination and leaders’ insubordination. Table 6.7
though demonstrates in step three that leaders’ committed IIFT significantly moderated the relationship between followers’ imagination and leaders’ LMX. To explore this, simple slopes analysis was undertaken and is presented in Figure 6.1. It was observed that the slope at 1SD beneath the mean of the moderator only approached significance \( (t = 1.68, p = 0.097) \). The slope at 1SD above the mean though was significant \( (t = 2.602, p = .011) \). This provides partial support for hypothesis 3b.

Table 6.6.
_Hypothesis 2b - Hierarchical linear modelling results predicting leaders’ LMX with followers’ imagination and leaders’ insubordination IIFT as moderator_

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagination (A)</td>
<td>0.362**</td>
<td>0.347**</td>
<td>0.121</td>
<td></td>
</tr>
<tr>
<td>Insubordination (B)</td>
<td>0.182</td>
<td>-0.476</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>0.293</td>
<td>0.255</td>
<td>0.253</td>
<td>0.248</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>0.038</td>
<td>0.002</td>
<td>0.005</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>0.130</td>
<td>0.008</td>
<td>0.020</td>
</tr>
</tbody>
</table>

\(^{^p}<.10; {}^*p<.05; {}^{**}p<.01\)

Table 6.7
_Hypothesis 2b - Hierarchical linear modelling results predicting leaders’ LMX with followers’ imagination and leaders’ committed IIFT as moderator_

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagination (A)</td>
<td>0.362**</td>
<td>0.371**</td>
<td>-1.633^</td>
<td></td>
</tr>
<tr>
<td>Committed (B)</td>
<td>0.151</td>
<td>-0.666^</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>0.293</td>
<td>0.255</td>
<td>0.254</td>
<td>0.238</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>0.038</td>
<td>0.001</td>
<td>0.016</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>0.130</td>
<td>0.004</td>
<td>0.063</td>
</tr>
</tbody>
</table>

\(^{^p}<.10; {}^*p<.05; {}^{**}p<.01\)
Hypotheses Related to Follower Constructive Thinking Dimensions

The results of the HLM analysis investigating hypotheses 3 (main effect of follower emotional coping) and 3a (moderating effect of leader conformity IIFT) are presented in Table 6.8. Step one demonstrates that followers’ emotional coping was positively related to leaders’ LMX and was significant. Consequently, hypothesis 3 was supported. Step two demonstrates that leaders’ conformity IIFT was not significantly related to their LMX rating. However, step three demonstrates a significant interaction between followers’ emotional coping and leaders’ conformity. To explore this, simple slopes analysis was undertaken and is presented in Figure 6.2. The slope 1SD beneath the mean of the moderator was not significant ($t = 1.328, p = .188$). The slope 1SD above the mean though was significant ($t = 3.214, p = .002$). This provides support for hypothesis 3a.
Table 6.8. 
Hypotheses 3 and 3a - Hierarchical linear modelling results predicting leaders’ LMX with followers’ emotional coping and leaders’ conformity IIFT as moderator

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Coping (A)</td>
<td></td>
<td>.020*</td>
<td>.020*</td>
<td>-.002</td>
</tr>
<tr>
<td>Conformity (B)</td>
<td></td>
<td>-.041</td>
<td>-.049*</td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td></td>
<td></td>
<td></td>
<td>.009*</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.293</td>
<td>.273</td>
<td>.274</td>
<td>.251</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>.020</td>
<td>-.001</td>
<td>.023</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>.068</td>
<td>-.004</td>
<td>.084</td>
</tr>
</tbody>
</table>

^p<.10; *p<.05; **p<.01

Figure 6.2. Moderating effect of leader conformity IIFT (1±SD) on the relationship between follower emotional coping (1±SD) and leader LMX.

The results of the HLM analysis investigating hypotheses 4 (main effect of follower behavioural coping) and 4a (moderating effect of leader enthusiasm IIFT) is presented in Table 6.9. As can be seen, in step one followers’ behavioural coping was positively related to leaders’ LMX and was significant. Consequently,
hypothesis 4 was supported. Step two demonstrates that leaders’ enthusiasm IIFT was not significantly related to their LMX rating. Step three demonstrates no significant interaction between followers’ behavioural coping and leaders’ enthusiasm. Therefore, hypothesis 4a was not supported.

Table 6.9.

| Hypotheses 4 and 4a - Hierarchical linear modelling results predicting leader LMX with Follower Behavioural Coping and Leader Enthusiasm IIFT as Moderator |
|-----------------------------|------------------|------------------|------------------|------------------|
|                            | Baseline | Step 1 | Step 2 | Step 3 |
| Independent Variable       |          |        |        |        |
| Behavioural Coping (A)     |          | .031** | .031** | .055  |
| Moderator Enthusiasm (B)   |          | .039   | .220   |       |
| Interaction Term AxB       |          | -.003  |       |       |
| Level 1 variance of residuals | .293    | .283   | .281   | -.003 |
| Variance change            | N/A      | .010   | .002   | .002  |
| ΔR²                         | N/A      | .034   | .007   | .007  |

*p<.10; *p<.05; **p<.01

The results of the HLM analysis investigating hypothesis 4b (moderating effect of leader committed IIFT) are presented in Table 6.10. Specifically, step three demonstrates no significant interaction between followers’ behavioural coping and leaders’ committed IIFT. Therefore, hypothesis 4b was not supported.

Table 6.10.

| Hypothesis 4b - Hierarchical linear modelling results predicting leader LMX with Follower Behavioural Coping and Leader Committed IIFT as Moderator |
|---------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Independent Variable                                         | Baseline | Step 1 | Step 2 | Step 3 |
| Behavioural Coping (A)                                       |          | .031** | .031** | -.086 |
| Moderator Committed (B)                                      |          | .121   | -.528  |       |
| Interaction Term AxB                                         |          | .013   |       |       |
| Level 1 variance of residuals                                | .293    | .283   | .281   | .013  |
| Variance change                                              | N/A     | .010   | .002   | -.001 |
| ΔR²                                                           | N/A     | .034   | .007   | -.004 |

*p<.10; *p<.05; **p<.01
The results of the HLM analysis investigating hypotheses 5 (main effect of follower categorical thinking) and 5a (moderating effect of leader insubordination IIFT) is presented in Table 6.11. As can be seen, in step one followers’ categorical thinking was negatively related to leaders’ LMX and was significant. Consequently, hypothesis 5 was supported. Step two demonstrates that leaders’ insubordination IIFT was significantly related to their LMX rating. Step three demonstrates a significant interaction between followers’ categorical thinking and leaders’ insubordination. To explore this, simple slopes analysis was undertaken and is presented in Figure 6.3. It was observed that the slope at 1SD beneath the mean of the moderator was not significant ($t = 1.328, p = .188$). The slope at 1SD above the mean though was significant ($t = 3.214, p = .002$). Surprisingly, therefore, the interaction was not in the expected direction. Thus, hypothesis 5a was not supported.

Table 6.11.

<table>
<thead>
<tr>
<th>Hypotheses 5 and 5a - Hierarchical linear modelling results predicting leaders’ LMX with followers’ categorical thinking and leaders’ insubordination IIFT as moderator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
</tr>
<tr>
<td>Categorical Thinking (A)</td>
</tr>
<tr>
<td>Insubordination (B)</td>
</tr>
<tr>
<td>Interaction Term</td>
</tr>
<tr>
<td>A×B</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
</tr>
<tr>
<td>Variance change</td>
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<tr>
<td>Δ$R^2$</td>
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*^p<.10; *^p<.05; **^p<.01
Discussion

As leaders and followers do not usually experience their relationship in the same way (see Gerstner & Day, 1997; Sin et al., 2009; van Gils et al., 2010; Wilson et al., 2010), the previous chapter presented an argument which integrated CEST (Epstein, 1998, 2001; 2003) with implicit leadership and followership theory (Lord & Maher, 1993; Sy, 2010) to explain the variations observed between leaders’ and followers’ LMX ratings (Gerstner & Day, 1997; Sin et al., 2009). Two general models were developed based on this argument (see Figures 5.1a and 5.1b in Chapter 5). In these models, both leaders’ and followers’ information processing style (Norris & Epstein, 2011) and constructive thinking (Epstein, 2003) were theorised as antecedents to followers’ and leaders’ LMX rating respectively. This was based on the premise that these personality factors, in particular, those linked to the experiential system would influence a wide range of human behaviours across
contexts and situations (Epstein, 1994; 2001; 2014) including those occurring in leader-follower relationships. Drawing upon ILT and IFT theories (see Lord & Maher, 1993; Sy, 2010), these two models also explicitly recognise that the behaviours of the dyadic partner are likely to be interpreted and evaluated in different ways. Specifically, followers and leaders would draw upon their IILT or IIFT respectively when making judgements and evaluating the dyadic partner. This is because these would take account of some of the observer’s personal preferences and tendencies as opposed to a more general ILT or IFT (see Chapters 3 and 4).

Evidence in Chapter 5 supports the notion that information processing and constructive thinking in leaders were, in general, related to followers’ LMX ratings. Furthermore, these relationships were moderated by followers’ IILTs. This chapter, therefore, tested whether these personality dimensions in followers would relate to leaders’ LMX ratings and whether they would also be moderated by leaders’ IIFTs. In general, the results support the idea that these personality dimensions in followers predicted leaders’ LMX ratings. However, while there was some evidence to demonstrate these relationships as moderated by leaders’ IIFTs, it was not as conclusive as that observed in Chapter 5. Theoretical and practical implications are discussed below.

**Followers’ Information Processing and Leaders’ LMX**

As hypothesised, rational processing in followers was positively related to leaders’ LMX ratings. This finding can be contrasted with the results presented in Chapter 5, which found no significant relationship between leaders’ rational processing and followers’ LMX. One potential reason for this difference relates to
what leaders and followers perceive as valued resources from their dyadic partner (see Wilson et al., 2010). For followers, their inherent lower power in the relationship is likely to increase the value they place on how leaders use that power (i.e. coercively vs. participatory). Specifically, they may place a higher value (compared to leaders) on leaders’ social behaviours (e.g. inclusion in decision making, support, caring, empathy). In support, consideration of followers’ needs and facilitating their participation in decision-making are amongst the most important antecedents of follower satisfaction with leaders (Brown, 1996; Yukl, 1998). In contrast, leaders with their increased power and focus on managing and directing action towards individual, team and organisational outcomes are likely to place a higher value on their followers’ competence in achieving these (e.g. see Hollander & Offermann, 1990; Sy, 2010).

The rational and experiential systems appear to be differentially related to contributing to resources that are valued by leaders and followers. Specifically relative to the experiential system, rational processing is not as strongly related to the development of positive and supportive relationships (Epstein et al., 1996). Consequently, while rationality in leaders may help them personally think through issues and problems in the workplace and correct initial judgments in error (e.g. see Cerni et al., 2008; King, 2012; Norris & Epstein, 2011), it does not appear to be perceived or valued in the same way by followers (Norris & Epstein, 2011; Simoen, 2014). Rational processors though tend to be action focused (Epstein et al., 1996) and use rational influencing tactics (Cerni et al., 2012) both of which are likely to help increase the opportunities for followers to behave in ways which are valued by most leaders (Oc & Bashshur, 2013; Rank et al., 2007; Thompson, 2005). Rational processing in followers, therefore, appears to support behaviours, which are more
valued by leaders. In contrast, the experiential system appears to support those behaviours in leaders that are more valued by followers. This position is aligned with wider leadership theories which generally see leaders as focused on instilling a positive vision of the future and effectively managing relationships with followers in order to align their actions with this vision (e.g. Baker, 2007; Chaleff, 2003; Kotter, 1990; Wieseke, Ahearne, Lam, & Dick, 2009). In contrast, followers enact this vision and, therefore, need to be more practical focused or ‘hands-on’.

The relationship between followers’ rational processing and leaders’ LMX though was not moderated by leader conformity. It was implicitly assumed that a high rational processing style would serve to act as a barrier to influence attempts by others such as the leader. However, research suggests that this assumption may not be correct. Specifically, there is limited and conflicting evidence to suggest a linear relationship between influenceability and cognitive intelligence (see Rhodes & Wood, 1992), of which, rational processing shows the strongest correlations (see Epstein et al., 1996). From the perspective of leaders, therefore, while high levels of rational processing may help followers to be effective in their role (e.g. think through problems, proactive), it does not necessarily mean that such followers would be hard to influence. Consequently, the congruence argument may not apply in a simple linear process as originally believed.

Contrary to the hypothesis, followers’ experiential processing was not positively related to leaders’ LMX, although it was in the expected direction and did approach significance. This is not totally surprising as a similar non-significant finding between leaders’ experiential processing and followers’ LMX was observed in Chapter 5. However, similar to Chapter 5, exploratory analyses did demonstrate followers’ imagination, a sub-factor of the experiential system (Norris & Epstein,
was positively related to leaders’ rating of the relationship. Leaders who endorsed high levels of commitment in their ideal follower particularly valued this type of processing in followers’. Similar to the explanation for leaders’, it appears that imagination, due to its integral links to empathy (see Gaesser, 2013), helps followers to take the perspective of their leaders so they can understand and predict what they may need, and how they may be affected by, the followers’ decisions and actions. Furthermore, it helps support followers’ performance (e.g. Salanova, Agut, & Periò, 2005; Borman, Penner, Allen, & Motowidlo, 2001) and improves team cohesiveness (Rapisarda, 2002), which is likely to help further address leaders’ needs. Consequently, imagination in followers appears to support the development of positive and supportive working relationships with leaders.

Contrary to expectations, though, a leader insubordination IIFT did not have the same moderating effect as their committed IIFT on the relationship between followers’ imagination and leaders’ LMX. It may be that leaders who seek relatively higher levels of insubordination in their ideal follower may not actually experience such follower behaviours in a congruent way with their basic needs (see Epstein, 2003). According to ILT and IFT theory (Lord & Maher, 1990; 1993; Lord et al., 1984; Phillips & Lord, 1982; Sy, 2010), individuals demonstrate an increased propensity to look for information, which confirms or disconfirms whether an individual matches their ILT or IFT and, thus, can be classified as either a leader or follower. Individuals, though, who show an increased propensity to see anger and hostility in others, of which leaders who endorse high levels of follower insubordination would likely do, can result in themselves being more angry and aggressive (Penton-Voak et al., 2013). Being angry and aggressive can be considered as a negative affective state. This is unlikely to address the basic need of minimising
pain and maximising pleasure (see Epstein, 2003). Furthermore, such behaviours in both leaders and followers are unlikely to promote a supportive and positive working relationship. Yet the need to relate to others is also a basic need specified in CEST (Epstein, 2003). Consequently, while some leaders may state they seek insubordination in their ideal follower the actual experience of such followers may actually be experienced quite negatively relative to those who do not.

Followers’ Constructive Thinking and Leaders’ LMX

It appears that high levels of emotional coping in followers help them to develop positive working relationships with their leaders. This finding aligns with wider research demonstrating negative links between neuroticism and the development of positive and supportive relationships across broad domains (Aeron & Pathak, 2012; Botwin, Buss, & Shakelford, 1997; Bouchard, Lussier, & Saborin, 1999; Caughlin, Huston, & Houts, 2000; Neyer & Voigt, 2004). According to broaden-and-build theory, negative affect results in attention turning inward towards the self which then result in rigid, defensive behaviours being marshalled (Garland et al., 2010). In the context of the leader-follower relationship, therefore, a high level of follower emotional coping appears to facilitate a cognitive and emotional openness to the needs of leaders\(^1\). Specifically, when faced with criticism, rejection or frustration, high levels of emotional coping appears to act as a protective mechanism against turning their attention inward and marshalling psychological and behavioural defence mechanisms. This, in turn, should facilitate increased opportunities, albeit via indirect pathways, to attend to the needs of leaders (e.g. open to feedback, more

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\(^1\) The same should also occur with other members of the follower’s team and other co-workers (e.g. see Aeron & Pathak, 2012) which should indirectly support the meeting of the leader’s needs (e.g. improved team cohesiveness, more positive working climate).
professional behaviour, increased teamwork). From the perspective of leaders, therefore, high levels of emotional coping in their followers is likely to be experienced positively via direct (i.e. face-to-face interactions) and indirect (e.g. via other employees, improved team cohesiveness) pathways.

This is supported by research which demonstrates that employees who experience low levels of negative affect and/or increased emotional stability tend to show improved responses to leader feedback (Ilies, de Pater, & Judge, 2007), increased performance (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991; Judge, Erz, & Bono, 1998), and improved teamwork (Aeron & Pathak, 2012). Consequently, there should, in general, be a corresponding increase in the receipt of valued resources from followers (i.e. address leaders’ needs) who demonstrate high levels of emotional coping. This, in turn, would result in the improvement, which is observed in leaders’ perceptions of their relationships.

Unsurprisingly, the proactive and positive tendencies of followers with high levels of behavioural coping (Epstein, 2001) have positive impacts on leaders’ perceptions of the relationship. A similar explanation to that presented in Chapter 5 which draws upon broaden-and-build theory (Fredrickson, 1998; 2001; 2003) can be used to explain this. Specifically, it appears that the increased tendency for followers with high levels of behavioural coping to experience positive affect helps expand their awareness, thinking and behaviours (see Fredrickson, 2003). Due to this increased experience, openness, and proactivity followers develop an increased pool of personal, professional, and social skills and knowledge. This increased variety of resources (relative to followers with lower behavioural coping) theoretically should enable them to better adapt to new situations and problems in the workplace. Indeed, employees who demonstrate higher levels of behavioural coping tend to voluntarily
take on increased workloads while also showing less stress and increased happiness (Green 1988 as cited in Epstein, 2003). Furthermore, individuals who show increased positive affect are more open to critical feedback and information (Estrada et al., 1997; Raghunathan & Trope, 2002) in addition to showing increased empathy (Waugh & Fredrickson, 2002). From the perspective of leaders, such behavioural tendencies in followers are likely to be highly valued which, in turn, should improve their perception of their followers’ competence and loyalty. The result, therefore, is an improved working relationship.

The observation that neither leaders’ committed nor enthusiasm IIFTs significantly moderated the relationship between followers’ behavioural coping and leaders’ LMX was quite surprising. Theoretically, the congruence between the proactive and positive minded tendencies of followers with high behavioural coping and leaders who seek high levels of commitment and enthusiasm in their ideal follower should have moderated this relationship. For the enthusiasm factor, this may be due to the low level of reliability coupled with the small sample size, which undermined the ability to detect significant differences. For the committed IIFT though, this may have been due to the observation that the majority of leaders seek followers who are reliable, productive and work hard (i.e. high levels of follower commitment). This is obviously unsurprising considering organisations exist, at their most basic level, to perform in some way (e.g. financial performance, customer satisfaction). This lack of variability in what leaders seek from followers, therefore, may not be enough to detect any moderation effects.

As expected, the cognitive and behavioural tendencies of followers with high levels of categorical thinking negatively impacted on leaders’ perceptions of the relationship. The fact that categorical thinkers tend to show an increased likelihood
to see others who voice antithetical positions as in error, be less trusting of others, be more pejorative, and are quick to anger and experience annoyance (Epstein, 1998; 2001), is unlikely to support the development of positive and supportive working relationships with leaders. For example, followers who regularly take a different perspective to leaders on the best course of action, due to differences in frames of reference or how they tend to see problems and situations, may see such leaders as typically in error. They may voice such a position in a particularly judgmental manner both directly (i.e. face-to-face with leader) and indirectly (e.g. tell other team members that the ‘boss is an idiot’ which then gets feedback to the leader by these other team members). From the perspective of leaders, such behaviours are unlikely to reinforce the perception of a positive and supportive working relationship. Indeed, while effective followers show the courage to voice antithetical positions to their leaders when required, they need to do this in a positive and respectful way that promotes a positive working environment and demonstrates support for their leaders (Chaleff, 1995; 2003; 2008; 2009; Kelly, 1988; 1992; 2008). It appears, though, that categorical thinking in followers does not help achieve this.

While the negative impact of followers’ categorical thinking on leaders’ LMX is unsurprising, the observation that this relationship was stronger when leaders endorsed high, rather than low, levels of insubordination was not anticipated. As noted previously, ILT and IFT theory state that implicit leadership and followership theories serve as an important basis for what perceivers attend to, what they encode, the information they retrieve when recalling leader or follower related information, and guiding people’s interpretations of the leaders’ or followers’ behaviours (Lord & Maher, 1990; 1993; Lord et al., 1984; Phillips & Lord, 1982). Consequently, there is an increased propensity to look for information, which
confirms of disconfirms the notion that the observed is either a leader or follower and, thus, how they act and feel towards them. Individuals who show an increased propensity to see anger and hostility in others results in themselves being angrier and more aggressive (Penton-Voak et al., 2013), which are negative affective states.

As noted previously, a negative affective state is not aligned with the basic need for maximising positive affect and minimising negative affect (Epstein, 2003; 2014). Consequently, leaders who have a propensity to seek insubordination in their followers may actually result in them experiencing negative affect if they do indeed observe such behaviours in their follower. This negative leader affective state results in a corresponding decrease in these leaders’ perceptions of such followers resulting in a more negative relationship rating. Categorical thinking in followers, therefore, appears to be experienced particularly negatively by leaders’ who endorse relatively higher levels of insubordination in their ideal follower. This is due to their increased tendency to seek out (consciously and unconsciously) negative behaviours in followers, which results in an increased propensity to react negatively to such behaviours. This is still aligned with what may be predicted by person-environment theory (e.g. Kristof-Brown, 1996; Kristof-Brown et al., 2005) but in this case, the originally hypothesised congruence target was incorrect. Specifically, rather than IIIT schema congruence, it was the basic need congruence in the experiential system that proved to be key. From a practical standpoint, this suggests that leadership training should seek to reduce the degree to which leaders seek insubordinate followers. This should improve relationships with more callous and less trusting employees given that managers do not react as negatively to them (i.e. a reinforcing cycle of negative interactions is reduced or mitigated).
Concluding Remarks and Practical Implications

The current study demonstrates support that follower information processing style and constructive thinking impacts on how leaders’ experience the leader-follower relationship. However, support for the proposition that these relationships would be moderated by what leaders’ seek in their ideal followers was not as convincing as the results observed in Chapter 5. Two possible reasons are offered as to why this may be the case. First, there may not be enough variability in some of the IIFT factors to detect moderation effects. Indeed, given that most organisations exist to produce some form of outcome, it is not surprising that most leaders’ seek their employees to be competent, committed, hardworking and high performing (see Sy, 2010). Indeed, Lord and Engle (1997) state that “supervisors rely on implicit performance theories to form impressions of subordinates” (p. 992). Such theories can be considered more normative in terms of the expectations of how followers should act. The IIFTs that the current sample of leaders held, therefore, could reflect more socially normative follower expectations as opposed to specific individual preferences for a particular type of follower. For example, it is a socially normative expectation that followers be hard working and competent; friendship with followers therefore become less important for leaders. Consequently, this socially normative, but limited IIFT variability undermines the ability to detect any moderation effects potentially becomes minimised. The explicit measurement approach may have also compounded this issue (i.e. explicit attitudes of follower).

The second potential reason is due to the small sample size, in particular, the limited number of leaders. The variation in the number of followers per leader suggests that the responses from a leader with a higher than average number of followers (e.g. some leaders had up to 10 followers) could have a particularly high
risk of biassing statistical analyses and undermining the ability to uncover the true relationships within the general population. It is not possible to tell if this has occurred in the current data set. However, there is some indirect support. Specifically, the average conformity IIFT in the current study was somewhat lower than that observed in Chapter 4.

One of the key practical implications from the current study is that leader-follower relationships could be theoretically improved via follower interventions, which seek to develop and improve their information processing style and constructive thinking. Research demonstrates that both of these personality elements can be improved through training (see Cerni et al., 2010; Epstein, 1998; 2014). Therefore, follower training which aims to improve their rational processing, emotional coping, behavioural coping, while reducing their categorical thinking should improve leaders’ perceptions of followers’ competence over time as these aspects of personality develop. While they did not use CEST as their framework, Proudfoot, Corr, Guest and Dunn (2009) provide evidence to support that such follower training programmes would have positive outcomes. Specifically, employees who went through a 13-week training programme based upon cognitive-behavioural therapy principles (e.g. automatic thoughts, goal setting, attributions, action planning, Socratic questioning, self-observation, and weekly assignments) showed improvements in relation to productivity, job satisfaction, attribution styles, self-esteem, employee turnover, and psychological strain.
Limitations

This study has limitations that are similar to those evidenced in Chapter 5. First, as discussed above, the low sample size may have undermined the ability to detect some relationships. Second, as leaders’ IIFTs are related to their information processing styles and constructive thinking (see Chapter 4), it is quite possible that it is a congruence between leaders’ and followers’ information processing styles and constructive thinking that is contributing to leaders’ LMX rating. Indeed, there are significant bodies of research demonstrating that congruence between leader and follower personality factors contributes to higher LMX rating (see Schaubroeck & Lam, 2002; Strauss et al., 2001; Zhang, et al., 2012). Third, the IFT questionnaire is an explicit measure used to measure an implicit construct. Therefore, there is a misalignment in the methodology that can cause interpretation issues (Uhlmann et al., 2012). However, as noted by Epitropaki and colleagues (2013), the use of explicit and implicit measures is still considered useful for extending theory and research. Future research though may wish to use an implicit measure to further investigate whether similar relationships emerge.
CHAPTER 7

Review of Studies and Conclusions

The current research sought to address three gaps in leadership research and theory. The first gap studies 1 and 2 (Chapters 3 and 4 respectively) addressed was the need to extend theory around, and identify the antecedents to, both implicit leadership and followership theories (see Keller, 2003; Schyns & Meindl, 2005). Extending research in these areas carries important implications, given these constructs influence how individuals make sense of leaders and followers (Lord & Maher, 1990; Poole et al., 1989; Sy, 2010; Weick, 1995) and, thus, influence group and organisational outcomes (see Hansbrough, 2005; Lord et al., 1984; Nye, 2005; Nye & Forsyth, 1991). The second gap, which studies 3 and 4 addressed, was the need to extend the research looking at the antecedents of leader-member exchange (Mahsud et al., 2010). The third gap, which was also addressed by studies 3 and 4 (Chapters 5 and 6 respectively), was to explain why leaders and followers do not usually see ‘eye-to-eye’ with regards to their existing relationship (see Gerstner & Day, 1997; Sin et al., 2009). This is despite existing LMX theory which suggests that both leaders and followers will experience their relationship similarly (Graen & Uhl-Bien, 1995; van Gils et al., 2010). It was proposed that these gaps could be addressed through an integrative approach.

An integrative approach to understanding leadership is important as traditionally the focus of leadership research and practice has been on leaders at the expense of followers (Day, 2001; Goffee & Jones, 2001; Lord & Brown, 2001; Lord & Maher, 1993; Shamir, 2007). However, many theorists recognise that followers play highly active roles in the leadership process (e.g. Chaleff, 1995; 2003; 2008; 2009; Kelley, 1988; 1992; 2008; Lord & Brown, 2001; Shamir, 2007; Uhl-Bien et
al., 2014). Consequently, there have been increasingly stronger calls in the literature to take a more holistic approach to leadership (e.g. Hosking, 2002; Shamir, 2007; Uhl-Bien et al., 2014; Schyns et al., 2011; 2012). Recognising this need for theory integration, the research in the preceding chapters tested various components of a generalised leadership model, which is reproduced in Figure 7.1.

Leadership in this model was conceptualised as a relationship between leaders and followers' and that the quality of this relationship is influenced by the interacting internal worlds (i.e. cognitive-emotional) and role expectations of both dyadic partners (see Bornstein, 2003; Lord & Brown, 2001; Stech, 2007). Based upon this conceptualisation, this model integrated Cognitive-Experiential Self
Theory (CEST; Epstein, 1998; 2003; 2014), implicit leadership theory (Lord & Maher, 1990; 1993), implicit followership theory (Sy, 2010), and leader-member exchange (Dansereau et al., 1975; Graen et al., 1973; Graen & Uhl-Bien, 1995) to help: (1) explain why leaders and followers vary in their preferences for specific follower and leader traits respectively (see Offerman, Kennedy, & Wirtz, 1994); and (2) understand how these preferences may impact on the value perceived by both leaders and followers with regards to what is provided by the dyadic partner in their relationship and thus how they each perceive the quality of the relationship (see van Gils et al., 2010; Wilson, Sin, & Conlon, 2010).

Studies 1 and 2 – General Findings and Conclusions

Studies 1 and 2 extend theory on how and why IILT and IIFT ‘schemas’ are created and develop over time. Specifically, studies 1 and 2 explored how leaders’ and followers’ information processing style and constructive thinking as described in CEST (Epstein, 1998; 2003; Norris & Epstein, 2011) influenced their preferences for particular traits and behaviours in followers and leaders respectively. Across both studies, it was theorised that followers and leaders seek to think, behave and communicate in ways that are aligned with their information processing style and constructive thinking (see Berne, 1961). When leaders or followers communicate in ways that are aligned with their preferred style, they will experience positive vibes and emotions (see Berne, 1961; McCann & Higgins, 1988). When communication is incongruent, these will be less positive. Given that emotions are fundamental to how the experiential system learns, these affective experiences act as learning opportunities for leaders and followers to associate particular follower and
leader traits respectively which have contributed to interactions and working environments which are congruent or incongruent with how they tend to processes information. The research in studies 1 and 2 generally support this theoretical framework. Indeed, there was general evidence to support both information processing styles and constructive thinking independently contributed to explaining both leaders and follower IIFTs and IILTs respectively to varying degrees. Therefore, these aspects of the initial research model were generally supported.

It is important to emphasise that ILT and IFT targets investigated were that of an ideal leader and follower (i.e. IILT and IIFT) rather than a more general ILT or IFT target. This point is pertinent as the original ILT was initially developed based upon responses to the targets of leaders, effective leaders, and supervisors (see Offerman et al., 1994). Similarly, the IFT measure by Sy (2010) was developed based upon responses to the targets of a follower, effective follower, ineffective follower and subordinate. None of these targets specifically references an ideal leader or ideal follower. Perhaps the closest targets are effective leaders and effective followers. However, effective and ideal are not necessarily synonymous in their meaning. For example, the word effective is defined as a success is achieving some desired outcome (Effective, n.d.). Ideal though is defined as satisfying one’s idea of what is perfect or most appropriate (Ideal, n.d.). In the former, the definition is more about achieving some external objective or the extent to which some particular problem is overcome. In the latter, though, the emphasis is more on addressing one’s preferences and perceptions. These differences are likely to influence how respondents conceptualise and respond to these targets (see Offerman et al., 1994; Sy, 2010).
This observation is important for both theoretical and methodological reasons. Offerman and colleagues (1994) measure is one of the most popular in the ILT literature. However, the ways in which the ILT and IFT measures were developed suggests that it may not fully capture followers’ conceptualisations of an ideal leader; but rather only the schemas of more general or effective leader targets. It is important, therefore, to recognise that previous research which has stated that their focus is on individuals’ ideal leader schemas (e.g. Epitropaki & Martin, 2004; Keller, 1999; Koommoo-Welch, 2008) appears to have used these popular measures without adequate adaption on the assumption they will be appropriate for assessing participants’ ideal leader schemas.

This methodological issue, therefore, may partly explain why the reported relationships between personality characteristics and ILTs in past research have been somewhat weak (e.g. Keller, 1999). Specifically, the antecedents to an ideal and general ILT and IFT would likely be different. As touched upon in the discussion of studies 1 and 2, the use of an ideal leader or ideal follower schema should be more cognitively primed than a general schema in the mind of followers or leaders respectively during leader-follower interactions in the general workforce. This is because these schemas would take into account their needs, values and preferences. It is, therefore, important for future ILT and IFT research to clearly distinguish the leader or follower target when designing their research.

**Studies 3 and 4 – General Findings and Conclusions**

Studies 3 and 4 held two core aims. The first of these aims was to explore how leaders’ and followers’ information processing style and degree of constructive
thinking impact on their working relationships as perceived by their dyadic partner. The general theoretical approach adopted was that both leaders’ and followers’ information processing and constructive thinking would strongly influence the general behaviours that manifest in the leader-follower relationship (e.g. see Cerni et al., 2012; Curtis & Lee, 2013; Epstein, 2001; Norris & Epstein, 2011). Consequently, these cognitive and behavioural differences should influence how leaders’ and followers’ perceive the nature of their leader-follower relationship.

Studies 3 and 4 both generally found that leaders’ and followers’ information processing style and various elements of their constructive thinking influenced their followers’ and leaders’ perceptions of the leader-follower relationship respectively. In particular, the research suggested that these cognitive factors contributed to traits and behaviours that are valued (or not) by the dyadic partner. However, there was also evidence to suggest that rational thinking impacts on the leader-follower relationship differently depending on whether the individual is a leader or a follower. Specifically, leaders’ rational processing did not influence the quality of the leader-follower relationship as perceived by followers. However, in study 4, followers’ rational processing did influence their leaders’ perceptions of the relationship. Coupled with the other research findings discussed elsewhere (see Cerni et al., 2008; King, 2012; Simoens, 2014), these differences suggest that rational processing contributes differently to the leader-follower relationship depending on what a leader or follower values in an individual who occupies a follower or leader role respectively. Explicitly, it appears that rational processing in followers contributes to behaviours which are valued by leaders. In contrast, rational processing in leaders does not appear to contribute to behaviours that are valued by followers.
The second core research aim of studies 3 and 4, that is perhaps the most relevant for extending LMX theory and research, was to explore if and how followers’ IILT and leaders’ IIFT influenced their interpretations and evaluations of their dyadic partner’s behaviours. Drawing upon existent ILT and IFT theory (Lord & Maher, 1990; 1993; Sy, 2010), it was hypothesized that leaders and followers draw upon their IIFT and IILT respectively during leader-follower interactions to interpret and evaluate their dyadic counterpart’s behaviours (see also van Gils et al., 2010; Wilson et al., 2010). As noted above, an ideal schema is most likely to be prevalent during these interactions because these would, at least in part, account for the observer’s cognitive-emotional tendencies (as suggested by the findings of studies 1 and 2). Consequently, this influences how leaders and followers evaluate the quality of their relationship.

Study 3 found strong evidence that followers’ IILTs influence how they interpret and evaluate the behaviours of leaders. Study 4 though did not provide strong support for the same process occurring from the perspective of leaders. This is probably due to the small sample utilised. However, it is important to recognise that, even though the small sample size likely undermined the ability to detect significant moderation effects, the fact that some did emerge provides initial evidence that leaders also draw upon their IIFTs when interpreting and evaluating the actions of their followers.

These findings extend LMX theory and research by providing insight into how and why followers and leaders do not necessarily perceive their relationship in the same way (see Gerstner & Day, 1997; Sin et al., 2009). Specifically, all things being equal, variation in followers’ LMX is not solely dependent on the cognitive-emotional tendencies of the leader, but also on how followers’ interpret these. These
findings sustain the proposition in LMX that not all followers perceive and evaluate leaders in the same way (Dansereau et al., 1975; Graen, et al., 1973). They also provide some insight into what follower characteristics influence these differences. There is also some limited support that a similar process is occurring from the perspective of leaders. Specifically, that variation in leaders’ LMX is not only dependent on the cognitive-emotional tendencies of followers, but also on how leaders’ interpret these tendencies in their day-to-day interactions.

These results have important theoretical implications for more mainstream leadership theories with regards to where leadership resides. Mainstream leadership theories (e.g. transformational leadership) specify a predefined model which describes what an effective leader is (see Antonakis et al., 2003; Avolio & Bass, 1991; Bass & Avolio, 1990; 1993; 1997; House, 1977). As noted by Day (2001), such models are used in leader development interventions with the aim to change leaders’ cognitions and/or behaviours to fall in line with these models. While there is evidence to demonstrate that these leadership models positively influence the performance, motivation and satisfaction of the average follower (see DeGroot, Kiker, & Cross, 2000; Judge & Piccolo, 2004), the current research strongly suggests that such models will not fit, or be effective for, all followers’ conceptualisations of what they believe an ideal leader should be (see also Dvir & Shamir, 2003; Moss & Ngu, 2006; Wofford et al., 2001). Therefore, there is an inherent danger in typical leader development interventions that aim to align a leader’s cognitions and behaviours to some abstract model without taking consideration the beliefs of a leader’s followers.

To highlight the danger of assuming that one type of leadership model will be effective on all followers, assume, for a moment, that a normal bell curve represents
the distribution of followers for whom a particular leadership model is effective for. This would suggest that any pre-specified leadership model would not be “effective” for about 31% of followers. Obviously, this is an overly simplistic view of the problem, but it helps highlight the theoretical and practical issues of specifying one model of leading for all. Instead, conceptualising leadership as a relationship between leaders and followers appears a more promising approach to gaining better knowledge and insight (see also Shamir, 2007; Uhl-Bien et al., 2014). Studies 3 and 4 provide evidence that seeing leadership as a relationship can be fruitful for extending leadership and followership theory and opens up new lines of research. Specifically, the current research provides evidence that leadership can be conceptualised as a complex interplay between the cognitive-emotional tendencies of leaders and followers and their respective beliefs about what and how an ideal leader or follower should think and behave.

One way of understanding the complex interplay between the cognitive-emotional tendencies of leaders and followers and their respective beliefs is via an integration of connectionist ILT and IFT models with an individual’s overall implicit theory of reality as described in CEST (Epstein, 1994; 2003). An implicit theory of reality is a hierarchical cognitive structure of interrelated schemas. At the top of this hierarchy are the more general, abstract schemas (e.g. the world is safe, the self is worthy). At the bottom are situation specific schemas (Epstein, 2003). Connectionist models of ILTs and IFTs (see Brown & Lord, 2001; Hanges et al., 2000; Lord et al., 2001), at their most basic, understand ILTs and IFTs as existing within the pattern of knowledge unit activations and inhibitions. This pattern depends on contextual factors including the organisational culture, the leader, the follower, and the current task (Lord et al., 2001). This description is compatible to the situation specific
schemas described in CEST (Epstein, 2003). Specifically, ILTs and IFTs can be understood as instances of situation specific schemas that exist in the wider implicit theory of reality. Furthermore, a recognition that characteristics of followers and leaders influence the activation pattern in the connectionist models appears theoretically congruent with the more abstract and broader schemas of followers’ and leaders’ implicit theory of reality. Therefore, these theoretical paradigms appear to be mutually compatible.

**Other Theoretical Implications**

There are other theoretical implications of the current research. First, the way in which leadership is conceptualised has potential implications for understanding the consequences of high and low-quality leader-follower relationships on organisational outcomes. From the perspective of the current research, leaders’ and followers’ perceptions of their relationships are dependent on the interplay between their experiences during leader-follower interactions, their cognitive-emotional preferences and tendencies, and their implicit beliefs. As leaders and followers look for dyadic partners who are congruent with their cognitive-emotional tendencies and implicit beliefs, the implication is that subjectively reported “high-quality relationships” or “low-quality relationships” may, from an objective perspective, look very different across each dyad (e.g. different combinations of congruent or incongruent leader-follower cognitive-emotional tendencies and beliefs).

As a consequence, it cannot be assumed that a subjectively reported high or low-quality relationship will necessarily result in positive or negative organisational outcomes implicitly assumed in LMX research (e.g. Dulebohn et al., 2012; Dunegan...
et al., 2002; Erdogan & Liden, 2002; Graen & Uhl-Bien, 1995; Judge & Ferris, 1993; Liden et al., 1993). Instead, there may be some combinations of leader-follower cognitive-emotional tendencies and beliefs, which may result in both leaders and followers subjectively reporting a high-quality relationship that actually objectively results in poorer organisational outcomes. Alternatively, there may be situations where perceived low-quality leader-follower relationships may actually contribute to positive team and organisational performance. For example, study 3 demonstrates that followers who seek highly dedicated leaders tend to report higher levels of relationship quality when their leader is proactive and optimistic. In contrast, followers who do not want highly dedicated leaders are more likely to report having a poor relationship with these types of leaders. Instead, they tend to report having better relationships with less proactive and optimistic leaders. From the perspective of these dyadic combinations, while the former relationship may be subjectively experienced negatively from the perspective of the follower, from an organisational perspective, these relationships may be more beneficial (e.g. leaders are proactive in ensuring followers complete their tasks). In contrast, while the latter relationship may be subjectively experienced positively from the followers’ perspective, these relationships may actually be less beneficial for the organisation (e.g. leaders are more laissez-faire towards ensuring followers complete tasks). Consequently, future research may benefit by distinguishing relationship quality in terms of a subjective perception or some objective outcome.

The second wider theoretical implication is the potential application of this general theoretical framework to other relationship contexts (i.e. beyond leadership). Specifically, it may be useful to integrate CEST (Epstein, 1998; 2001; 2003; 2014) with other implicit role based theories to understand how these may be influencing a
relationship in a particular context. For example, perceptions of marriage quality may be, in part, dependent on how each believes their partner should act in their role. Specifically, similar to how IFTs and ILTs influence the observers’ perceptions of followers and leaders respectively (Lord & Maher, 1990; Sy, 2010), each partner in the relationship is likely hold an ideal image for their dyadic counterpart (e.g. see DeHart, Pelham, & Murray, 2004; Knee, Nanayakkara, Vietor, Neighbors, & Patrick, 2001). These differences would correspondingly influence what they attend to, encode, and how they judge and evaluate the behaviours of their dyadic counterpart. From this perspective, new insights into relationships across different contexts could be generated.

**General Research Strengths and Limitations**

One of the key methodological strengths across studies 1 to 4 was the adoption of a two-stage research design. These two stages were separated by at least two days. Furthermore, the surveys in each stage had response scales that differed from each other (i.e. 5-point and 10-point in stage 1 and 5-point and 7-point in stage 2). These design factors should reduce issues associated with common method bias (see Podsakoff et al., 2003 for a detailed discussion). Common method bias was also investigated using statistical analyses in studies 1 and 2. In these cases, limited evidence of common-method bias was found. The relationships observed across these studies, therefore, should be more likely to reflect the actual relationships in the population rather than an artefact of how the data was collected.

A consideration of the strengths and limitations in adopting CEST (Epstein, 1973; 1994; 2003) instead of other dual-processing models (see Kahnman, 2003;
Smith & DeCoster’s, 2000; Strack & Deutsch, 2004) in the theorising of the current research also needs to be made. As noted in the introduction, all dual-processing theories essentially propose humans have two information processing systems (Evans, 2008; Evans & Over, 1996; Gawronski & Creighton, 2013; Kahneman 2011; Kahneman & Frederick 2002). The first system is typically seen high capacity and processes information implicitly or automatically at the unconscious level. In contrast, the second system is lower in its capacity and is engaged in more explicit or controlled processes. In the case of CEST (Epstein, 1973; 1994; 2003), it is clear that experiential system aligns with the first system described, and the rational system aligns with the second system (see also Evans, 2008). Where CEST strengths lie compared to these models is that the dual-processing aspect is placed in the wider context of a global theory of personality (Epstein, 2003; Pacini & Epstein, 1999). In addition, the core strength in relation to the current research was the fact that it was explicitly compatible with psychodynamic theories of leadership and followership, but within a scientific defensible framework (Epstein, 1994; Frankish & Evans, 2009). The importance of emotions in the experiential system is also a feature that is not typical in other dual processing theories (Evans, 2008). Yet, emotions have been increasingly recognised as important in the workplace (e.g. Bono et al., 2007; Brief & Weiss, 2002).

While CEST clearly has strengths, especially in relation to the current research, it does have specific weaknesses for interpreting some aspects of the current research. In particular, unlike more recent dual-processing theories (e.g. see Kahnman, 2003; Smith & DeCoste’s, 2000; Strack & Deutsch, 2004), CEST does not specifically outline how the experiential operates at the cognitive level. For example, RIM (Strack & Deutsch, 2004) draws upon recent conceptualisations of
associative-network models (e.g. Smith, 1998), to describe how the IS operates. Specifically, within the RIM, the links between knowledge elements have different strengths, which are based upon prior learning (i.e. elements that occur in close temporal or spatial proximity with have links that are strengthened). Once an element is activated via some environmental input, other elements that are linked also become activated. The pattern of this activation depends on the nature and strengths of these links resulting in cognitive structures (i.e. schemas) within RIM’s IS. CEST only provides a more simple description of how the experiential system (e.g. see Epstein, 2003), although this is somewhat compatible with how RIM states the IS system operates.

One of the other limitations of CEST is the focus primarily on the experiential system (Epstein, 2003). Consequently, there is subsequently less focus on the rational system. At the outset of this research, this was an intentional imbalance as, from the perspective of CEST (Epstein, 2001; 2003), research assessing the relationships between the rational components of personality and ILT’s have already undertaken in the literature (e.g. Keller, 1999).

In addition to the small sample sizes utilised in studies 3 and 4, one of the main research limitations was the use of explicit measures to assess implicit constructs (see Uhlmann et al., 2012 for a detailed discussion). Specifically, there is a divergence between the construct of interest and how it is measured. It is important to recognise though that Epitropaki and colleagues (2013) state that both explicit and implicit measures are important for furthering our understanding of how these beliefs influence leader-follower relationships. Indeed, according to CEST, while both the experiential and rational systems are seen to be independent, they do operate in parallel and interact with each other to influence the processing that occurs (Epstein,
1998; Epstein et al., 1996). Consequently, there is a reason to believe that, despite the methodological mismatch, what individuals explicitly report as their ideal follower or leader will bear a resemblance to their implicit schemas. However, it is suggested that future research should seek to use implicit measures. It may be expected that similar relationships would emerge and may be even stronger given that implicit leadership and followership theories would exist in the preconscious experiential system. Consequently, the experiential aspects of personality should be more proximal antecedents.

Finally, in general, all the studies presented adopted analysed one dependent variable at a time. In contrast, a pattern approach would consider the internal coherent and consistent pattern of ILT variables that exist within followers and provide a more holistic understanding of follower ILTs (e.g. see Foti & Hauenstein, 2007). Consequently, future research may wish to adopt a pattern approach. It is important to note that the pattern approach is considered as a complementary approach to the variable approach, not as a substitute. Indeed, Foti and Hauenstein (2007) state that “the pattern approach can complement the variable approach” (p. 353). Consequently, results presented across the four presented studies are still important for extending leadership research.

**Practical Implications**

There are a number of practical implications that emerge from the current research for employee selection, team composition, and for how leadership development should be approached. From an employee selection perspective, the research demonstrates that both information processing style and constructive
thinking will, on average, influence any candidates’ ability for building and maintaining high-quality leader-follower relationships. This is an important outcome as high-quality leader-follower relationships contribute to lower employee turnover, increased organisational commitment, job performance and satisfaction, and organisational citizenship (Dulebohn et al., 2012; Ilies et al., 2007) which ultimately impact the bottom line of organisations (see Cascio, 1991; Koys, 2001). However, there are no guarantees that the candidates’ traits and beliefs will be congruent with that of existing employees (i.e. who the candidate will lead or follow depending on the role they are applying for). Consequently, selection processes could also consider the match of candidates’ traits, behaviours, and beliefs to the existing employees where the candidate will be placed. In other words, the best outcomes for the leader-follower relationship will be where a consideration of the congruence between candidates’ and the existing leader’s or follower’s information style, constructive thinking, and implicit beliefs are made.

There are similar implications for team composition decisions. Team composition refers to how individual characteristics in a team are arranged to bring about increased effectiveness on team processes and outcomes (Bell, 2007). As stated by Marks, Mathieu, and Zaccaro (2001), members of a team must engage in “interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities directed toward organizing taskwork to achieve collective goals” (p. 357). Similar to employee selection, the current research provides insight into leader and follower characteristics that will facilitate group cohesiveness, processes and outcomes. Specifically, team members can be selected based on how congruent their cognitive-emotional tendencies and beliefs about leaders and followers are to other team members. For example, the research would suggest that
the most congruent followers for a team which has a leader with high levels of imagination, and emotional and behavioural coping, would be most effective with those followers who endorse high levels of leader sensitivity and dedication.

The nature of congruence as described above for employee selection and team composition decisions, therefore, extends the person-supervisor fit research (see Kristof-Brown et al., 2005). Specifically, it provides insight into which leader and follower traits and beliefs may be most congruent for influencing leader-follower relationships. However, coupled with a relationship based perspective of leadership (see also Lord & Brown, 2001; Shamir, 2007; Uhl-Bien et al., 2014), the use of CEST (Epstein, 1998; 2001; 2003) as a framework for understanding how these aspects of personality and beliefs may interact together has particularly important implications for how leadership development is approached.

There have been many practitioners who have written about the limitations of current mainstream approaches to leader development (e.g. Day, 2001; Hosking, 2002; Schyns et al., 2011; 2012; Velsor & McCauley, 2010). Specifically, they generally argue that what are typically referred to, or marketed as, leadership training programmes are actually leader training programmes (Day, 2001). Such programmes seek to increase the knowledge, skills and abilities of individuals who hold a leader role (Day, 2001; Velsor & McCauley, 2010). However, from a relationship perspective, such an approach to improving leadership is problematic. Specifically, they fail to understand the active and dynamic impacts that followers have on the leadership process. The findings in the current research support the notion that current leader development programmes should evolve to actual leadership development programmes before they become truly effective (see e.g. Day, 2001; Hosking, 2002; Schyns et al., 2011; 2012; Velsor & McCauley, 2010).
Similar to psychodynamic approaches to improving leadership effectiveness (e.g. see Bornstein, 2003; Kroeger et al., 2002; Stech, 2007), these leadership programmes would incorporate both leaders and followers. Specifically, they would provide feedback and insight into both leaders’ and followers’ personalities, in particular, the experiential aspects due to its significant influence over everyday cognitions and behaviours (see Epstein, 1998; 2003) and how these may impact on their working relationship and, subsequently, individual, team, and organisational outcomes. These training programmes though should seek to go further than simply understanding the impact of each other’s information processing style and constructive thinking. Specifically, they should also seek to increase leaders’ and followers’ understanding of how these elements of personality influence what they subsequently want in leaders and followers (i.e. their IIFTs and IILTs) to ultimately influence their working relationship. Indeed, Schyns and colleagues (2011) describe a technique for bringing leaders’ attention to their implicit leadership theories by getting them to draw images they associate with leaders and then discussing these images to help gain a better understanding of how their beliefs influence behaviours and, subsequently, the leadership process. Such techniques could be integrated into a holistic leadership development programme in which both leaders’ and followers’ personalities and implicit beliefs are explored.

Importantly for these leadership development programs is the fact that followers’ and leaders’ information processing styles and constructive thinking can be specifically targeted for change (see Cerni et al., 2010; Epstein, 1998; 2003). Such changes are likely to change the nature of individuals’ IILTs and IIFTs. Specifically, leader and follower interventions which seek to change leaders’ and follower’ information processing style and constructive thinking, therefore, should,
over time, come to influence not only the ways in which they process information generally but also what they look for in their ideal leader or follower. As noted in previous chapters, Kruse and Sy (2011) have found that increasing positive affect can correspondingly increase the expression of prototypical followership traits. In contrast, negative affect increases the endorsement of anti-prototypical traits. The transient nature of affect though suggests that such changes are likely to revert to their original IFT.

Affect in CEST though is conceptualised as an outcome of the initial cognitive interpretative processes in the experiential system (see Figure 1.1 in Chapter 1; Epstein, 1998; 2003). If leadership development programmes therefore target such processes for change, it suggests that both leaders and followers can be developed. Specifically, cognitive processes can be changed resulting in less intense and frequent negative affective experiences in addition to more intense and frequent positive affective experiences. Such changes should result in longer-lasting changes to both leaders’ and followers’ IIFTs and IILTs respectively. Consequently, these changes should improve the leader-follower relationship. In support, research demonstrates the Pygmalion effects of leaders who hold positive expectations of their followers on actual follower performance (Eden, 1990; Whiteley et al., 2012).

**Concluding Remarks**

Leadership is clearly a highly complex phenomenon. The current research suggests that such complexity can be better understood by adopting a more integrative and holistic approach to studying leadership, which can provide greater insights and understanding. Specifically, by taking such an approach, three
limitations in the leadership literature were overcome. Studies 1 and 2 demonstrate that the cognitive-emotional tendencies, especially those occurring unconsciously, of leaders and followers, influence the beliefs that they hold about what an ideal follower or leader should be respectively. These images of the ideal leader and follower generally align with individuals’ cognitive-emotional tendencies. As demonstrated in studies 3 and 4, both the cognitive-emotional tendencies of leaders and followers along with their implicit beliefs subsequently influence how they come to perceive their leader-follower relationships. Such a perspective has significant theoretical and practical implications for how we approach leadership, followership, leaders and followers.
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APPENDICES

Below is a list of the contents in each appendix. Please note that the Constructive Thinking Inventory (Epstein, 2001) is not included due to licensing and copyright restrictions.

APPENDIX A
Rational Experiential Multimodal Inventory (Norris & Epstein, 2011)

APPENDIX B
ILT Questionnaire (Offerman, Kennedy & Wirtz, 1994)

APPENDIX C
IFT Questionnaire (Sy, 2010)

APPENDIX D
Leader-Member Exchange (LMX-MDM; Liden & Maslyn, 1998)

APPENDIX E
Exploratory Analyses of Gender and Sub-Scales Relationships with Implicit Leadership Theories

APPENDIX F
Exploratory Analyses of Relationships between Leader Naïve-Optimism Sub-scales and Follower LMX
APPENDIX A

Rational Experiential Multimodal Inventory (Norris & Epstein, 2011)

Instructions: Please read and rate the following statements about your feelings, beliefs, and behaviours using the scale below. Work rapidly; first impressions are as good as any.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Definitely False</th>
<th>Mostly False</th>
<th>Undecided or Equally True &amp; False</th>
<th>Mostly True</th>
<th>Definitely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m not a very spontaneous person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am not very good in solving problems that require careful logical analysis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I trust my initial feelings about people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoy reading things that evoke visual images.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I often go by my instincts when deciding on a course of action.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Reasoning things out carefully is not one of my strong points.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I’d rather be upset sometimes and happy sometimes, than always feel calm.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have favourite poems and paintings that mean a lot to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I try to avoid situations that require thinking in depth about something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>When I’m sad, it’s often a very strong feeling.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I tend to describe things by using images or metaphors, or creative comparisons.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Knowing the answer without understanding the reasoning behind it is good enough for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sometimes I like to just sit back and watch things happen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have a logical mind.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I can clearly picture or remember some sculpture or natural object (not alive) that I think is very beautiful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I identify strongly with characters in movies or books I read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Using logic usually works well for me in figuring out problems in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My emotions don’t make much difference in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am not a very analytical thinker.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Statement</td>
<td>Definitely False</td>
<td>Mostly False</td>
<td>Undecided or Equally True &amp; False</td>
<td>Mostly True</td>
<td>Definitely True</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>-----------------------------------</td>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td>When I travel or drive anywhere, I always watch the landscape and scenery.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I almost never think in visual images.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I don’t like to have to do a lot of thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Emotions don’t really mean much; they come and go.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>When I have a strong emotional experience, the effect stays with me for a long time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoy intellectual challenges.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Things that make me feel emotional don’t seem to affect other people as much.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Everyday experiences often evoke strong feelings in me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am much better at figuring things out logically than most people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I don’t react emotionally to scary movies or books as much as most people do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoy imagining things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>When I’m happy, the feeling is usually more like contentment than like exhilaration or excitement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I like to rely on my intuitive impressions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Art is really important to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I don’t think it is a good idea to rely on ones intuition for important decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoy problems that require hard thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I tend to use my heart as a guide for my actions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoy learning by doing something, instead of figuring it out first.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I can often tell how people feel without them having to say anything.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I generally don’t depend on my feelings to help me make decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>For me, descriptions of actual people’s experiences are more convincing than discussions about facts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I prefer complex to simple problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My anger is often very intense.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### APPENDIX B

**ILT Questionnaire (Offerman, Kennedy & Wirtz, 1994)**

**Instructions**: For each trait below, please indicate the extent to which it is characteristic of your **IDEAL LEADER** in a business setting ranging from 1 (not at all characteristic) to 10 (extremely characteristic). For each trait use whichever definition is meaningful to you.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Not at all Characteristic</th>
<th>Extremely Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sympathetic</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Energetic</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Dedicated</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Well-groomed</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Domineering</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Intellectual</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Sensitive</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Charismatic</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Motivated</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Attractive</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Pushy</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Educated</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Bold</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Compassionate</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Inspiring</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Hard-working</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Well-dressed</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Dominant</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Intelligent</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Obnoxious</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>Trait</td>
<td>Not at all Characteristic</td>
<td>1</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Goal-oriented</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Classy</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Manipulative</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Wise</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sincere</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Dynamic</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Power-hungry</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Knowledgeable</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Warm</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Conceited</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Clever</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Forgiving</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Loud</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Selfish</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Helpful</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Demanding</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX C

IFT Questionnaire (Sy, 2010)

Instructions: For each trait below, please indicate the extent to which it is characteristic of your IDEAL follower in a business setting ranging from 1 (not at all characteristic) to 10 (extremely characteristic). For each trait use whichever definition is meaningful to you.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Not at all Characteristic</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Extremely Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardworking</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Outgoing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Inexperienced</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Excited</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Loyal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Arrogant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Bad-Temper</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Happy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Team Player</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Easily Influenced</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Follows Trends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Soft-spoken</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Uneducated</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Productive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Goes above and beyond</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Rude</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Slow</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Reliable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>
APPENDIX D

Leader-Member Exchange (LMX-MDM; Liden & Maslyn, 1998)

**Instructions:** the statements below ask you about your relationship with your **officially designated manager or supervisor**. Indicate the degree to which a statement is true of you. Do not spend too much time on any one item.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Disagree Somewhat</th>
<th>Undecided</th>
<th>Agree Somewhat</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I admire my supervisor's professional skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am impressed with my supervisor's knowledge of his/her job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am willing to apply extra efforts, beyond those normally required, to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>meet my supervisor's work goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not mind working my hardest for my supervisor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I do work for my supervisor that goes beyond what is specified in my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I like my supervisor very much as a person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I respect my supervisor's knowledge of and competence on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My supervisor defends my work actions to a superior, even without</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>complete knowledge of the issue in question.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My supervisor is a lot of fun to work with.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My supervisor is the kind of person one would like to have as a friend.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My supervisor would come to my defence if I were &quot;attacked&quot; by others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My supervisor would defend me to others in the organisation if I made an</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>honest mistake.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

Exploratory Analyses of Relationships between Follower Information Processing Style and Constructive Thinking with Implicit Followership Theories

Table 8.1 presents exploratory correlations between REIm main and sub-scale relations with ILT dimensions by gender. Table 8.2 presents exploratory correlations between CTI main and sub-scale relations with ILT dimensions by gender.

Table 8.1

<table>
<thead>
<tr>
<th></th>
<th>Sensitivity</th>
<th>Tyranny/Intelligence</th>
<th>Attractiveness</th>
<th>Dedication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>M</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Rational</td>
<td>-.02</td>
<td>.13</td>
<td>-.11</td>
<td>.04</td>
</tr>
<tr>
<td>Experiential</td>
<td>.33**</td>
<td>.37**</td>
<td>.35**</td>
<td>-.01</td>
</tr>
<tr>
<td>Intuition</td>
<td>.35**</td>
<td>.27*</td>
<td>.39**</td>
<td>.03</td>
</tr>
<tr>
<td>Emotionality</td>
<td>.18**</td>
<td>.23*</td>
<td>.18**</td>
<td>-.05</td>
</tr>
<tr>
<td>Imagination</td>
<td><strong>.20</strong></td>
<td>.25*</td>
<td>.18**</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Notes: *Indicates $p < .05$; **Indicates $p < .01$; ´Relationships indicated by Spearman’s rho; Group (G) $n = 311$; Male (M) $n = 91$; Female (F) $n = 220$. Significant differences in male and female correlations are bolded.
### Table 8.2

**Correlations between CTI and Five ILT Factors**

<table>
<thead>
<tr>
<th></th>
<th>Sensitivity</th>
<th>Tyranny</th>
<th>ILT Dimensions</th>
<th>Attractiveness</th>
<th>Dedication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G M F</td>
<td>G M F</td>
<td>G M F</td>
<td>G M F</td>
<td>G M F</td>
</tr>
<tr>
<td>Global Constructive Thinking</td>
<td>.05 -.14 .12</td>
<td>.04 .29* -.06</td>
<td>-.25** -.26** -.26**</td>
<td>-.01 .17 -.09</td>
<td>.02 .01 .04</td>
</tr>
<tr>
<td>Emotional Coping</td>
<td>-.07 -.33** .03</td>
<td>.02 .23* -.07</td>
<td>-.30** -.33** -.30**</td>
<td>-.02 .13 -.08</td>
<td>-.05 -.12 -.01</td>
</tr>
<tr>
<td>Self-Acceptance</td>
<td>-.04 -.28* .05</td>
<td>-.01 .17 -.08</td>
<td>-.29** -.31** -.30**</td>
<td>-.07 .04 -.11</td>
<td>-.04 -.15 -.04</td>
</tr>
<tr>
<td>Absence of Negative</td>
<td>-.04 -.16 .01</td>
<td>.02 .19 -.05</td>
<td>-.19** -.25** -.17**</td>
<td>-.02 .16 -.11</td>
<td>.03 .01 .04</td>
</tr>
<tr>
<td>Overgeneralisation</td>
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<td>.02 .20 -.06</td>
<td>-.24** -.22 -.25**</td>
<td>.00 .09 -.05</td>
<td>-.06 -.05 -.07</td>
</tr>
<tr>
<td>Non-Sensitivity</td>
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<td>.03 .26* -.06</td>
<td>-.34** -.36** -.33**</td>
<td>.00 .14 -.06</td>
<td>-.03 -.06 -.01</td>
</tr>
<tr>
<td>Absence of Dwelling</td>
<td>.19** .17 .21**</td>
<td>.08 .26* .01</td>
<td>-.06 -.01 -.08</td>
<td>.06 .32** -.11</td>
<td>.13* .25* .05</td>
</tr>
<tr>
<td>Behavioural Coping</td>
<td>.09 .08 .11</td>
<td>.07 .22 .01</td>
<td>-.12* -.15 -.11</td>
<td>.05 .22 -.06</td>
<td>.11 .10 .08</td>
</tr>
<tr>
<td>Positive Thinking</td>
<td>.19** .19 .20**</td>
<td>.09 .25* .02</td>
<td>-.04 .05 -.07</td>
<td>.05 .33** -.11</td>
<td>.12* .30** .02</td>
</tr>
<tr>
<td>Action Orientation</td>
<td>.25** .32** .23**</td>
<td>.03 .09 -.01</td>
<td>.09 .29* .03</td>
<td>.07 .31** -.03</td>
<td>.09 .27* .03</td>
</tr>
<tr>
<td>Personal Superstitious</td>
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<td>.03 -.11 .09</td>
<td>.10 .11 .11</td>
<td>.06 -.10 .10</td>
<td>-.06 .05 -.15*</td>
</tr>
<tr>
<td>Thinking</td>
<td>-.10 .06 -.14</td>
<td>.09 .15 .12</td>
<td>.09 -.03 .14</td>
<td>.23** .23* .20**</td>
<td>-.02 .12 -.13</td>
</tr>
<tr>
<td>Categorical Thinking</td>
<td>-.02 .10 -.05</td>
<td>.10 .14 .11</td>
<td>-.02 -.14 .02</td>
<td>.28** .24* .28**</td>
<td>-.02 .06 -.09</td>
</tr>
<tr>
<td>Polarised Thinking</td>
<td>-.12* -.07 -.14</td>
<td>.04 -.09 .10</td>
<td>.14* .07 .18*</td>
<td>.10 .06 .09</td>
<td>-.03 .05 -.01</td>
</tr>
<tr>
<td>Distrust of Others</td>
<td>-.23** -.14 -.26**</td>
<td>-.00 -.04 .03</td>
<td>.05 -.28* .16*</td>
<td>.05 -.04 .06</td>
<td>-.10 -.07 -.16*</td>
</tr>
<tr>
<td>Intolerance</td>
<td>.08 -.09 .13</td>
<td>.11 .22 .08</td>
<td>-.03 -.21 .01</td>
<td>.21** .13 .23**</td>
<td>.06 -.01 .06</td>
</tr>
<tr>
<td>Esoteric Thinking</td>
<td>.08 -.06 .11</td>
<td>.09 .10 .07</td>
<td>-.05 -.14 -.02</td>
<td>.22** .19 .23**</td>
<td>.07 .06 .07</td>
</tr>
<tr>
<td>Belief in the Unusual</td>
<td>.07 -.10 .12</td>
<td>.10 .24* .08</td>
<td>-.02 -.23* .04</td>
<td>.19** .06 .22**</td>
<td>.05 -.07 .06</td>
</tr>
<tr>
<td>Formal Sup. Thinking</td>
<td>.10 .04 .13</td>
<td>.26** .28* .26**</td>
<td>-.02 -.21 .06</td>
<td>.23** .33** .17**</td>
<td>.13* .17 .11</td>
</tr>
<tr>
<td>Naïve-Optimism</td>
<td>.07 .15 .04</td>
<td>.24** .25* .23**</td>
<td>.11 .00 .14</td>
<td>.15* .31** .10</td>
<td>.07 .15 .05</td>
</tr>
<tr>
<td>Over-Optimism</td>
<td>.00 .06 -.02</td>
<td>.19** .14 .23**</td>
<td>-.20 -.21** -.20**</td>
<td>.28* .15* .10</td>
<td>.25* -.00</td>
</tr>
<tr>
<td>Stereotypical Thinking</td>
<td>.13* -.09 .22**</td>
<td>.16** .25* .12</td>
<td>-.01 -.29** .10</td>
<td>.16** .22 .12</td>
<td>.13* .04 .16*</td>
</tr>
</tbody>
</table>

Notes: *Indicates p<.05; **Indicates p<.01; *Relationships indicated by Spearman’s rho; Group (G) n = 273 Male (M) n = 76; Female (F) n = 197; Significant differences in male and female correlations are bolded.
APPENDIX F

Exploratory Analyses of Relationships between Leader Naïve-Optimism Sub-scales and Follower LMX

The following tables provide the exploratory multi-level analyses which were conducted in study 3, investigating the relationships between leaders’ over-optimism, stereotypical thinking, and pollyann-ish thinking (subscales of Naïve-optimism) with followers’ overall LMX. Exploratory analyses are also presented investigating how the follower IILT dimensions of attractiveness and dedication may moderate these relationships.

Table 8.1 presents the exploratory analyses investigating the relationship between leader over-optimism and follower LMX. As can be seen, in step one, a negative relationship between leader over-optimism and follower LMX was found but was not significant \( (p = .105) \). Step two showed that follower attractiveness IILT was not significantly related to their LMX rating. However, step three demonstrates a significant interaction between leader over-optimism and follower attractiveness.

To investigate this interaction, simple slopes analysis was undertaken and is presented in Figure 8.1. It was observed that the slope at 1SD above the mean of the moderator was significant \( (t = 3.800, p < .001) \). The slope at 1SD below the mean though was not significant \( (t = .101, p = .920) \).
Table 8.3. Exploratory hierarchical linear modelling results predicting follower LMX with Leader over-optimism and Follower Attractiveness as Moderator

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-optimism (A)</td>
<td></td>
<td></td>
<td>-.040</td>
<td>.064^</td>
</tr>
<tr>
<td>Attractiveness (B)</td>
<td></td>
<td></td>
<td>-.009</td>
<td>.796**</td>
</tr>
<tr>
<td>A×B</td>
<td></td>
<td></td>
<td></td>
<td>-.020**</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>.481</td>
<td>.429</td>
<td>.430</td>
<td>.351</td>
</tr>
<tr>
<td>Variance change</td>
<td>N/A</td>
<td>.052</td>
<td>-.001</td>
<td>.079</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>.108</td>
<td>-.002</td>
<td>.184</td>
</tr>
</tbody>
</table>

^p<.10; *p<.05; **p<.01

Figure 8.1. Moderating effect of follower attractiveness IILT (1±SD) on the relationship between leader over-optimism (1±SD) and follower LMX.

Table 8.2 presents the exploratory analyses investigating the moderating effect of follower dedication on the relationship between leader over-optimism and follower LMX. Step one was the same as previously found above. Step two showed that follower dedication IILT was not significantly related to their LMX rating. However, Step three demonstrates a significant interaction between leader over-
optimism and follower attractiveness. To investigate this interaction, simple slopes analysis was undertaken and is presented in Figure 8.2. It was observed that the slope at 1SD above the mean of the moderator was significant ($t = 2.927, p = .004$). The slope at 1SD below the mean though was not significant ($t = .494, p = .622$).

Table 8.4.  
*Exploratory hierarchical linear modelling results predicting follower LMX with Leader over-optimism and Follower Dedication as Moderator*  

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-optimism (A)</td>
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<td>-0.38</td>
<td>0.16*</td>
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<tr>
<td>Dedication (B)</td>
<td></td>
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<td>1.12**</td>
<td></td>
</tr>
<tr>
<td>Interaction Term A×B</td>
<td></td>
<td></td>
<td></td>
<td>-0.024**</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
<td>0.481</td>
<td>0.429</td>
<td>0.400</td>
<td>0.372</td>
</tr>
<tr>
<td>Variance change</td>
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<td>0.052</td>
<td>0.029</td>
<td>0.028</td>
</tr>
<tr>
<td>ΔR²</td>
<td>N/A</td>
<td>0.108</td>
<td>0.068</td>
<td>0.070</td>
</tr>
</tbody>
</table>

*p<.10; *p<.05; **p<.01

Figure 8.2. Moderating effect of follower dedication IILT (1±SD) on the relationship between leader over-optimism (1±SD) and follower LMX.
Table 8.3 presents the exploratory analyses investigating the relationship between leader stereotypical thinking and follower LMX. As can be seen, in step one, a significant positive relationship between leader stereotypical thinking and follower LMX was found. Step two showed that follower attractiveness IILT was not significantly related to their LMX rating. However, step three demonstrates a significant interaction between leader stereotypical thinking and follower attractiveness. To investigate this interaction, simple slopes analysis was undertaken and is presented in Figure 8.3. It was observed that the slope at 1SD above the mean of the moderator was significant ($t = 5.513, p < .001$). The slope at 1SD below the mean though was not significant ($t = 1.199, p = .234$).

Table 8.5.
*Exploratory hierarchical linear modelling results predicting follower LMX with Leader stereotypical thinking and Follower Attractiveness as Moderator*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypical thinking (A)</td>
<td>.037**</td>
<td>.037**</td>
<td>-.023</td>
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</tr>
<tr>
<td>Moderator Attractiveness (B)</td>
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<td>-.423**</td>
<td></td>
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<tr>
<td>Interaction Term A×B</td>
<td></td>
<td></td>
<td></td>
<td>.011**</td>
</tr>
<tr>
<td>Level 1 variance of residuals</td>
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<td>.448</td>
<td>.448</td>
<td>.360</td>
</tr>
<tr>
<td>Variance change</td>
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<td>.033</td>
<td>.000</td>
<td>.088</td>
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<tr>
<td>AR2</td>
<td>N/A</td>
<td>.069</td>
<td>.000</td>
<td>.196</td>
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</table>

*p<.10; *p<.05; **p<.01
Moderating effect of follower attractiveness IILT (1±SD) on the relationship between leader stereotypical thinking (1±SD) and follower LMX.

Table 8.4 presents the exploratory analyses investigating the moderating effect of follower dedication on the relationship between leader stereotypical thinking and follower LMX. Step one was the same as previously found above. Step two showed that follower dedication IILT was not significantly related to their LMX rating. However, step three demonstrates a significant interaction between leader stereotypical thinking and follower attractiveness. To investigate this interaction, simple slopes analysis was undertaken and is presented in Figure 8.4. It was observed that the slope at 1SD above the mean of the moderator was significant ($t = 6.072, p < .001$). The slope at 1SD below the mean though was not significant ($t = .617, p = .539$).
Table 8.6.
*Exploratory hierarchical linear modelling results predicting follower LMX with Leader stereotypical thinking and Follower Dedication as Moderator*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Baseline</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypical thinking (A)</td>
<td></td>
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<td>.037**</td>
<td>-.132*</td>
</tr>
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<td>Moderator Dedication (B)</td>
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<td></td>
<td>.136</td>
<td>-.631*</td>
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<td>.020**</td>
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<td>.077</td>
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*p<.10; *p<.05; **p<.01

*Figure 8.4.* Moderating effect of follower dedication IILT (1±SD) on the relationship between leader stereotypical thinking (1±SD) and follower LMX.

Table 8.5 presents the exploratory analyses investigating the relationship between leader pollyann-ish thinking and follower LMX. As can be seen, in step one, a positive relationship between leader pollyann-ish thinking and follower LMX was found but was not significant. Step two showed that follower attractiveness IILT was not significantly related to their LMX rating. However, step three
demonstrates a significant interaction between leader pollyann-ish thinking thinking and follower attractiveness. To investigate this interaction, simple slopes analysis was undertaken and is presented in Figure 8.5. It was observed that the slope at 1SD above the mean of the moderator was significant ($t = 4.810, p < .001$). The slope at 1SD below the mean though only approached significance ($t = 1.806, p = .074$).

Table 8.7.

<table>
<thead>
<tr>
<th>Exploratory hierarchical linear modelling results predicting follower LMX with Leader pollyann-ish thinking and Follower Attractiveness as Moderator</th>
</tr>
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<tbody>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>Independent Variable</td>
</tr>
<tr>
<td>Pollyann-ish thinking (A)</td>
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<tr>
<td>Moderator</td>
</tr>
<tr>
<td>Attractiveness (B)</td>
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<tr>
<td>Interaction Term</td>
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<td>A×B</td>
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<td>Level 1 variance of residuals</td>
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<td>ΔR²</td>
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*p<.10; *p<.05; **p<.01

Figure 8.5. Moderating effect of follower attractiveness IILT (1±SD) on the relationship between leader pollyann-ish thinking (1±SD) and follower LMX.
Table 8.6 presents the exploratory analyses investigating the moderating effect of follower dedication on the relationship between leader pollyann-ish thinking and follower LMX. Step one was the same as previously found above. Step two showed that follower dedication IILT was not significantly related to their LMX rating. However, step three demonstrates a significant interaction between leader pollyann-ish thinking thinking and follower dedication. To investigate this interaction, simple slopes analysis was undertaken and is presented in Figure 8.6. It was observed that the slope at 1SD above the mean of the moderator was significant ($t = 2.997, p = .003$). The slope at 1SD below the mean though was not significant ($t = .814, p = .418$).
Table 8.8. 
*Exploratory hierarchical linear modelling results predicting follower LMX with Leader pollyann-ish thinking and Follower Dedication as Moderator*

<table>
<thead>
<tr>
<th>Independent Variable</th>
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<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
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<td>-.467^</td>
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^p<.10; *p<.05; **p<.01

![Figure 8.6](image_url) 
*Figure 8.6. Moderating effect of follower dedication IILT (1±SD) on the relationship between leader pollyann-ish thinking (1±SD) and follower LMX.*