THE DISPOSITIONAL ANTECEDENTS OF LEADER-MEMBER EXCHANGE AND ORGANIZATIONAL CITIZENSHIP BEHAVIOUR
THE DISPOSITIONAL ANTECEDENTS OF LEADER-MEMBER EXCHANGE AND ORGANIZATIONAL CITIZENSHIP BEHAVIOUR: A PROCESS PERSPECTIVE

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ABSTRACT

While dispositional antecedents to organizational citizenship behaviour (OCB) have been established, scant attention has been given to the interpersonal and attitudinal processes that may mediate the effects of personality on OCB. Similarly, we know little with respect to the influence of supervisor and subordinate personality on leader-member-exchange quality (LMX). In this study, a path analytic model was developed and tested in which the effects of leader and follower personality attributes on LMX quality were hypothesized to be mediated through cognitive (role ambiguity), perceptual (perceived similarity), and affective (subordinate affect toward supervisor) variables. The model also positions LMX as mediating the effects of these cognitive, perceptual, and affective variables on job satisfaction and OCB. Structural Equation Modeling supported the hypothesized model. Results were consistent with both affective and role definition process explanations for LMX development. There was particularly strong support for the role of follower affect in mediating the influence of LMX on OCB. The theoretical and applied significance of these findings are discussed.
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CHAPTER 1: INTRODUCTION

Over the past decade, the corporate environment and nature of work itself have undergone monumental change. Fierce international competition fuelled by new technology, a rapidly expanding service industry, and widespread economic globalization has not only triggered unprecedented innovation but has revolutionized the very complexion of work (Cascio, 1995; Howard, 1995; Zivnuska, Ketchen, & Snow, 2001). Many organizations have streamlined their work processes, resulting in flatter organizational structures, and more interdependent and ambiguous work roles (Howard, 1995; Rothstein, 1999). Due to these heightened work demands, “softer” employee KSAs that extend beyond general task knowledge, such as teamwork, interpersonal / customer service savvy, and behavioural adaptability are becoming prized workforce commodities (Latham & Sue-Chan, 1998; Rothstein 1999; Sanchez & Levine, 1999).

Mirroring the premium organizations are placing on certain employee competencies, a number of scholars have underlined the central role that an organization’s employees and human resource management systems (Delery & Shaw, 2001; Huselid, Jackson, & Schuler 1997; Snow & Snell, 1993; Zivnuska, Ketchen, & Snow, 2001) play in driving organizational success. In view of a projected worker “skills gap” (Rothstein, 1999) coupled with a more even playing field on other factors of production / service delivery (i.e., increased access to financial capital, equipment, technology, information), an organization’s “human capital” has been heralded as a primary lever of sustainable competitive advantage (e.g., Cascio, 1995; Pfeffer, 1995, 1998).
For many years, human resource managers have relied heavily on a reductionistic, within-job paradigm for building human capital (e.g., Cronshaw, 1998). Thus, employees have tended to be recruited, selected, trained, and promoted based on their ability to perform job-specific tasks. While for many organizations this HRM approach has been successful in building the human capital needed to perform specific job duties, individuals’ contributions to the relational infrastructure of the organization have perhaps been underemphasized (Borman & Motowidlo, 1993; Lin, 2001; Organ, 1988).

To advance our understanding of how individuals may contribute to the relational infrastructure of their organization, this study endeavoured to explore the interconnections among three constructs fundamental to an organization’s relational infrastructure: personality, leader-member exchange, and organizational citizenship behaviour. Within this framework, a focal objective of this research was to investigate interpersonal and attitudinal processes that may mediate the relationship between personality and organizational citizenship behaviour. A number of studies have established an empirical link between certain personality attributes and organizational citizenship behaviour; however, very few studies have aimed to uncover the process mechanisms driving this relationship (e.g., Hui, Law, & Chen, 1999). In this study, it was proposed that leader-member exchange and variables closely associated with this construct would be instrumental in explaining the mechanisms by which certain personality attributes influence organizational citizenship behaviour.

This thesis consists of five chapters. In this chapter, the three focal individual and dyadic constructs that underlie organizational relationship-building (i.e., personality,
leader-member exchange, and organizational citizenship behaviour) are described. I then
review research surrounding these constructs and propose a path model that delineates the
process by which personality influences organizational citizenship behaviour. In Chapter
2, the theoretical underpinnings of the proposed model are discussed and the specific
hypotheses that were tested in the study are outlined. Chapter 3 provides an overview of
the research methodology and data analytic techniques that were employed in the study.
In Chapter 4, results from the model estimation procedure and individual hypothesis tests
are reported. Finally, in Chapter 5, I review results for the study, outlining theoretical and
applied implications.

1.1. Foundations of Social Capital: LMX and OCB as Pathways to Competitive
Advantage

1.1.1 Social and Human Capital

Recent advances in “social capital theory” have alerted researchers to the
importance of an organization’s relational infrastructure in its overall functioning (Lin,
embedded in a social structure that are accessed and/or mobilized in purposive actions”
(p. 29). In contrast to human capital, which represents employees’ overall skills sets
based on indices of education, training, and experience, social capital reflects the social
interface between individuals, and specifically, the existence of close interpersonal
relationships among organizational members (Lin, 2001). Drawing on a resource-based
view of the firm, Nahapiet and Ghosal (1998) argue that high-quality relationships
between employees are highly valuable, not easily forged, and difficult to imitate. As such, these relationships can contribute to a distinct competitive advantage via a number of mechanisms, including facilitating the coordination of activities, reducing transaction costs, improving the flow of information between individuals, stimulating the development and dissemination of knowledge, and increasing the levels of commitment among employees (Lazega & Pattison, 2001; Leona & Van Buren, 1999; Lin, 2001; Nahiapet & Ghosal, 1998).

Recent theoretical work relating to two individual-level constructs: organizational citizenship behavior (OCB; Bolino, Turnley, & Bloodgood, 2002) and leader-member exchange (LMX; Uhl-Bien, Graen, & Scandura, 2000) has illuminated the role these constructs play in building social capital, and in turn, enhancing organizational performance.

1.1.2 Organizational Citizenship Behaviour (OCB)

According to Bateman and Organ (1983, p. 588), OCBs represent employee behaviours “that cannot be prescribed or required in advance for a given job” and “include any of those gestures (often taken for granted) that lubricate the social machinery of the organization but that do not directly inhere in the usual notion of task performance”. Consistent with these definitional underpinnings, Bolino, Turnley, and Bloodgood (2002) have proposed a multi-level model identifying social capital as an organization-level mediator of the effect of OCB on organizational performance. They postulate that specific dimensions of OCB (loyalty, obedience, functional participation,
Social participation, advocacy participation) augment organizational effectiveness via their effects on different components of social capital (including structural, relational, and cognitive dimensions). For example, one of the key determinants of relational social capital (the extent to which relationships are characterized by trust, intimacy, liking, and identification) is loyalty OCB, or the extent to which employees are willing to subordinate their personal interests to benefit the organization and to promote and defend the organization. Conversely, one of the chief determinants of cognitive social capital (the extent to which employees truly understand one another via shared language/narratives) is advocacy participation OCB, or the extent to which employees offer suggestions for improvements, and encourage other employees to speak up. All told, this model extends prior conceptual (Podsakoff, MacKenzie, Paine, & Bachrach, 2000) and empirical (Koys, 2001; Podsakoff, Ahearne, & MacKenzie, 1997; Podsakoff & MacKenzie, 1994) work supporting the linkages between OCB and group / organizational performance. The model propounded by Bolino et al. underscores that the primary means by which OCB influences organizational performance is via its impact on organizational relationship-building.

### 1.1.3 Leader-Member Exchange Theory

Leader-member exchange theory, originally labelled the “vertical dyad linkage model” (VDL), was first introduced by Dansereau, Graen, and Haga (1975) and Graen and Cashman (1975). In formulating the VDL model, these scholars asserted that the traditional approach to leadership (“the average leadership style approach”) overlooks the
fundamental behavioural processes linking supervisors and subordinates. Specifically, they contend that the traditional approach, due to its almost exclusive focus on the average or usual behaviour displayed by a supervisor toward his/her work group, neglects the relationship development and exchange processes that are critical to effective leadership. To address these inadequacies, a dyadic approach to the study of leadership was conceived. Grounded in role theory (Kahn, Wolfe, Quinn, Snoek, Rosenthal, 1964; Katz & Kahn, 1978) and social exchange theory (Blau, 1964; Sahlins, 1972), the LMX model describes the dyadic role-making processes that emerge between a leader and subordinate. In addition to role-making dynamics, LMX theory also acknowledges the role of reciprocal influence processes in shaping the quality of the leader-subordinate relationship. Based on factors underlying role-definition and interpersonal interaction, the theory aims to explicate how different supervisor-subordinate relationships (e.g., “in-group” and “out-group”) evolve over time (see chapter 2 for a more detailed description of LMX theory).

In their review of the LMX literature, Uhl-Bien, Graen, & Scandura (2000) argue that much can be learned from LMX research on how HR systems can be improved to cultivate social capital and develop long-term competitive advantage. Guided by LMX theory, Uhl-Bien et al. (2000) provide an overview of several means by which job analysis, selection, performance appraisal, and rewards systems can be engineered to foster greater relationship-building. Two of the primary themes emerging from their analysis are: 1. employees should be recruited, selected, appraised, and rewarded in part based on “their relationship potential”, or capacity to develop high-quality relationships,
and 2. a more concerted effort should be made to assess supervisor-subordinate fit with respect to variables such as personality, values, and goals. Thus, Uhl-Bien et al. (2000) suggest that personality / interest variables, supervisor – subordinate compatibility, and LMX are pivotal elements contributing to the social infrastructure of an organization.

1.2 Interpersonal Similarity, Personality, and Performance

1.2.1 Interpersonal Similarity

Consistent with the proposition that supervisor - subordinate compatibility on various “softer” dimensions (values, personality, goals) are critical antecedents of social capital (Uhl-Bien, Graen, & Scandura, 2000), Schneider’s Attraction-Selection-Attrition (A-S-A) paradigm (Schneider, 1987) posits that employees’ personalities play a vital role in moulding the relational infrastructure of an organization. A central tenet of the A-S-A model is the homogeneity hypothesis. This hypothesis stipulates that individuals matching a given modal personality are attracted to and selected into organizations with compatible work cultures, strategies, structures, and processes; in turn, the organization’s culture, strategies, socialization practices, and work processes “polish” the fit and act to retain individuals with similar, organizationally-compatible personalities. Empirical research has corroborated the attraction-selection, and promotion-attrition ends of the A-S-A model with respect to a number of personality variables (e.g., Schaubroeck, Ganster, & Jones, 1998; Schaubroeck & Lam, 2002; Schneider, Smith, Taylor, & Fleenor, 1998).

In concert with other work exploring the effects of demographic similarity (e.g., Tsui & O’Reilly, 1989), the A-S-A model is aligned with behavioural integration and
similarity-attraction theories (Schaubroeck & Lam, 2002). Behavioural integration theory posits that due to the use of common referents in perceiving, interpreting, and acting on social information (Schaubroeck & Lam, 2002), similarity between employees facilitates more effective interpersonal interaction (reflected in communication quality and collaboration among employees) and social integration ("the degree to which an individual is psychologically linked to others in a group", Hambrick, 1994, p. 189). Likewise, the similarity-attraction paradigm (Byrne, 1971) proposes that similarity between two individuals serves a self-validation function. Specifically, greater demographic, personality, and attitudinal similarity will tend to reinforce how two parties view the world and themselves (i.e., their frames of reference). In turn, this consensual validation precipitates greater interpersonal affect, attraction, and harmony between the two similar parties (Byrne, 1971). All told, the ASA model indicates that personality variables are critical determinants of relational functioning in organizations. Behavioural integration and similarity-attraction theories buttress this claim and signal that due to the importance of self-validation and individual frames of reference, similarity on personality variables, particularly those relevant to one’s self-concept, may provide added insight into how interpersonal relations evolve in organizations.

1.2.2 The "Big Five" Taxonomy of Personality

Since the early 1990’s, organizational researchers and human resource practitioners have displayed rekindled interest in exploring the influence of personality constructs on individual and group performance, and incorporating personality variables
in organizational HR systems. The resurgent interest in personality assessment can largely be attributed to: (a) the advent and subsequent corroboration of a robust Five-Factor taxonomy (i.e., “the Big Five”; Costa & McCrae, 1995; Digman & Inouye, 1986; Digman & Takemoto-Chock, 1981; Goldberg, 1990, 1992, 1994; Goldberg & Saucier, 1995; McCrae & Costa, 1985, 1987; McCrae & John, 1992) and (b) contemporary meta-analytic support for the validity of these five personality constructs in predicting both individual job performance (e.g., Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001; Hogan & Holland, 2003; Hurtz & Donovan, 2000; Salgado, 1997; Tett, Jackson, & Rothstein, 1991) and work group effectiveness (e.g., Barrick, Stewart, Neubert, & Mount, 1998; Barry & Stewart, 1997; Kichuk & Wiesner, 1997, 1998; LePine, Hollenbeck, Ilgen, & Hedlund, 1997; Moynihan & Peterson, 2001; Neuman, Wagner, & Christiansen, 1999; Neuman & Wright, 1999; Taggar, Hackett, & Saha, 1999). While some debate still persists surrounding the specificity and number of dimensions that best represent one’s personality structure (Block, 1995a, 1995b; Hough & Ones, 2002), the weight of empirical evidence amassed over the last several years substantiates the view that personality variables are intricately connected to a number of the foremost criteria studied in human resource management and organizational behaviour (Barrick, Mount, & Judge, 2001; House, Shane, & Herold, 1996). The Big Five constructs, for example, have been linked not only to employee performance but to leader behaviour (Judge, Bono, Ilies, & Gerhardt, 2002; Judge & Bono, 2000), and work attitudes such as job satisfaction (Judge, Heller & Mount, 2002).
**The “Big Five” and Individual Performance.** Two seminal meta-analyses have highlighted the validity of two Big Five constructs – conscientiousness and agreeableness – in predicting employee performance. Barrick and Mount (1991) meta-analyzed 117 studies and reported validity coefficients across five occupational groups and three different job performance criteria (job proficiency, training proficiency, and personnel data). Conscientiousness, defined as: “being careful, thorough, responsible, organized, and planful...hardworking, achievement-oriented, and persevering.” (p. 4), was significantly correlated with each of the performance criteria across all five job categories (mean $r = .22$). Agreeableness, characterized as “being courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, and tolerant.” (p. 4), though discernibly less predictive, exhibited marginally significant validity coefficients for managerial and police jobs (mean $r = .10$). In a similar meta-analysis, Tett, Jackson, and Rothstein (1991) found that agreeableness (mean $r = .33$) was a more potent predictor of job performance than conscientiousness (mean $r = .18$). Sampling strategies (e.g., inclusion/exclusion of theory-guided / confirmatory studies) and nuances in methodology (e.g., operationalizations of “job performance”) aside, these two meta-analyses indicate that certain Big Five constructs, particularly agreeableness and conscientiousness significantly predict job performance.

**The Big Five and Team Performance.** Complementing these findings pertaining to individual performance, agreeableness and conscientiousness also appear to be associated with effective group functioning. Neuman and Wright (1999) reported that higher levels of employee agreeableness and conscientiousness are positively related to
both objective indicators and supervisory ratings of team effectiveness. In a similar study, Neuman, Wagner, and Christiansen (1999) found that “team personality elevations” (a team’s mean level of a personality trait) on agreeableness ($B = .43$) and conscientiousness ($B = .43$) were related to team customer service ratings and task completion. Lastly, in a study of engineering design teams, Kichuk and Wiesner (1997, 1998) revealed that team elevations on agreeableness and homogeneity on conscientiousness were positively related to design team performance. Teams with higher levels of agreeableness were more likely to successfully complete the design task while teams with members displaying similar levels of conscientiousness (whether high, low, or otherwise) demonstrated higher levels of task proficiency. Taken together, this empirical evidence indicates that conscientiousness and agreeableness are important contributors to work group effectiveness. Interestingly, it appears that aggregate levels of certain traits and group member similarity on others optimize group effectiveness.

1.2.3 Composite Personality Constructs: Core Self-Evaluation

Extending research on the Big Five, Judge and colleagues have recently introduced a composite personality construct labelled “core self-evaluation” (CSE), or “positive self-concept” (Judge, Erez, & Bono, 1998). Judge, Locke, and Durham (1997) describe CSE as tapping the fundamental, bottom-line evaluations that individuals hold about themselves, the world, and others. They posit that such evaluations may be either conscious or subconscious. Thus, situation-specific appraisals (e.g., evaluations of work colleagues) will tend to be coloured by one’s self-evaluations, whether or not the
individual is aware of the nature of this effect on their perceptions and behaviour (Bono & Judge, 2003). Originally formulated as a means of tracing dispositional variance in job satisfaction (Judge, Bono, & Locke, 2000; Judge, Locke, Durham, & Kluger, 1998), CSE is a broad, higher-order construct that consists of four of the most commonly studied traits in personality psychology (Bono & Judge, 2003, Judge et al., 1997). These traits include: (a) self-esteem - the overall value that one places on oneself as a person (Harter, 1990); (b) generalized self-efficacy - one’s perceptions of their fundamental ability to perform tasks successfully across a variety of situations (Locke, MacClear, & Knight, 1996), (c) locus of control - beliefs about the extent to which one has control over events in their lives (internal locus of control reflects perceptions that one’s behaviour figures prominently in how events unfold; external locus of control reflects a belief that the environment or fate controls events; Rotter, 1966), and (d) emotional stability - a tendency to demonstrate low levels of negative affect and pessimism (Watson, 2000).

**Core Self-Evaluation and Performance.** Empirical work has upheld the construct and criterion-related validity of CSE. In a recent meta-analysis, Judge and Bono (2001) report significant correlations between each of the CSE traits and employee performance. In weighing their findings, Judge and Bono observed that three of the CSE traits evinced corrected correlations (generalized self-efficacy, $p = .23$; internal locus of control, $p = .22$; self-esteem, $p = .26$) that were equal to or higher than that of conscientiousness reported in Barrick and Mount (1991). Accordingly, Judge and Bono concluded that the CSE traits are among the best dispositional predictors of performance. Drawing on this evidence, coupled with their review of the construct validity of CSE, Bono and Judge
(2003) proposed that CSE may be conceptualized as “a broader, more construct valid measure of emotional stability” (p. 13). Taken together, this research suggests CSE may explain incremental variance in workplace behaviours above and beyond the Big Five.

1.3 Personality and OCB

Research on OCB and an analogous construct, contextual performance, has reinforced the importance of personality variables in predicting relational components of performance. “Contextual performance” connotes those behaviours: “…that are not directly related to their main task functions but are important because they shape the organizational, social, and psychological context that serves as the critical catalyst for task activities and processes.” (Borman & Motowidlo, 1993, p. 71). As with OCB, contextual performance refers to behaviours such as helping and cooperating with coworkers, volunteering to carry out tasks not formally required in one’s job, and persisting with extra effort to complete work activities successfully (Borman & Motowidlo, 1993). Given the conceptual overlap between contextual performance and OCB, Organ (1997) has recommended that the two theoretical formulations and research literatures should be merged. He suggests that OCB should be redefined as “contributions to the maintenance and enhancement of the context of work” (Organ, 1997, p. 90), thereby assuming the essential character of contextual performance.\(^1\)

\(^1\) In subsequent sections of this report, I will use the term “organizational citizenship behaviour” (OCB) in referring to this amalgamated OCB – contextual performance construct. In this section, in order to preserve the distinction between “contextual performance” and “OCB”, I will retain these separate labels and use the term “citizenship performance” in referring to the merged construct.
Central to Borman and Motowidlo’s (1993) conceptualization of contextual performance are two primary propositions. First, Borman and Motowidlo propose that contextual performance can be functionally and empirically distinguished from task proficiency (i.e., “work activities that either contribute to the technical core directly or service it indirectly”, Borman & Motowidlo, 1993, p. 73). Thus, contextual performance and task proficiency represent distinct constructs. In a similar vein, they propose that contextual performance and task proficiency contain different antecedents. Specifically, they postulate that personality variables comprise the primary individual difference antecedents of contextual performance, while ability and knowledge comprise the primary individual difference antecedents of task proficiency (e.g., Borman & Motowidlo, 1993; Motowidlo, Borman, & Schmit, 1997).

On the whole, these two chief tenets underlying Borman and Motowidlo’s contextual performance construct have received significant empirical support (Borman & Penner, 2003). Research has substantiated the distinctiveness of contextual performance and task proficiency for both managerial (Conway, 1996; 1999) and non-managerial jobs (Borman & Motowidlo, 1997, Motowidlo & Van Scotter, 1994; Van Scotter & Motowidlo, 1996). Moreover, while findings regarding the differential validity of personality in predicting contextual and task performance are mixed (e.g., Hurtz & Donovan, 2000; Borman & Penner, 2001; Borman, Penner, Allen, & Motowidlo, 2001), a formidable body of evidence signals that personality variables are significantly associated with citizenship performance.
Overall, meta-analyses synthesizing this research indicate that conscientiousness is the most robust personality predictor of citizenship performance (Borman, Penner, Allen, & Motowidlo, 2001; Hurtz & Donovan, 2000; LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). This research also suggests that agreeableness and emotional stability are valid predictors of citizenship performance, particularly in jobs requiring significant social interaction (Borman et al., 2001; Hurtz & Donovan, 2000; Mount, Barrick, & Stewart, 1998; Johnson, 2001).

Despite this evidence for a significant association between personality and citizenship performance, very little research has sought to explore mediators of this relationship. To fully understand how personality influences citizenship performance, the specific trait and attitudinal antecedents of citizenship performance must be given more in-depth consideration.

1.4 Understanding Personality-OCB Linkages

1.4.1 Personality and Generalized Work Morale in Relation to OCB

To disentangle the rather diverse literature on trait and attitudinal predictors of OCB, Organ and Ryan (1995) conducted a meta-analytic review ($k = 55$) inspecting four attitudinal (leader supportiveness, job satisfaction, organizational commitment, and perceived fairness) and four personality (conscientiousness, agreeableness, positive affectivity, and negative affectivity) variables in relation to OCB. Results revealed that each of the four attitudinal measures were significantly related to the two OCB facets examined (mean $r = .32$ to .24 Altruism; $r = .35$ to .27 Generalized Compliance). Among
all the variables included in the meta-analysis, leader supportiveness emerged as the strongest predictor of OCB \((r = .27 \text{ Altruism}; \ r = .34 \text{ Generalized Compliance})\).

Furthermore, with the possible exception of conscientiousness \((r = .22 \text{ Altruism}; \ r = .30 \text{ Generalized Compliance})\), work attitudes were more predictive of OCB than personality constructs (e.g., \(r = .13 \text{ Agreeableness and Altruism}; \ r = .11 \text{ Agreeableness and Generalized Compliance}\)). Based on these results, Organ and Ryan (1995) deduced:

"Traits such as agreeableness, positive affectivity, negative affectivity, and conscientiousness probably predispose people to certain orientations vis-a-vis coworkers and managers. And those orientations might well increase the likelihood of receiving treatment that they would recognize as satisfying, supportive, fair, and worthy of commitment. Furthermore, to the extent that attitudinal measures inherently tap recurrent affective states, personality factors that augment the affect of the work situation could be seen as indirect contributors to OCB, rather than ‘direct’ causes of OCB.” (pp. 794 -795).

Thus, consistent with earlier work by Organ and colleagues (e.g., Bateman & Organ, 1983; Organ & Konovsky, 1989; Smith, Organ, & Near, 1983), Organ and Ryan (1995) concluded that the effects of personality variables on OCB may be largely transmitted indirectly via a “generalized work morale” factor.

1.4.2 LMX as a Catalyst of Generalized Work Morale and OCB

Two subsequent meta-analyses have reinforced the notion that generalized work morale explains substantial variation in OCB. Enlisting the same set of attitudinal predictor variables as Organ and Ryan (1995), LePine, Erez, and Johnson (2002) conducted a meta-analysis covering a broader range of OCB dimensions (altruism, civic virtue, conscientiousness, courtesy, and sportsmanship). Drawing on 37 studies that
investigated the relationship between work attitudes and specific dimensions of OCB, LePine et al. found that the magnitude of correlations did not significantly vary by OCB dimension. Furthermore, mirroring results from Organ and Ryan (1995), leader support emerged as the most potent predictor of overall OCB (r = .32 leader support, r = .24 satisfaction, r = .20 commitment, r = .23 fairness, r = .23 conscientiousness).

Incorporating the most complete set of predictors of any meta-analysis on OCB, Podsakoff, MacKenzie, Paine, and Bachrach (2000) conducted a review encompassing 10 predictor categories: employee attitudes, dispositional variables, employee role perceptions, demographic variables, employee abilities and individual differences, task characteristics, organizational characteristics, and leader behaviours. Consistent with Organ and Ryan (1995) and Lepine, Erez, and Johnson (2002), Podsakoff et al. (2000) found that leader support significantly predicted OCB across dimensions (altruism, courtesy, conscientiousness, civic virtue, sportsmanship, generalized compliance). They also identified trust in leader as the strongest predictor of “overall OCB” (r = .39).

Moreover, although somewhat tentative given the number of studies included (k = 6), Podsakoff et al. (2000) reported a correlation of .30 between LMX and overall OCB. More recently, Hackett, Farh, Song, and Lapierre (2003) corroborated this finding on a larger sample of studies (k = 18), yielding a mean meta-analytic coefficient of .32 for the relationship between LMX and OCB. Taken together, these meta-analyses suggest not only does work affect appear to be pivotal in the development of OCB, but the relationship an employee possesses with their supervisor (i.e., the level of support,
consideration, and trust conveyed by one’s supervisor) may play a prominent role in
driving the effects of generalized work morale on OCB.

Consistent with this argument that supervisor relationship quality influences work
perceptions, research on LMX has revealed a significant relationship between LMX and a
number of employee attitudinal and behavioural outcomes, ranging from employee job
satisfaction (e.g., Dansereau, Graen & Haga, 1975; Seers & Graen, 1984; Vecchio &
Gobdel, 1984; Vecchio, Griffith, & Hom, 1986), organizational commitment (e.g.,
Duchon, Green, & Taber, 1986; Green, Anderson, & Shivers, 1996; Kinicki & Vecchio,
1994, Settoon, Bennett, & Liden, 1996), and empowerment (e.g., Gomez & Rosen, 2001;
Sherman, 2002) to individual performance (Duarte, Goodson, & Klick, 1993, 1994; Liden
& Graen, 1980; Settoon, Bennett, & Liden, 1996; Wayne, Shore, & Liden, 1997) and
innovation (Basu & Green, 1997; Scott & Bruce, 1994; 1998; Tierney, Farmer, & Graen,
1999). Based on this formidable body of evidence and their meta-analytic findings
uncovering significant relations between LMX and a wide spectrum of workplace
attitudes and behaviours, Gerstner and Day (1997) have proposed that LMX provides: “a
lens through which the entire work experience is viewed” (p. 840).

Subsequent research has reinforced this assertion. In a study by Wayne, Shore,
and Liden (1997) examining the relations between LMX, perceived organizational
support and OCB, both LMX and perceived organizational support significantly predicted
OCB. More importantly, while LMX and perceived organizational support were found to
be reciprocally related, LMX exerted a stronger influence on perceived organizational
support than vice versa. This finding lends credence to the notion that LMX actively
shapes how one construes his/her work environment. Given this finding, coupled with research revealing significant relations between LMX and the components of generalized work morale\(^2\), LMX appears to play a prominent role in driving generalized work morale, and in turn, OCB. Based on this premise and Organ and Ryan’s (1995) thesis that generalized work morale will mediate the relationship between personality and OCB, I proposed in this study that LMX should mediate the effect of personality on work morale and OCB.

1.5 Positioning Personality Within an Evolving Explanatory Model of OCB

Despite theoretical linkages between personality constructs, LMX, and OCB, and the pivotal role these constructs play in building social capital, only two empirical studies (Deluga, 1998; Hui, Law, & Chan, 1999) have simultaneously examined the interplay among these variables.

Deluga (1998) investigated the relations between leader-member conscientiousness similarity, subordinate in-role behaviour, LMX, and OCB. Drawing on the similarity-attraction model, Deluga posited that conscientiousness similarity would foster higher levels of interpersonal comfort, compatibility, and work coordination. As a result of these more harmonious relations, Deluga suggested subordinates would garner more in-depth performance feedback from their supervisor, thereby gaining a more vivid understanding of role requirements. As a result of this clearer understanding of their role,

\(^2\) In summarizing this research, Gerstner and Day (1997) report corrected meta-analytic coefficients of \(r = .50\) job satisfaction, \(r = .42\) organizational commitment, \(r = .70\) satisfaction with supervision.
subordinates would perform their job more effectively, in turn, optimizing the quality of the leader-member exchange. On balance, results from this study supported the hypotheses linking conscientiousness similarity, in-role behaviour, LMX, and OCB. All hypotheses were statistically significant with the exception of the relationship between subordinate in-role performance and LMX ($p < .07$).

Deluga's (1998) study should be commended for exploring the linkages between personality, LMX, and OCB, as well as testing a possible process mediator (i.e., subordinate in-role behaviour) of the personality – LMX relationship. A few key limitations are notable, however. First, only direct effects were examined in the regression analyses conducted - LMX was not formally tested as a mediator in Deluga’s model. Second, a rather unconventional measure of LMX (the Information Exchange Scale by Kozlowski & Doherty, 1989) was employed in Deluga’s study. This measure, which places more weight on the personal / friendship components of the supervisor-subordinate relationship, may not have adequately captured the mutual trust, respect, and obligation dimensions that typify LMX (e.g., Graen & Uhl-Bien, 1995). This may account for the non-significant path between in-role performance and LMX reported in the study. Lastly, while Deluga reported a significant relationship between LMX and OCB, he did not explain or empirically test the process mechanisms that drive this linkage. Overall, while this study provides a starting point for understanding the effect of personality on OCB, more research is needed fleshing out the nature of this relationship.

Building on this earlier work by Deluga (1998), but employing more rigorous measurement and analytic procedures (structural equation modeling and LMX-7), Hui,
Law, and Chen (1999) directly examined the mediating effect of LMX on the relationship between personality and OCB. Consistent with their hypothesized model, Hui et al. uncovered a significant negative relationship between trait negative affectivity and LMX, and in turn, a positive correlation between LMX and OCB. Hui et al. offered a very succinct explanation for their findings. They suggested that employee negative affectivity influences OCB “via employees’ organizational experiences or perception of organizational reality” (p. 15). Unfortunately, Hui et al. did not include intervening process variables to verify this assertion nor did they specify how negative affectivity ties in with LMX theory. A further limitation of this study is Hui et al. confined their investigation to one personality trait assessed from the subordinate’s perspective. Lastly, the sample consisted of Chinese production floor employees. Given the strong emphasis placed on “guanxi”, or interpersonal relationships in China (Hwang, 1987; Jacobs, 1980), the generalizability of Hui et al.’s findings to western society and employees at higher levels in the organization remains unclear.

In view of such considerations, Hui et al. (1999) highlighted a number of areas warranting future research. They underlined the pressing need for process research aimed at disentangling “how disposition may affect OCB” (p. 15). In this vein, they encouraged research that explores whether LMX mediates the effects of other dispositional predictors of OCB. They also called for research that more closely inspects the processes by which LMX influences OCB. Finally, Hui et al. (1999) pointed out the need for replication and extension of their findings on a different cultural sample.
Consistent with the recommendations for research enumerated by Hui, several LMX researchers (e.g., Bauer & Green, 1996; Gerstner & Day, 1997; Phillips & Bedein, 1994; Uhl-Bien et al., 2000) have called for more assiduous study of how personality influences LMX. Despite the expressed need to “more clearly merge the LMX ‘antecedents’ and HR selection literatures” (Uhl-Bien, Graen, Scandura, 2000, p. 172), scholars acknowledge there has been a dearth of research on the dispositional antecedents of LMX (Gerstner & Day, 1997). Research examining the effect of leader traits and supervisor-subordinate personality similarity on LMX has been scant, as have been studies that incorporate constructs from the Big Five model (Bauer & Green, 1996; Gerstner & Day, 1997; Liden, Sparrowe, & Wayne, 1997; Phillips & Bedein, 1994; Uhl-Bien et al., 2000). Perhaps most problematic, however, is virtually none of this research has formally tested the theoretical mechanisms linking personality to LMX. A more systematic, theoretically grounded examination of personality variables is needed if we are to advance our understanding of the dispositional antecedents underlying LMX.

1.6 Research Objectives and Proposed Conceptual Model

Given the limitations of past research exploring the role of personality in LMX, coupled with the need for process research elucidating how personality influences OCB, the purpose of this study was to develop and test a middle-range theory (Moore, Johns, & Pinder, 1980) delineating how two well-established personality constructs in the HR literature influence LMX, and in turn, employee OCB. Consistent with the model advanced by Hui, Law, and Chen (1999), coupled with research suggesting that one’s
relationship with their supervisor forms the foundation of their work perceptions and organizational experience (e.g., Gerstner & Day, 1997; Wayne, Shore, & Liden, 1997), it was proposed that LMX would be a pivotal mediator of the relationship between personality and OCB. Furthermore, extending prior research exploring the effects of personality on LMX, this study examined how the personality of both the supervisor and subordinate independently and jointly contribute to LMX. Therefore, to gain added insight into the linkage between personality, LMX, and OCB, the two focal personality variables chosen for the study—agreeableness and core self-evaluation—represent robust personality constructs that on theoretical grounds were expected to predict LMX and OCB when measured from both the supervisor’s and subordinate’s perspectives. In an effort to disentangle the process by which these personality variables influence LMX, the association between these two personality variables and two hypothesized direct antecedents of LMX were tested—role ambiguity and affect toward the supervisor.

In a similar vein, this research aimed to illuminate the process mechanisms mediating the relationship between LMX and OCB. Extrapolating on previous work by Hui, Law, and Chen (1999), and Organ and Ryan (1995), this research examined the role

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3 In the interest of model parsimony and in light of conceptual overlap between core-self evaluation and other personality constructs contained in the Big Five model (e.g., conscientiousness, emotional stability), agreeableness was the focal Big Five variable included in the study. Initially, conscientiousness and emotional stability were also considered for inclusion in the study; however, core self-evaluation and conscientiousness encompass a similar component of achievement motivation (e.g., Barrick & Mount, 1993; Erez & Judge, 2001) hypothesized to explain LMX in this study (i.e., both constructs may influence the role definition processes underlying LMX). Furthermore, Bono and Judge (2003) have conceptualized core-self evaluation as “a broader, more construct valid measure of emotional stability” (p. 13). Perhaps most importantly, while prior research has examined the relationship between certain Big Five constructs, such as conscientiousness (Deluga, 1998) and extraversion (Phillips & Bedeian, 1994) and LMX, no research, to date, has explored the effects of supervisor or subordinate agreeableness or core self-evaluation on LMX.
of work morale in transmitting the effects of personality and LMX on OCB. In accordance with these objectives, the path model tested in this study is displayed in Figure 1.

Overall, this research addresses the need for a more theory-guided distillation of the dispositional variables and mediating mechanisms linking supervisor-subordinate personality, LMX, and OCB. Furthermore, by exploring how these three primary individual and dyadic determinants of relationship quality intersect, this study provides added insight into the developmental process underlying social capital.
CHAPTER 2: HYPOTHESIS GENERATION

As illustrated in Figure 1, LMX is conceived in this study as a central mediator of the relationship between personality and OCB. Accordingly, I begin discussion in this chapter with a more detailed review of the conceptual foundation of LMX and propose hypotheses linking LMX to its core theoretical determinants (Stage 2 of Figure 1 – “Core Foundation of LMX”). The dispositional antecedents of LMX (Stage 1 of Figure 1 – “Dispositional Antecedents”) are then discussed and hypotheses are advanced that specify relations between these variables and the core foundation of LMX outlined in Stage 2. I conclude the chapter by articulating relations between LMX and its two hypothesized outcomes -- job satisfaction and OCB (Stage 3 of Figure 1 – “Employee Outcomes”).

2.1 Core Foundation of LMX (Stage 2)

As exhibited in Stage 2 of Figure 1, it was postulated that subordinates’ affect toward their supervisor and role ambiguity are core direct determinants of LMX. Furthermore, perceived similarity was envisioned as a key determinant of LMX, with its effect on LMX transmitted via these two core variables. In this section, I briefly review the primary theoretical models of LMX and elucidate hypotheses suggesting that subordinate role definition and affect are core precursors to LMX. I then discuss research in the realm of interpersonal similarity and present hypotheses proposing that subordinate perceptions of similarity to their supervisor will predict interpersonal affect and role ambiguity.
2.1.1 Conceptual Underpinnings of Leader-Member Exchange Theory

Leader-Member Exchange theory originated from the Vertical-Dyad Linkage (VDL) model pioneered by Dansereau, Graen, and Haga (1975) and Graen and Cashman (1975). Grounded in role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), early formulations of LMX theory advanced by Graen and colleagues stressed the importance of informal “role-making” processes in the development of employee work roles. Later, Liden and colleagues (e.g., Dienesch & Liden, 1986; Liden, Sparrowe, & Wayne, 1997) emphasized the affective underpinnings of LMX.

Graen and Scandura’s Role-Making Model of LMX. In explaining the theoretical basis of LMX, early proponents of the VDL model (e.g., Dansereau, Graen, & Haga, 1975; Graen and Cashman, 1975) argued that roles (i.e., sets of behaviours expected of employees) are often not formally prescribed in one’s job description, but are in part determined through an interpersonal exchange and informal negotiation process with one’s supervisor. Later, Graen and Scandura (1987) elaborated on the nature of this process. They proposed that the LMX development process is comprised of three distinct stages: 1. role-taking, 2. role-making, and 3. role routinization. In the first phase – role-taking – the supervisor initiates a “sent role” (request, demand, assignment). The subordinate receives the role, and whatever noise was added in transmission, and reacts. Based on how the subordinate responds to this initial role demand (his/her receptivity), the supervisor ascertains whether he will transmit another “sent role”. Thus, in this phase, the supervisor gauges the subordinate’s motivation and potential to carry out unstructured tasks. In the next stage – role-making – roles become more clearly defined. Unstructured
tasks are completed by the subordinate and a high-quality LMX relationship begins to unfold in which each party contributes to the growth of the relationship. Subordinates, in exchange for their successful collaboration on unstructured tasks, are provided a number of tangible and intangible resources at the disposal of the supervisor, including increased influence, task (growth) opportunities, latitude / autonomy in task completion, and leader support and attention. Finally, in the third stage – role routinization – the behaviour of the supervisor and subordinate becomes interlocked. A dyadic understanding evolves in which role expectations become routinized and supervisors and subordinates continue collaborating closely on unstructured tasks.

_Graen and Uhl-Bien’s Leadership-Making Model_. Augmenting this role-making model espoused by Graen and Scandura (1987), Graen and Uhl-Bien (1995) have formulated a “leadership-making model” of LMX comprised of “stranger”, “acquaintance”, and “partnership” stages. This model mirrors the stages specified in Graen & Scandura’s (1987) role-making model, but fleshes out the nature of the relationship development process that unfolds across stages. Specifically, Graen and Uhl-Bien posit that the first stage – the “stranger phase” – involves a “cash and carry” economic exchange, in which strictly formal contractual role obligations are fulfilled. In the next phase – “acquaintance” stage – the relationship becomes more personalized and a social exchange process is fashioned between leader and subordinate. At this stage, resources are shared on both a professional and personal level. Lastly, at the “mature partnership” stage, exchanges begin to occur “in kind” with the form and timelines for reciprocation more diffuse and unspecified. At this stage, feelings of mutual respect, trust,
and obligation are nurtured and continue to expand. Overall, the “leadership-making model” depicts the LMX maturation process as progressing from a relationship predicated on economic exchange, limited mutual influence, transactional leader behaviour, and protection of one’s self-interest to one characterized by heightened levels of social exchange (e.g., more diffuse obligations), protracted mutual influence, transformational leader behaviour, and the pursuit of collective interests.

**Dienesch and Liden’s Process Model of LMX.** Complementing these theoretical models proffered by Graen and colleagues, work by Liden and colleagues emphasizes the interpersonal and affective processes contributing to LMX development. Dienesch and Liden (1986) advanced a process-oriented model of LMX development that integrates literature on attribution theory, role theory, leadership, social exchange, and upward influence. In the first step of this model, leader and member characteristics (physical characteristics, attitudes, abilities, personality, experience, etc.) are conceived as key contributors to the initial leader - member interaction. In the second step, the leader delegates a trial assignment or preliminary set of duties to the member partly contingent on the characteristics of the leader and subordinate. After receiving these assignments, the member then forms specific attributions, perceptions of equity, and judgments regarding the instrumentality of performing the assigned tasks, and engages in performance or non-performance behaviours. Next, in an effort to interpret and explain the member’s behaviour, the leader formulates attributions regarding the behaviour exhibited. Based on these attributions, and the upward influence behaviour of the subordinate, the leader then initiates a response. Finally, Dienesch and Liden postulate that various contextual factors,
such as work group composition, culture, leader power, and organizational politics
impinge on the LMX development process across stages.

Liden, Sparrowe, and Wayne's Social Exchange Perspective on LMX. In a
subsequent extension of this model by Dienesch and Liden (1986), Liden, Sparrowe, and
Wayne (1997) argue that the notion of reciprocity has been inadequately captured in
LMX theoretical frameworks. Accordingly, they suggest that Sahlin's (1972) reciprocity
continuum should be incorporated into future LMX theory and research. Sahlin proposed
that the level of reciprocity in a relationship can be assessed along three dimensions:
immediacy (the amount of time that transpires between receipt of a tangible or intangible
"gift" from an exchange partner and when reciprocation occurs); equivalence (whether
the "gift" returned is of greater or lesser value than what was initially received) and
interest (each exchange partner’s motive in the relationship, ranging from total self-
interest to an unselfish devotion and deep concern for the other). Thus, consistent with
their emphasis on the interpersonal and contextual dynamics governing LMX
development, Liden et al. encourage more work on the social exchange component of
LMX.

2.1.2 Comparing LMX Formulations by Graen et al. and Liden et al.: Role Behaviour
vs. Affect

The theoretical formulations by Liden and colleagues, represent a departure from
earlier work by Graen and colleagues who have largely focused on the importance of
role-making and task performance (competence) in the development of LMX (e.g., Liden,
Sparrowe, & Wayne, 1997; Uhl-Bien, Graen, & Scandura, 2000). The work by Liden and colleagues, conversely, addresses the integral role that a number of leader and member characteristics, and interpersonal / contextual factors play in driving LMX development (e.g., Liden, Sparrowe, & Wayne, 1997). Given their inclusion of social / non-task-related factors (e.g., upward influence behaviours) as well as direct acknowledgment that affect comprises one of the central LMX dimensions (Dienesch & Liden, 1986; Liden & Maslyn, 1998; Liden, Sparrowe, & Wayne, 1997), the work conducted by Liden underscores the influence of interpersonal liking on LMX. Graen and colleagues, on the other hand, have voiced their contention to this premise that interpersonal affect is imperative in the development of LMX. In presenting their leadership-making model, Graen and Uhl-Bien (pp. 237-238) commented:

“Development of LMX is based on the characteristics of the working relationship as opposed to a personal or friendship relationship, and this trust, respect, and mutual obligation refer specifically to individual’s assessments of each other in terms of their professional capabilities and behavior. This is different from the liking-based dimensions of interpersonal attraction and bonding suggested by others (e.g., Liden & Maslyn, 1994)”.

Later, Uhl-Bien, Graen, & Scandura (2000, p. 164) further downplayed the role of interpersonal affect in LMX:

“Despite findings in the LMX literature that affect is positively correlated with LMX, high quality leader-member relationships should not be based solely on liking. Affect is not necessary or sufficient to carry the dyad through the ‘crunch time’ when work pressures place strong demands on relational ties and call for competence-based decisions”.

In this vein, Graen and colleagues contend that supervisor and subordinate competence and role-related behaviour are the predominant determinants of high-quality
work relationships. In various situations, interpersonal affect will not reflect the true character and functionality of a supervisor – subordinate relationship.

**Affect Toward Supervisor and LMX.** Despite such criticism from Graen and colleagues, empirical evidence suggests that affect may play an important role in the development of the leader-member relationship. Extending research on performance appraisal that has established a link between supervisor affect and ratings of subordinate performance (Allen & Rush, 1998; Cardy & Dobbins, 1986; Conway, 1998; Dobbins & Russell, 1986; Findley, Giles, & Mossholder, 2000; Kingstrom & Mainstone, 1985; Lefkowitz, 2000; Tsui & Barry, 1986; Robbins & DeNisi, 1994; Sinclair, 1988; Varma, DeNisi, & Peters, 1996), studies have demonstrated a direct relation between interpersonal affect and LMX.

Illustrating the impact of interpersonal affect on LMX, Engle and Lord (1997) found that supervisor and subordinate liking was not only strongly related to LMX ratings ($r = .88$ subordinates; $r = .79$ supervisors), but mediated the effects of both perceived similarity and implicit performance theory congruence (i.e., leader-member agreement on what a good worker does) on subordinate LMX ratings. Likewise, employing a longitudinal design, Liden, Wayne, and Stillwell (1993) assessed the influence of employee and supervisor liking and a number of other key variables (e.g., expectations from other dyad member, perceived similarity, demographic similarity, and performance) on the development of LMX. Their findings revealed that, from both leader and member perspectives, liking (measured at 2-weeks) predicted LMX ratings at the three time intervals examined (2-weeks, 6-weeks, and 6-months). Furthermore, expectations
(assessed at 0-5 days), perceived similarity and liking (both assessed at 2-weeks) predicted variance in LMX at later time periods (6-weeks and 6-months) that was not predicted by LMX measured at earlier points in time. Liden et al. (1993) also tested the relative contributions of subordinate affect and performance on LMX and observed that supervisory performance ratings administered at week 2 were only associated with LMX measured at the same time period. In view of this result, Liden et al. (1993, p. 670) deduced:

“This finding brings into question LMX theorizing that has portrayed performance as the dominant variable in LMX development (Graen, 1976; Graen & Scandura, 1987). The results reported here suggest that affective variables, such as expectations, perceived similarity, and liking can also be important in the development of LMX. Although only additional research can determine the relative importance of affective variables and performance in LMX development, it is clear that affect plays an important role”.

**Role ambiguity and LMX.** As outlined in the role-making and leadership-making models propounded by Graen and colleagues, role definition processes are fundamental to the development of LMX. Given the theoretical grounding of LMX in role theory (Kahn et al., 1964), an ambient trend in organizations toward increased complexity and ambiguity of work activities (e.g., Howard, 1995), and the importance of role clarity to overall job performance (e.g., Jackson & Schuler, 1985; Tubre & Collins, 2000), one variable that may be proximal to LMX development is the extent of role ambiguity experienced by a subordinate.

Role ambiguity represents an individual’s feelings of uncertainty regarding their organizational role obligations and/or the means by which they should fulfill them (Organ & Greene, 1974; Rizzo, House, & Lirtzman, 1970). This construct has both objective
(environmental) and subjective (individual) origins (King & King, 1990; Kahn et al., 1964) and reflects one’s knowledge of the behaviours required to perform effectively in their job (Jackson & Schuler, 1985; Mossholder, Bedeian, & Armenakis, 1981; Organ & Green, 1974). Gerstner and Day (1997) report a mean meta-analytic correlation of .43 between role clarity (inverse of role ambiguity) and LMX. Despite these conceptual and empirical underpinnings, very few studies have examined role ambiguity as a central antecedent of LMX.

2.1.3 Affect Toward Supervisor and Role Ambiguity as Direct Antecedents to LMX

Taken together, as depicted in Stage 2 of Figure 1, the present study proposes that subordinate affect toward their supervisor and subordinate role ambiguity are two central antecedents of LMX. While affect is envisioned by Liden and colleagues to be a key lever for LMX development, the “role-making” and “leadership-making” models of Graen and colleagues accentuate the importance of role definition processes. In one of the few studies to include measures of both liking and role ambiguity, Graen, Novak, and Sommerkamp (1982) found that LMX training markedly reduced subordinate role ambiguity but did not improve satisfaction with their manager. Based on these findings, Graen and Scandura (1987, p. 201) inferred: “clearly, satisfaction with manager (liking) is different from the quality of the dyadic structure”. In view of theoretical and empirical evidence suggesting affect and role-related perceptions will be key determinants of LMX, coupled with our interest in testing the relative contributions these constructs exert on LMX, the following hypotheses were proposed:
Hypothesis 1: Subordinates’ affect toward their supervisor is positively related to perceptions of leader-member exchange with their supervisor.

Hypothesis 2: Subordinates’ role ambiguity is negatively related to perceptions of leader-member exchange with their supervisor.

2.1.4 Perceived Similarity as a Direct Antecedent to Affect Toward Supervisor and Role Ambiguity

As suggested in prior research (e.g., Engle & Lord, 1997; Liden, Wayne, & Stillwell, 1993), interpersonal similarity is a key catalyst of LMX. In Stage 2 of Figure 1, subordinate perceptions of similarity to their supervisor are positioned as a direct antecedent of subordinate affect toward their supervisor and role ambiguity. In this section, I briefly review research linking supervisor–subordinate similarity to employee outcomes, including performance ratings and work attitudes. I then present our hypotheses proposing that perceived similarity directly influences subordinate affect and role ambiguity (Stage 2 of Figure 1).

Relational Demography and Employee Outcomes. Largely guided by the similarity-attraction model (i.e., similarity will increase liking) and behavioural integration theories (i.e., similarity will improve communication and social interaction), research on “relational demography” (Tsui & O’Reilly, 1989) has revealed that supervisor-subordinate similarity on various demographic characteristics (e.g., age,
gender, race, education, organizational tenure) will tend to inflate supervisory performance evaluations (e.g., Tsui & O’Reilly, 1989; Turban & Jones, 1988, Wayne & Liden, 1995). Likewise, various forms of demographic similarity, including age, race, education, and gender similarity have been linked to satisfaction with supervision (e.g., Turban & Jones, 1988; Vecchio, 1993; Vecchio & Bullis, 2001). While this research signals that relational demography may, in many cases, predict important employee outcomes, effect sizes reported in this literature have generally been weak.

Turning to the LMX literature, a few studies have examined the effect of supervisor – subordinate relational demography on LMX. Results from this research have been mixed, with some studies exhibiting significant effects based on gender (Duchon, Green, & Taber, 1986; Green, Anderson, & Shivers, 1996), age (Duchon, Green, & Taber, 1986) and organizational tenure similarity (Epitropaki & Martin, 1999), and others producing null results (Bauer & Green, 1996; Liden, Wayne, & Stillwell, 1993; McClane, 1991). Given this state of the literature, coupled with their null findings for the effect of gender, age, or education similarity on LMX, Green, Anderson & Shivers (1996) have recommended: “future work should seek predictors that may be more robust than demographic similarity, such as value or affective differences” (p. 213).

**Personality / Value Similarity and Employee Outcomes.** Following in this path, research on Person – Organization Fit (e.g., Chatman, 1989) and the Attraction-Selection-Attrition (A-S-A) model (e.g., Schaubroeck, Ganster, & Jones, 1998; Schaubroeck & Lam, 2002; Schneider, 1987; Schneider, Smith, Taylor, & Fleenor, 1998) has indicated that value-fit and personality congruence influence employee membership, promotion,
and retention patterns. Moreover, Meglino, Ravlin, and Adkins (1989, 1991) have found that supervisor - subordinate similarity on various work values (e.g., achievement, helping and concern for others, fairness, and honesty) predicts different employee attitudes (e.g., organizational commitment, satisfaction with supervision, and general job satisfaction).

Only recently, however, has research begun to explore the effects of personality similarity on various employee outcomes. Research examining the effects of personality similarity on performance ratings has revealed similarity effects for peer ratings of performance. Antonioni and Park (1991) found that conscientiousness similarity significantly elevates peer ratings of performance. More recently, in a study of the effect of personality similarity on both peer and supervisor ratings, Strauss, Barrick, and Connerley (2001) found emotional stability similarity favourably influences peer ratings. In terms of supervisory ratings, however, Strauss et al. (2001) failed to uncover similarity effects for any of the three Big Five constructs they examined (emotional stability, conscientiousness, extraversion).

**Subordinate Perceived Similarity and Affect Toward Supervisor.** In contrast to inconsistent findings reported on relational similarity, the bulk of research pertaining to perceptions of similarity has uncovered significant relations with both performance ratings (e.g., Pulakos & Wexley, 1983; Strauss, Barrick, & Connerly, 2001; Turban & Jones, 1988; Wayne & Liden, 1995) and LMX (e.g., Engle & Lord, 1997; Liden, Wayne, & Stilwell, 1993; Wayne & Liden, 1995). This evidence, coupled with the premise that similar individuals will become more cognizant of their actual level of similarity with
increased interpersonal interaction (e.g., Duck, 1977), suggests that actual relational similarity may exert its effects on LMX largely via perceptions of similarity between the supervisor and subordinate. Consistent with this proposition, Wayne and Liden (1995) have found that supervisor perceptions of similarity mediate the effects of demographic similarity on subordinate performance ratings. Furthermore, Strauss et al. (2001) reported that although actual personality similarity was generally unrelated to performance ratings, interpersonal similarity on extraversion and emotional stability influenced perceptions of similarity on these constructs. With respect to LMX, prior research (Liden, Wayne, & Stillwell, 1993; Engle & Lord, 1999) suggests that both perceived similarity and liking may influence LMX. To date, research has not formally tested perceived similarity or interpersonal affect as mediators of the relationship between personality similarity and LMX. Given its relevance to the similarity-attraction model and explaining the means by which actual similarity exerts its effect on LMX, the following hypothesis was proposed:

**Hypothesis 3: Subordinate perceptions of similarity to their supervisor are positively related to affect toward their supervisor.**

**Subordinate Perceived Similarity and Role Ambiguity.** In addition to studying the effect of supervisor–subordinate similarity on interpersonal affect, Engle and Lord (1997) call for research probing the effect of similarity on role-dependent variables (e.g., role ambiguity). Reinforcing this recommendation, recently Antonioni and Park (2001) found that the influence of conscientiousness similarity on peer ratings of contextual work
behaviours remained significant after controlling for interpersonal affect. In light of this result, they concluded that supervisor bias (i.e., liking resulting from similarity-attraction) is not the only factor underlying interpersonal similarity that colours performance ratings – these higher ratings also reflect tangible behavioural differences, such as enriched role communication.

In a detailed study of the effects of supervisor–subordinate similarity, Turban and Jones (1988) investigated the effects of perceived similarity on an array of employee outcomes, including role perceptions, job satisfaction, and performance. They reported a correlation of \(-.65\) between subordinate perceptions of similarity with their supervisor and role ambiguity. Likewise, supervisor perceptions of similarity to their subordinate were significantly associated with role ambiguity \((r = -.26)\). Turban and Jones also uncovered substantial correlations between subordinate perceptions of similarity and a host of subordinate outcomes, including job satisfaction \((r = .30)\), performance ratings \((r = .19)\), and factors such as confidence and trust in supervisor \((r = .66)\) and frequency of communication with supervisor \((r = .24)\). In interpreting their results, Turban and Jones explained:

"Much similarity research has assumed that a person perceived as similar is more attractive and this attraction positively biases evaluation. The present study supports an alternative explanation. Subordinates who perceived the supervisor as similar to themselves, and those whom the supervisor perceived as similar reported less role ambiguity, more confidence and trust in the supervisor, and greater influence over the supervisor. If perceived similarity led to a more positive working relation with the supervisor that produced greater insight into what is important in receiving a higher evaluation, insight (rather than bias) might have led to higher performance ratings. This explanation is consistent with findings that the quality and frequency of supervisor-subordinate interactions are important influences on subordinate performance." (p. 233).
These findings indicate that perceived similarity is a key determinant of role ambiguity and one’s relationship with their superior. In light of this research suggesting that perceived similarity engenders clearer role definition, and earlier results indicating demographic similarity mitigates role ambiguity (Tsui & O’Reilly, 1989), the following was hypothesized:

**Hypothesis 4:** Subordinate perceptions of similarity to their supervisor are negatively related to subordinate role ambiguity.

### 2.2 Dispositional Antecedents of LMX (Stage 1)

#### 2.2.1 Personality and LMX: A Process Perspective

While preliminary evidence suggests that leader and member personality traits can independently and jointly predict LMX (Liden, Sparrowe, & Wayne, 1997), there has been a notable paucity of research exploring the impact of personality on LMX (e.g., Bauer & Green, 1996; Gerstner & Day, 1997; Liden, Sparrowe, & Wayne, 1997; Phillips & Bedein, 1994; Uhl-Bien et al., 2000). Given the limited number of studies that have been conducted in this domain, coupled with some inconsistency in the results obtained, Gerstner and Day (1997, p. 838) call for personality research: “investigating robust dispositional characteristics that are theoretically associated with LMX development”. Likewise, Bauer and Green (1996) recommend that research investigate the relationship between specific Big Five personality factors and LMX. In response to such admonitions, the lack of research that has formally tested process mediators of the personality – LMX
relationship, and a need to examine personality variables from both the leader and member’s perspective (e.g., Liden, Sparrowe, & Wayne, 1997), this study investigated the relations of two robust personality constructs assessed from both the leader and members’ perspective to the theoretically-grounded antecedents of LMX. Specifically, as illustrated in Stage 1 of Figure 1, it was proposed that supervisor – subordinate agreeableness and core self-evaluation would predict the core antecedents of LMX specified in Stage 2. In this section, hypotheses corresponding to these two personality constructs are delineated. I first provide a semantic description of each construct, including a synopsis of each construct’s constituent traits and foremost correlates. I then outline prior research linking facets of the construct to LMX. Finally, hypotheses are presented, first in terms of subordinate standing on the construct, then supervisor standing.

2.2.3 Agreeableness as a Direct Antecedent to Affect Toward Supervisor

As illustrated in Stage 1 of Figure 1, supervisor and subordinate agreeableness were hypothesized to predict subordinate affect toward their supervisor.

Agreeableness. Individuals who are higher in agreeableness are cooperative, friendly, warm, empathetic, flexible, courteous, unassuming, and sincere (Goldberg, 1990). They tend to be trusted, straightforward, and altruistic (Costa & McCrae, 1992). Consistent with these traits, research has shown that agreeable individuals tend to demonstrate a prosocial disposition (Penner, Midili, & Kegelmeyer, 1997), exhibit higher emotional and social intelligence (Davies, Stankov & Roberts, 1998), and engage in behaviours that facilitate team functioning (e.g., Kichuk & Wiesner, 1997, 1998; Neuman
& Wright, 1999; Peterson, Owens, & Martorana, 1998; Taggar, 2002), such as organizational citizenship behaviour (e.g., Johnson, 2001; McNeely & Meglino, 1994; Organ & Ryan, 1995). Taken together, this research suggests that agreeable individuals possess a stronger social orientation and may display more refined social skills in dealing with others. Reinforcing this interpretation, agreeableness has proven to most strongly predict performance in jobs involving considerable social interaction (e.g., Borman, Penner, Allen, & Motowidlo, 2001; Hurtz & Donovan, 2000; Johnson, 2001; Mount, Barrick, & Stewart, 1998; Tett & Burnett, 2003; Witt, Burke, Barrick, & Mount, 2002).

Agreeableness and LMX. Prior research has uncovered a significant relationship between subordinate negative affectivity and LMX (Engle & Lord, 1997; Hui, Law, & Chen, 1999) as well as supervisor positive affectivity and LMX (Day & Crain, 1992). Moreover, Bauer and Green (1996) found that supervisor–subordinate similarity on positive affectivity is significantly related to LMX. Despite some overlap between the trait affectivity construct and agreeableness, no research has directly examined the effect of agreeableness on LMX.

Subordinate Agreeableness and Affect Toward Supervisor. Due to the greater social orientation and social skills of highly agreeable subordinates, these individuals can be expected to experience more favourable emotional transactions with their supervisors (e.g., Rafaeli & Sutton, 1987). Given these transactions, coupled with the warmth, empathy, and tender-mindedness of individuals possessing higher levels of agreeableness (Goldberg, 1990; Costa & McCrae, 1992), agreeable subordinates should experience more favourable affect toward their supervisor. Accordingly, I hypothesized:
Hypothesis 5: Subordinate agreeableness is positively related to subordinate affect toward their supervisor.

Supervisor Agreeableness and Affect Toward Supervisor. In addition to subordinate agreeableness, supervisor agreeableness also can be expected to predict subordinate affect toward their supervisor. Recent research has identified agreeableness as the strongest Big Five correlate of transformational leadership (Judge & Bono, 2000). Given traits such as altruism, friendliness, tact, and sensitivity are hallmarks of agreeableness (Goldberg, 1990, McCrae & John, 1992), agreeable leaders may exhibit behaviours associated with the individualized consideration dimension of transformational leadership. Individualized consideration entails nurturing and supporting the development of followers, expressing positive affect toward the follower, and developing higher levels of mutuality, disclosure, and intimacy in the relationship (Kark & Shamir, 2002). As a result of such behaviours, individualized consideration has been associated with increased follower loyalty, commitment, and cooperation (Kark & Shamir, 2002).

Complementing this research, recent studies suggest that transformational leadership and LMX are closely intertwined. Howell and Hall-Merenda (1999) have reported a correlation of .53 between transformational leadership and LMX. More recently, Wang, Law, Hackett, Wang, and Chen (2005) have found that LMX mediates the relationship between transformational leadership and OCB. They argue that
transformational leadership becomes more “personalized” through LMX, and LMX consolidates the affective bond between leader and subordinate. Given this evidence, coupled with the greater social orientation and perceived approachability of agreeable supervisors (Hogan & Shelton, 1998), the following hypothesis was advanced:

**Hypothesis 6:** Supervisor agreeableness is positively related to subordinate affect toward their supervisor.

2.2.4 Core Self-Evaluation as a Direct Antecedent to Role Ambiguity and Job Satisfaction

Core Self-Evaluation. Core self-evaluation refers to the fundamental, subconscious conclusions individuals reach about themselves, other people, and the world (Judge, Locke, Durham, & Kluger, 1998). Four broad traits combine to form the core self-evaluation construct: self-esteem, generalized self-efficacy, emotional stability, and locus of control (e.g., Judge & Bono, 2001; Judge, Erez, Bono, & Thoresen, 2000). As reflected in these traits, the core self-evaluation construct contains strong work motivation and ability components (Judge, Erez, & Bono, 1998). Empirical research has underscored
the motivational and task-related underpinnings of core-self evaluation. Erez and Judge (2001), for instance, reported that goal-setting and motivation (goal commitment and activity level) mediates the relationship between core-self evaluation and measures of individual performance. Furthermore, Erez and Judge (2001) found the relationship between core self-evaluation and performance remains significant after controlling for the effects of conscientiousness – a trait with similar motivational components (e.g., Barrick, Mount, & Strauss, 1993; Stewart, Carson, & Cardy, 1996; Barrick & Mount, 1993).

**Core Self-Evaluation and LMX.** Early research exploring the effects of personality on LMX has revealed that subordinates high in growth need strength (i.e., embodying a need for personal challenge, accomplishment, learning, and professional development) will tend to be more responsive to supervisory efforts to cultivate LMX (Graen, Novak, & Sommerkamp, 1982; Graen, Scandura, & Graen, 1986). Given the conceptual overlap between growth need strength and core self-evaluation in terms of their common emphasis on achievement motivation, subordinates higher in core self-evaluation may, likewise, be more inclined to develop high-quality work relationships with their supervisor. Complementing this evidence, a handful of studies have explored the relationship between specific core self-evaluation traits and LMX. Murphy and Ensher (1999) revealed a significant association between both supervisor and subordinate self-efficacy and subordinate perceptions of LMX. In interpreting these results, Murphy and Ensher attributed the effects of subordinate self-efficacy to the greater competence, dedication, and persistence in task completion that high self-efficacy subordinates tend to exhibit. Research evidence regarding a second core self-evaluation trait – locus of control
— is less definitive but also suggests elements of core self-evaluation may predict LMX. While Phillips and Bedeian (1994) failed to uncover a link between locus of control and LMX, Kinicki and Vecchio (1994) found internal locus of control was positively related to LMX quality. On balance then, it appears that certain core self-evaluation traits may facilitate LMX development. Accordingly, in this research I enlisted a composite measure of core self-evaluation (tapping the core self-evaluation traits) to examine the effect of supervisor and subordinate core self-evaluation on LMX. Specifically, I proposed that subordinate and supervisor core self-evaluation influences LMX through its effect on role definition processes (i.e., role ambiguity).

**Subordinate Core Self-Evaluation and Role Ambiguity.** Given that a subordinate’s willingness and capability to complete unstructured work tasks is a central mechanism driving the role-making process (e.g., Graen & Scandura, 1987; Uhl-Bien, Graen, & Scandura, 2000), and individuals high in core self-evaluation exhibit greater work motivation (Erez & Judge, 2001; Judge, Erez, & Bono, 1998; Judge, Bono, & Locke, 2000) and tend to function better in unstructured roles (Judge, Bono, & Locke, 2000; Bono & Judge, 2003), subordinates higher in core self-evaluation may be expected to experience more favourable role-making episodes with their supervisor. Based on these role-making capabilities and the higher levels of dyadic communication (Mueller & Lee, 2002; Yrie, Hartman, & Galle, 2002) and supervisory feedback received during role-making (Dansereau, Graen, & Haga, 1975; Liden & Graen, 1980), subordinates with higher levels of core self-evaluation should experience greater role clarity.
In addition to this evidence, two core self-evaluation traits – locus of control and self-esteem – have been studied as antecedents of role ambiguity. Self-esteem has largely been examined as a moderator of role ambiguity and other employee attitudes (e.g., job satisfaction) and has proven to buffer the negative effects of role ambiguity (e.g., Mossholder, Bedeian, & Armenakis, 1981). Furthermore, research on locus of control has revealed that employees with an internal locus of control report less role ambiguity in their jobs than external locus of control employees (Organ & Green, 1974; Szilagyi, Sims, & Keller, 1976). These results are consistent with earlier research indicating that internal locus of control employees tend to be more informed about their occupations and engage in more job-related information seeking behaviour (e.g., Valecha, 1972). Given these findings, and the important influence competence, goal-directed behaviour, and motivation exert on the role-making process, I hypothesized:

**Hypothesis 7:** Subordinate core self-evaluation is negatively related to subordinate role ambiguity.

**Supervisor Core Self-Evaluation and Role Ambiguity.** In addition to the hypothesized relation between subordinate core self-evaluation and role ambiguity, a supervisor’s level of core self-evaluation can be expected to influence the role ambiguity experienced by their subordinates. Core self-evaluation is significantly associated with goal-setting behaviour and task performance (Erez & Judge, 2001). Moreover, leaders higher in core self-evaluation tend to garner higher leader effectiveness ratings (e.g.,
Judge, Bono, Illies, & Gerhart, 2002; Salvaggio, Nishi, Mayer, Lyon, Ramesh, & Schneider, 2003; Yukl, 1998). At the facet level, research suggests that internal locus of control supervisors engage in more participative and task-oriented leader behaviour (Spector, 1982). Individuals with an internal locus of control also have a propensity to view others as possessing an internal locus of control irrespective of their actual standing on the construct (e.g., Miller, 1970). Given the importance of perceived subordinate competence and motivation to supervisor delegation, and the greater propensity for internal locus of control supervisors to use a task-oriented and participative leadership style, one may expect supervisors measuring higher in core self-evaluation to delegate more role-making activities to their subordinates. In light of this increased delegation, coupled with the greater respect, trust, and obligation subordinates may feel toward high core self-evaluation supervisors, the following was hypothesized:

**Hypothesis 8:** Supervisor core self-evaluation is negatively related to subordinate role ambiguity.

**Subordinate Core Self-Evaluation and Job Satisfaction.** While the core self-evaluation of subordinates was expected to have an indirect effect on LMX via role ambiguity, it was also anticipated (as illustrated in Figure 1) that subordinate core self-evaluation would exert a direct effect on job satisfaction. The core self-evaluation construct was originally conceived as a means of tracing dispositional variance in job satisfaction (Bono & Judge, 2003; Judge, Locke, & Durham, 1997). In their seminal
paper on the construct, Judge et al. (1997) hypothesized that core self-evaluations would be related to job satisfaction through both direct and indirect means. Specifically, it appears that individuals high in core self-evaluation may derive more satisfaction from their work not only due to a general propensity to perceive work experiences in a positive light (affective “spill-over”), but they may, as a function of their heightened work effort, generate and experience more favourable intrinsic and extrinsic work outcomes. Indeed, research on three core self-evaluation traits – self-esteem, generalized self-efficacy, and emotional stability – suggests that individuals possessing higher levels of these traits tend to adopt a more optimistic approach to work and are inclined to deal effectively with adversity and persist in the face of failure (e.g., Dodgson & Wood, 1998; Gist & Mitchell, 1992; McCrae & Costa, 1991).

Empirical evidence has supported the relationship between core self-evaluation and job satisfaction. In a recent meta-analysis, Judge and Bono (2001) reported true score correlations between .24 (emotional stability) and .45 (generalized self-efficacy) for the relationship between specific core self-evaluation traits and job satisfaction. Moreover, using dual-source methodology (self and other ratings of core self-evaluation and job satisfaction), Judge et al. (1998) found that perceptions of job characteristics partially mediated the core self-evaluation – job satisfaction relationship. Extending this work, Judge, Bono, and Locke (2000) reported that job complexity (measured by job title in Dictionary of Occupational Titles) mediates the core self-evaluation – job satisfaction relationship and the effect of complexity on job satisfaction is largely transmitted via employee perceptions of job characteristics. Given this collective evidence suggesting
core self-evaluation may influence job satisfaction via factors distinct from role ambiguity and LMX, the following hypothesis was advanced:

**Hypothesis 9:** Subordinate core self-evaluation is positively related to subordinate job satisfaction.

### 2.2.5 Core Self-Evaluation Similarity in Relation to Perceived Similarity

As portrayed in Stage 1 of Figure 1, it was hypothesized that supervisor–subordinate similarity on core self-evaluation would significantly influence the core antecedents of LMX via it effects on perceived similarity. In this section, I briefly review research suggesting that supervisor–subordinate similarity on core self-evaluation should predict LMX and its two core antecedents – affect toward supervisor and role ambiguity. I then outline the final hypothesis for Stage 1, which stipulated that core self-evaluation similarity would exert its effects on subordinate affect and role ambiguity via subordinate perceived similarity to their supervisor.

**Core Self-Evaluation Similarity: A Differential Predictor of LMX and Transformational Leadership.** In a recent review of LMX research, Graen (2003) submits that one of the central means by which the transformational leadership and LMX paradigms differ is in terms of their association with self-esteem and self-concept. In light of this proposition and his assertion that self-efficacy may constitute a fourth dimension of LMX, Graen (2003) underlines the need for more research probing the effects of core self-evaluation on LMX.
Graen (2003) differentiates transformational leadership and LMX in terms of their reliance on both supervisor and subordinate self-esteem and self-concept clarity. Drawing on the “self-concept based view” of work motivation (Shamir, 1991) and transformational leadership (House, 1995; Kark & Shamir, 2002; Shamir, House, & Arthur, 1993), Graen (2003) proposes that transformational leadership elevates subordinate performance in large part via social identification processes (Ashforth & Mael, 1989; Hogg & Terry, 2000; Tajfel, 1982; Tajfel & Turner, 1985). Because self-esteem enhancement is a central impetus underlying social identification (Ashforth & Mael, 1989; Shamir, 1991) and transformational leaders tend to possess high self-esteem and self-concept clarity, Graen postulates that low self-esteem and self-concept clarity followers will be more responsive to the behaviour (e.g., individualized consideration, charisma, visioning) displayed by transformational leaders. Thus, in line with notions of complementary need fulfillment (e.g., Allinson, Armstrong, & Hayes, 2001; Winch, Ktsanes, & Ktsanes, 1954), Graen suggests relationships involving transformational leaders are most effective when leaders are high in self-esteem and self-concept clarity and subordinates are low in self-esteem and self-concept clarity.

Conversely, Graen (2003) argues that moderate levels of self-esteem and self-concept clarity facilitate the development of LMX. He posits that, unlike transformational leaders, LMX leaders do not require higher levels of self-esteem / self-concept clarity to develop strong ties with their subordinates. Graen contends that due to lower confidence in their performance capabilities, subordinates who are lower in self-esteem will tend not to invite nor accept LMX offers from their supervisor. In this vein, Graen proposes that,
relative to relationships involving transformational leadership, high LMX relationships will tend to be characterized by greater parity in the self-esteem and self-concepts of the leader and follower.

**Core Self-Evaluation Similarity and Affect.** While Graen’s line of reasoning (2003) implies that subordinates low in self-esteem will be less successful in developing high-quality LMX relationships due to their limited role-making capabilities, this conclusion seems to overlook the social identification and similarity-attraction processes underlying LMX. Several authors have accentuated the importance of subordinate social identification in LMX (e.g., Engle & Lord, 1997; Lord, Brown, & Frieberg, 1999; Lord & Smith, 1999; Sussman & Vecchio, 1997). Lord, Brown, and Frieberg (1999), for instance, argue that similarity in “self-views” (an individual’s perceptions of his or her standing on the attributes made salient by a given context – e.g., intellect, academic ability, social skills, athletic ability, physical attractiveness) and general self-schemas provides a foundation for supervisor-subordinate liking and LMX. Accordingly, they suggest that social identification processes will contribute to LMX development irrespective of the level of competence reflected in the source of similarity. In line with this argument, Snyder and Bruning (1986) reported that supervisor - subordinate similarity on task competence optimized LMX. Contrary to expectations, however, they found that dyad similarity at lower levels of competence generated the greatest LMX. In interpreting this result, Snyder and Bruning inferred: “Supervisors who lack confidence in their own capabilities may feel threatened by highly competent subordinates and be less likely to initiate a high level (dyadic) linkage in spite of its logical instrumentality for
performance.” (p. 84). Taken together, these findings suggest that, due to similarity-attraction and social identification processes, supervisor-subordinate similarity even at lower-levels of self-esteem, will yield higher levels of LMX.

**Core Self-Evaluation Similarity and Role Ambiguity.** In addition to subordinate affect, previous research suggests core self-evaluation similarity will enhance role definition processes. The effects of similarity on LMX have been borne out with respect to similarity on a number of role- and competence-based variables, including: conscientiousness (Deluga, 1998), achievement values (Ashkanasy & O’Connor, 1997), need for power (McClane, 1991), effort toward relationship development (Maslyn & Uhl-Bien, 2001), and implicit performance theories (Engle & Lord, 1997). Given that core self-evaluation is associated with role- and competence-related variables, such as goal-setting, motivation, and performance (e.g., Erez & Judge, 2001; Judge & Bono, 2001), coupled with Graen’s proposition that supervisor-subordinate self-esteem compatibility will enhance role-making, supervisor—subordinate core self-evaluation similarity is expected to mollify subordinate role ambiguity.

**Core Self-Evaluation Similarity and Perceived Similarity.** As outlined above, core self-evaluation similarity is projected to influence both subordinate affect toward their supervisor and role ambiguity. It is also anticipated, however, that perceived similarity will mediate these relationships. The similarity-attraction model (Byrne, 1971) presupposes conscious recognition of similarity for increased interpersonal attraction to evolve. Furthermore, in their review of literature on social influence in the workplace, Ferris and Judge (1991) concluded that one of the primary reasons “perceived similarity”
predicts work-related outcomes to greater effect than relational similarity is “people react on the bases of perceptions of reality, not reality per se” (p. 464). Given this evidence, coupled with earlier research indicating that the self-concept is a central frame of reference in perceptions of similarity (e.g., Catrambone, Beike, & Niedenthal, 1996; Markus, Smith, & Moreland, 1985), the following hypothesis was proposed:

**Hypothesis 10:** Supervisor - subordinate similarity on core self-evaluation is positively related to subordinate perceptions of similarity.

### 2.3 Employee Outcomes (Stage 3)

#### 2.3.1 LMX in Relation to Job Satisfaction and OCB

As discussed earlier in Chapter 1, prior research (e.g., Organ, 1997; Organ & Ryan, 1995) suggests that a general work morale factor is a pivotal determinant of OCB. Furthermore, meta-analytic evidence indicates that the strongest and most robust correlates of both LMX (Gerstner & Day, 1997) and OCB (LePine, Erez, & Johnson, 2002) are affect-laden variables. In view of this evidence and Gerstner and Day’s (1997) observation that LMX offers “a lens through which the entire work experience is viewed” (p. 840), work morale should play a pivotal role in transmitting the effects of LMX on OCB. To test this proposition, the present study postulated that general job satisfaction, measured in terms of overall work satisfaction and specific work and relational facets (e.g., satisfaction with work, and satisfaction with working relationships) should mediate the relationship between LMX and OCB. Furthermore, as evidenced in Stage 3 of Figure
1, LMX was also expected to exert a direct effect on OCB. Below, the paths linking LMX to job satisfaction and job satisfaction to OCB are discussed, followed by a description of the hypothesized direct effect.

**LMX and Job Satisfaction.** Employees in high-quality relationships with their supervisor tend to receive greater attention, support, and feedback from their supervisor, more challenging, rewarding, and higher-responsibility assignments, improved access to work-relevant information, and other special privileges compared to employees in low LMX relationships (e.g., Dansereau, Graen, & Haga, 1975; Graen, Novak, & Sommerkamp, 1982; Liden & Graen, 1980; Liden, Sparrowe, & Wayne, 1997). Insofar as job satisfaction connotes “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976, p. 1304), some of the defining features of LMX may heighten a subordinate’s level of job satisfaction. Indeed, employees in high-quality LMX relationships: “are expected to have more positive attitudes and engage in more positive behaviors than members whose support is limited to what is required in the employment contract” (Liden, Sparrowe, & Wayne, 1997, p. 60).

Several empirical studies have tested this proposition, demonstrating job satisfaction and its facets are among the most robust attitudinal correlates of LMX (Liden et al., 1997; Gerstner & Day, 1997). Studies have revealed that LMX is a strong predictor of overall satisfaction (Dansereau et al., 1975; Graen, Novak, & Sommerkamp, 1982; Vecchio, Griffeith, & Hom, 1988) as well as satisfaction with supervision (Vecchio & Gobdel, 1984) and satisfaction with working relations (satisfaction with supervisor and coworkers; Green, Anderson, & Shivers, 1996). Furthermore, Gerstner and Day (1997)
reported a mean meta-analytic correlation (corrected for measurement unreliability) of .50 between LMX and job satisfaction and .71 between LMX and satisfaction with supervision. Given this empirical evidence and the premise that LMX can be expected to enrich the nature and scope of one’s work, as well as the quality of the relationship with one’s supervisor and colleagues, the following hypothesis was advanced:

**Hypothesis 11**: Subordinate leader-member exchange is positively related to subordinate job satisfaction.

**Job Satisfaction and OCB**. The concept of organizational citizenship behaviour evolved from the job satisfaction literature. In response to the disappointing results regarding the relationship between job satisfaction and job performance, Organ and colleagues (Organ, 1977; Bateman & Organ, 1983; Smith, Organ, & Near, 1983) proposed that job satisfaction predicts OCB, which (unlike task behaviours) is less constrained by situational forces (e.g., available technology) and less reliant on the ability requirements of employees.

Elaborating on this relationship between job satisfaction and OCB, Bateman and Organ (1983) postulated that there are two primary theoretical mechanisms that explain a possible link between job satisfaction and OCB. First, Bateman and Organ (1983, p. 588) posited: “to the extent that a person’s satisfaction results from efforts of organizational officials and such efforts are interpreted as volitional and nonmanipulative in intent, the person will seek to reciprocate those efforts.” Thus, drawing on social exchange theory,
they submit that due to the discretionary nature of OCBs, employees are likely to respond to (reciprocate) favourable treatment by others in the organization with OCBs. Second, citing a series of social psychological experiments (Clark & Isen, 1982; Rosenhan, Underwood, & Moore, 1974; see also: Berkowitz & O'Connor, 1966; Isen, 1970; Isen & Levin, 1972; Levin & Isen, 1975) indicating that prosocial gestures are most likely to occur when a person experiences a “generalized mood state characterized by positive affect”, Bateman & Organ (p. 588) proposed: “to the extent that job satisfaction, as conventionally measured, reflects this positive affective state, it is likely that more satisfied persons display more prosocial, citizenship behaviours”.

Supporting the hypothesized link between job satisfaction and OCB, three meta-analyses have corroborated the job satisfaction - OCB relationship (LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff et al., 2000). Given the conceptual roots of OCB in the job satisfaction literature, coupled with empirical evidence signalling that job satisfaction is an important determinant of OCB, the following was hypothesized:

**Hypothesis 12:** Subordinate job satisfaction is positively related to subordinate organizational citizenship behaviour.

**Direct Effect of LMX on OCB.** Due to the transactional / instrumental elements of LMX relationships and the tendency for certain OCBs to be deemed as part of one’s work role (e.g., Morrison, 1994), a direct effect of LMX on OCB was expected in addition to the hypothesized indirect effect (**hypotheses 11 and 12**). Despite the
theoretical grounds for this indirect effect, rather surprisingly, job satisfaction has been examined as mediator of the LMX – OCB relationship in only one previous study. Podsakoff and MacKenzie (1993) re-analyzed data from Tansky (1993) and found that LMX was associated with perceived fairness, which, in turn, predicted OCB. Job satisfaction, however, mediated the effect of perceived fairness on OCB. More recently, Hackett and Lapierre (2004) employed meta-analytic regression to investigate job satisfaction and organizational commitment as possible mediators of the LMX – OCB relationship. Mediation analyses indicated that job satisfaction and organizational commitment both partially mediate the LMX-OCB relationship (independently and jointly). Job satisfaction, however, emerged as a stronger mediator than organizational commitment, explaining 57% of the shared variance between LMX and OCB. Given this initial evidence suggesting that job satisfaction partially mediates the LMX – OCB relationship and the need to directly test this relationship using more rigorous structural equation modeling methodology, the following hypothesis was proposed:

**Hypothesis 13:** Subordinate leader-member exchange is positively related to subordinate organizational citizenship behaviour.
CHAPTER 3: METHOD

This chapter is comprised of three sections. The first section describes the participants and data collection strategy employed in this research. The second section details the measures used in the study. The final section provides an overview of the data analytic methodology that was used to evaluate the psychometric properties of the study’s measures and test the path model specified in Figure 1.

3.1 Sample and Procedure

The sample was comprised of managers in the Canadian division of a multinational transportation security firm. The firm is one of the largest transportation security companies in the world, and has over 40 offices and approximately 2000 employees across Canada. Data collection was conducted by means of a two-part survey distributed to all managers in the organization. In the first section of the survey, all managers were invited to complete a self-report questionnaire. In the second part of the survey, supervisors of managers in the research sample were asked to complete an OCB rating form (one for each of their subordinates). For their participation in the study, respondents could receive a brief report summarizing their personality profile. In total, survey packages were mailed out to 233 managers. Two follow-up reminders resulted in the return of 189 surveys (81.1% response rate). After removing records with unmatched supervisor – subordinate pairs, 141 dyads remained, comprising the final sample for the study. The sample was 94.7% Caucasian and 75.5% male. The average tenure with the
company was 13.18 years ($sd = 9.26$ years) and the average tenure with their supervisor was 3.39 years ($sd = 4.83$ years).

### 3.2 Measures

The following is a description of the scales used to measure the variables contained in the study. The items comprising each scale are presented in Appendix 2.

**Agreeableness.** Supervisor and subordinate agreeableness were assessed with Goldberg’s (1999a; 1999b) 10-item “Big Five” IPIP scale. Goldberg (1999b) reported an alpha coefficient of .82 for this scale. Sample items include: “Sympathize with others’ feelings” and “Make people feel at ease”. Using a 5-point Likert scale (from “Very Inaccurate” to “Very Accurate”), respondents indicated the extent to which each item accurately described themselves.

**Core Self-Evaluation.** The 12-item Core Self-Evaluation Scale (CSES; Judge, Bono, and Thoresen, 2003) was used to measure this construct. Across four samples, Judge, Bono, and Thoresen (2003) reported a mean alpha coefficient of .84 for the CSES (2 student samples $\alpha = .86$ and .83; 2 field samples $\alpha = .85$ and .83). Scale items include: “When I try, I generally succeed” and “Overall, I am satisfied with myself”. Participants were asked to indicate the extent to which they agreed with each item in accordance with a 7-point Likert scale (from “Strongly Disagree” to “Strongly Agree”).

**Core Self-Evaluation Similarity.** In line with prior research examining the influence of supervisor-subordinate personality and value congruence on LMX (Allinson, Armstrong, & Hayes, 2001; Ashkanasy & O’Connor, 1997; Bauer & Green, 1996; Engle
...Lord, 1997), a difference score index was computed to reflect the level of core self-evaluation similarity for each supervisor–subordinate dyad. To calculate this index, the square root of the sum of squared differences across core self-evaluation items was computed for each supervisor-subordinate dyad (Edwards, 1994; Tisak & Smith, 1994). Accordingly, higher scores on this index indicate lower levels of similarity. While a number of strengths and limitations have been noted regarding difference scores (e.g., Edwards, 1994; Johns, 1981; Tisak & Smith, 1994), the appreciable reliabilities yielded for the CSE Scale (α = .84 subordinates; α = .83 supervisors) employed in this study was expected to minimize potential problems associated with their use (e.g., Edwards, 1994; Johns, 1981).

**Role Ambiguity.** Subordinate role ambiguity was measured using the 6-item Role Ambiguity Scale developed by Rizzo, House, and Litzman (1970). In reviewing the psychometric properties of the Role Ambiguity Scale, Smith, Tisak, and Schmieder (1993) reported alpha coefficients of .73, .80, and .73 across three different organizational samples. Sample items include: “I know what my responsibilities are” and “I know exactly what is expected of me”. Subordinates responded to each item using a 7-point Likert scale (“Strongly Disagree” to “Strongly Agree”).

**Affect Toward Supervisor.** This variable was measured using three items developed by Wayne and Ferris (1990). The items are: “I like my supervisor very much as a person”, “My supervisor is the kind of person one would like to have as a friend”, and “I get along well with my supervisor”. Subordinates were asked to indicate their level
of agreement with each item on a 7-point Likert scale ("Strongly Disagree" to "Strongly Agree").

**Perceived Similarity.** Subordinate perceived similarity was measured using four items adapted from Kristof-Brown, Barrick, and Franke's (2002) Perceived Similarity scale. To reflect the change in the context of assessment, the term “applicant” was replaced with “supervisor” for each item. In addition, a fifth item was added to directly tap perceived personality similarity ("My supervisor and I have similar personalities"). Sample items include: "My supervisor and I have many of the same beliefs and values" and "My supervisor reminds me of myself". Subordinates recorded their agreement-disagreement with each item using a 7-point Likert scale ("Strongly Disagree" to "Strongly Agree").

**Leader-Member Exchange.** Subordinate perceptions of leader-member exchange were assessed with the LMX-7 developed by Graen, Novak, and Sommerkamp (1982). Gerstner and Day (1997) reported a mean meta-analytic alpha coefficient of .89 for the LMX-7. Based on a review of its construct validity, Gerstner and Day (1997) concluded that the LMX-7 "has the soundest psychometric properties of all (LMX) instruments" (p. 827). Sample items in this 7-item measure include: "How well does your supervisor understand your job problems and needs" (response options ranging from “Not at All” to “Always”), “I have enough confidence in my supervisor that I would defend and justify his/her decision if he/she were not present to do so” (response options ranging from “Never” to “Always”), and “How would you characterize your working relationship with
Job Satisfaction. Job satisfaction was measured with four items designed to tap three widely recognized facets of job satisfaction: satisfaction with the work itself, satisfaction with supervision, and satisfaction with coworkers (Dunham, Smith, & Blackburn, 1977; Price & Mueller, 1986; Smith, Kendall, & Hulin, 1969) as well as overall job satisfaction. Subordinates were asked to rate along a 7-point Likert scale their level of agreement / disagreement with the following four items: “Generally speaking, I am satisfied with the kind of work that I do in my job at _____”, “Overall, I am satisfied with the quality of supervision at _____”, “Overall, I am satisfied with my co-workers at _____”, and “Generally speaking, I am very satisfied with my job at ____. Ratings for each item were aggregated to form a composite index of subordinate job satisfaction.

Organizational Citizenship Behaviour. In Part 2 of the survey, subordinate organizational citizenship behaviour was assessed with 15 items drawn from the Organizational Citizenship Behaviour Scale (Posakoff, MacKenzie, Moorman, & Fetter, 1990) and two additional items designed to tap overall OCB. To ensure sufficient coverage of the OCB content domain, three items from each of the dimensions comprising Podsakoff et al.’s (1990) OCB scale (Altruism, Conscientiousness, Sportsmanship, Courtesy, Civic Virtue) were selected for inclusion in the survey. Items were selected based on two criteria: 1. their relevance to managerial positions, and 2. the item loadings reported by Podsakoff et al. (1990). Sample items include: “Is always ready to lend a helping hand to those around him/her” (Altruism); “Believes in giving an
honest day's work for an honest day's pay (*Conscientiousness*); “Is mindful of how his/her behaviour affects other people's jobs” (*Courtesy*); “Attends functions that are not required but help the company image” (*Civic Virtue*); “Always focuses on what's wrong rather than the positive side” (*Sportsmanship-reverse scored*). The two general OCB items are: “Overall, this employee is a good corporate citizen” and “This person makes significant positive contributions to both the social and psychological work environment at ____”. In evaluating each subordinate, supervisors were asked to rate their level of agreement with each statement along a 7-point Likert scale (“Strongly Disagree” to “Strongly Agree”). Supervisor ratings across the 17 OCB items were aggregated to form a composite measure of employee OCB.

**Control Variables.** Supervisor and subordinate work relationship (dyad) tenure, and subordinate organizational tenure, job tenure, education, and age were assessed with single item measures in the survey.

### 3.3 Method of Data Analysis

This study centered on testing a path model that delineates hypothesized relationships among a number of latent constructs depicted in Figure 1. To test this model and each hypothesis specified therein, structural equation modeling (SEM) was applied as the central method of data analysis. In addition to estimating specific path coefficients, SEM enables an assessment of overall model fit and allows simultaneous testing of structural and measurement models. SEM also enables parameter estimation while taking account of random and systematic measurement error.
Following the “two-step” SEM approach recommended by Anderson and Gerbing (1988), data analyses in this study were completed in two stages. In the first stage, psychometric analyses were conducted to examine the reliability and dimensionality of each of the scales. In the second stage, the full path model depicted in Figure 1 was tested. With respect to the first stage, item analyses were conducted involving a review of the item distributions and point-biserial correlations for each scale. Alpha coefficients were also computed to provide estimates of internal consistency for each scale. To verify the dimensionality of the scales used in the study, three sets of confirmatory factor analyses (CFA) were conducted. First, a CFA was employed to verify the distinctiveness of the two personality constructs assessed in the study. Second, in order to establish the distinctiveness of the hypothesized mediating (“process”) variables in the path model and to validate scales that have been slightly modified in the study (e.g., affect toward supervisor, job satisfaction), a CFA incorporating each of the process variables was carried out. Lastly, in light of ongoing debate surrounding the factor structure of OCB, a CFA was conducted on the OCB scale (an abbreviated version of Podsakoff et al.’s OCB measure). Drawing on Organ’s (1988) conceptualization of OCB and earlier construct validation work on the Poskaoff et al. OCB scale (Podsakoff, MacKenzie, Moorman, & Fetter, 1990), a five-factor dimensional structure of OCB (comprised of altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions) was expected to emerge in this study. This hypothesized five-factor model was compared against competing one- (e.g., LePine, Erez, & Johnson, 2002), two- (e.g., Williams & Anderson, 1991), and three- (e.g., Coleman & Borman, 2000) factor measurement models of OCB.
In the second stage of data analysis, structural equation modeling was employed to test the overall fit of the path model and examine individual hypotheses (i.e., paths) specified in the path model. Several scholars (e.g., Bollen, 1989; Thompson, 2000) have recommended using multiple “goodness-of-fit” measures, as no one fit index captures all elements of model fit. Accordingly, the goodness-of-fit indices that were applied in this research are: \( \chi^2 \) test, \( \chi^2 / df \) ratio, root mean square error of approximation (RMSEA), Tucker - Lewis index (TLI), comparative fit index (CFI), Akaike Information Criterion (AIC), and expected cross-validation index (ECVI). These model fit statistics were applied to interpret the overall fit of the proposed model and were used, along with \( \chi^2 \) difference tests, to compare the path model to three competing models.

As illustrated in Figure 1, our baseline model (M\(_1\)) positions LMX as fully mediating the effect of the “Stage 1” dispositional antecedents (subordinate and supervisor agreeableness and core self-evaluation) and the influence of the “Stage 2” variables (perceived similarity, affect toward supervisor, role ambiguity) on employee outcomes (job satisfaction and OCB). Furthermore, in line with Hackett and Lapierre (2004), M\(_1\) specifies that job satisfaction partially mediates the relationship between LMX and OCB.

The first alternative model (M\(_2\)) proposes that LMX does not mediate the relationship between the “Stage 1” dispositional antecedents and “Stage 2” variables in relation to the employee outcomes. Drawing on research suggesting that role ambiguity (e.g., Jackson & Schuler, 1985; Rizzo, House, & Lirtzman) and work-related affect (e.g., Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003; Judge & Ilies, 2004) are strong...
determinants of job satisfaction, $M_2$ specifies direct effects of role ambiguity and affect toward supervisor on job satisfaction.

The two remaining alternative models ($M_3$ and $M_4$) were tested against the baseline model ($M_1$) to more fully examine whether job satisfaction partially mediates the effect of LMX on OCB. Therefore, in $M_3$, the mediating effect of LMX is retained from $M_1$, however, job satisfaction was specified as playing no role in mediating the effect of LMX. In $M_4$, the mediating effect of LMX was retained from $M_1$, however, job satisfaction was specified as a full mediator of the LMX – OCB relationship.
CHAPTER 4: RESULTS

This chapter reports results from the data analysis, including validation of the measures used in the study, estimation of the hypothesized research model (and comparisons to alternative models), and testing of the hypotheses. The results of scale validation are presented first, followed by results relating to the structural model estimation and individual hypothesis tests. 4

4.1 Confirmatory Factor Analyses

To test the construct validity of the measures employed in the study, CFAs were conducted on three sets of constructs: 1. the two personality attributes (agreeableness, core self-evaluation), 2. the hypothesized mediating ("process") variables proposed in the path model (perceived similarity, affect toward supervisor, role ambiguity, leader-member exchange, job satisfaction), and 3. organizational citizenship behaviour.

4.1.1 Personality

To test the dimensionality and discriminant validity of the two personality scales, CFAs were conducted comparing the hypothesized two-factor model and two competing models: the null (independence) model, and a one-factor model. The hypothesized two-factor model specified agreeableness and core self-evaluation as distinct but correlated

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4 Before conducting these analyses, data were inspected for: univariate outliers (standardized score criterion); multivariate outliers (Mahalanobis distance test); and multivariate normality (skewness and kurtosis statistics). This scan of the data supported the assumption of multivariate normality and failed to detect univariate or multivariate outliers.
factors. The null (independence) model assumed that each of the two sets of personality items were unrelated. The one-factor model stipulated that all personality items load on one latent "overall personality" factor. Results for the two-factor model are reported in Table 1. Goodness of fit indices for this two-factor model reflected a good fit to the data ($\chi^2 = 340.88$, $df = 208$; $TLI = .92$; $CFI = .93$; $RMSEA = .070$). The two-factor model produced a better $\chi^2 / df$ ratio (1.64) than both the independence (8.29) and one-factor (4.01) models. Other comparative fit indices ($AIC$, $ECVI$) also indicate that the two-factor model represents the best fit to the data. A $\chi^2$ difference test comparing the two-factor to the one-factor model revealed a statistically significant difference in favour of the two-factor model ($\chi^2$ difference = 498.03, $df$ difference = 1, $p = .00$). Given this evidence supporting the discriminant validity of the two personality scales, coupled with item-level results demonstrating that each item in the two-factor model loads significantly onto its corresponding personality factor (item loadings ranging from .35 to .72), these results support the construct validity of the agreeableness and core self-evaluation measures used in the study.

4.1.2 “Process” Variables

To examine the dimensionality and distinctiveness of each of the hypothesized process variables proposed in the path model, a CFA was conducted on five constructs: perceived similarity, affect toward supervisor, role ambiguity, leader-member exchange, and job satisfaction. The proposed five-factor CFA generated acceptable model fit statistics ($\chi^2 = 484.42$, $df = 265$; $TLI = .96$, and $CFI = .97$; $RMSEA = .080$). Item-level
analyses indicated, however, that one role ambiguity item (i.e., item RA3: "I know that I have divided my time properly") did not have a significant loading on the role ambiguity factor (factor loading = .12, p > .05, \( r^2 = .01 \)). In light of this low factor loading and the added random measurement error associated with this item (coefficient alpha for role ambiguity scale with item = .78; coefficient alpha without item = .83), item RA3 was removed from subsequent analysis. Table 2 reports CFA results for the five-factor model with item RA3 removed. Goodness-of-fit statistics indicate this revised five-factor model provided good overall fit to the data (\( \chi^2 = 459.27, df = 242; TLI = .96; CFI = .97; RMSEA = .083 \)). Compared to an alternative one-factor model in which all items measuring the process variables were designated to load on one overall factor (\( \chi^2 = 1088.87, df = 252; TLI = .89; CFI = .90; RMSEA = .160 \)), the five-factor model furnished a significantly better fit to the data (\( \chi^2 \) difference = 629.60, \( df \) difference = 10, p = .00). Likewise, the baseline five-factor model provided a significantly better representation of the data than an alternative four-factor model (\( \chi^2 = 550.48, df = 246; TLI = .95; CFI = .96; RMSEA = .098 \)), which merged LMX and affect into one factor (\( \chi^2 \) difference = 91.21, \( df \) difference = 4, p = .00). In each of these model comparisons, comparative fit indices (e.g., AIC and ECVI) also signalled that the five-factor model represents a substantially better fit to the data than the alternative models. In concert, results from these CFAs supported the unidimensionality and distinctiveness of the scales used to measure each of the five hypothesized process variables.

4.1.3 Organizational Citizenship Behaviour
In accordance with research suggesting that OCB should be conceptualized and tested as a multi-dimensional latent variable (e.g., Law, Wong, & Farh, 1998; Zhong & Farh, 2003), second-order CFAs were conducted comparing the baseline five-factor model (comprised of altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions) with alternative one-factor (overall “OCB”; Lepine, Erez, & Johnson, 2002), two-factor (OCB-Organization; OCB-Individual; William & Anderson, 1991), and three-factor (OCB-Organization, OCB-Interpersonal, OCB-Job / Task; Coleman & Borman, 2000) solutions. Results for the five-factor measurement model are reported in Table 3. Goodness-of-fit indices for the five-factor model reflected acceptable levels of fit ($\chi^2 = 161.02$, $df = 85$; $TLI = .97$; $CFI = .98$; $RMSEA = .083$).\footnote{The two general OCB items (gocb1, gocb2) were not included in the CFA analyses due to potential confounding effects on the model comparisons. When added to the 5-factor model as a sixth (general) dimension of OCB, model fit statistics were comparable and marginally better than those for the 5-factor model ($\chi^2 / df = 1.76$, $TLI = .97$, and $CFI = .98$; $RMSEA = .077$).} At the item level, each of the indicators loaded on their hypothesized OCB dimension, with most loadings falling in the high range (factor loadings = .63 to .94). As illustrated in Table 4, the five-factor model yielded a demonstrably lower $\chi^2 / df$ ratio (1.89) than the alternative three-factor (5.57), two-factor (5.68), or one-factor (6.32) models. Likewise, all comparative fit indices, including the $CFI$, $RMSEA$, $AIC$, and $ECVI$, evinced better fit for the five-factor model. Chi-square difference tests corroborate these findings. Significant chi-square differences were observed between the baseline five-factor model and each alternative model, favouring the five-factor model by a substantial margin in
each case (e.g., $\chi^2$ difference between five-factor and one-factor models = 407.79, $df$ difference = 5, $p < .001$).

Overall, results from these CFAs provided support for the hypothesized five-factor measurement model of OCB. Items loaded on their expected OCB dimension, and each of the five OCB dimensions were strongly related to overall OCB (factor loadings: .95 altruism, .89 conscientiousness, .80 courtesy, .70 civic virtues, .66 sportsmanship). The interfactor correlations between OCB dimensions provided further evidence of the construct validity of the five-factor model of OCB. Although ranging from moderate to high in magnitude (see Table 3; range of correlations: $r = .46$ civic virtue and sportsmanship to $r = .84$ altruism and conscientiousness), the significant variation in the correlations between OCB dimensions suggested that the five dimensions form distinctive components of OCB. All told, these findings are consistent with prior content and construct validation work on the Organizational Citizenship Behavior (OCB) Scale (Podsakoff, MacKenzie, Moorman, & Fetter, 1990), and indicate that the abbreviated OCB scale used in this study represents a construct valid measure of OCB.

4.2. Structural Model Estimation

In this section, I report the results of empirical estimation of the proposed path model depicted in Figure 1. I begin with an overview of the zero-order correlations, descriptive statistics, and alpha coefficients for the variables in the study. I then present results relating to the proposed structural model, followed by a more detailed analysis of results from individual hypothesis tests.
4.2.1 Zero-order Correlations

Zero-order correlations, means, standard deviations, and alpha reliability coefficients for all study variables are exhibited in Table 5. Table 5 shows that alpha coefficients were moderate to high, ranging from .77 (job satisfaction) to .94 (overall OCB). As illustrated in Table 5, apart from dyad tenure (length of relationship with supervisor), employee demographic variables (age, gender, organizational tenure, job tenure) were not significantly associated with the variables in the model. Given these analyses and the desire not to remove construct-relevant variance (i.e., variance integral to the development of LMX) from the SEM analysis, demographic variables were not included as control variables in the estimation of the structural model. Accordingly, a covariance matrix specifying zero-order relationships between variables was used in estimating the structural model.

4.2.2 Estimation of the Hypothesized Model

Using maximum likelihood estimation in LISREL 8.54, SEM analyses were conducted to compute the overall fit and parameter estimates of the hypothesized and competing structural models. To correct for measurement error in these analyses, common factor loadings in the lambda Y matrix were fixed to the product of the reliability (alpha coefficient) and standard deviation (Kelloway, 1998). The standardized path coefficients, standard errors, and t-values for all structural paths in the hypothesized path model are presented in Table 6. Also presented in Table 6 are coefficients of
determination ($R^2$) for each dependent variable. As shown in Table 6, all goodness-of-fit indices demonstrate that the hypothesized model furnished a good fit to the data ($\chi^2 = 56.79, df = 32; TLI = .94; CFI = .96; RMSEA = .075$).

Table 7 presents model fits statistics for the baseline and comparison models. Model fit statistics indicated that neither $M_2 (\chi^2 = 153.54, df = 27; TLI = .47; CFI = .74; RMSEA = .184)$ nor $M_3 (\chi^2 = 90.06, df = 33; TLI = .87; CFI = .92; RMSEA = .112)$ fit the data well while results for $M_4$ suggested some degree of fit ($\chi^2 = 68.17, df = 33; TLI = .92; CFI = .95; RMSEA = .088$). Chi-square difference tests comparing $M_1$ to $M_4$ indicated, however, that $M_1$ provided a significantly better fit to the data (e.g., $\chi^2$ difference = 11.38; $df$ difference = 1, $p < .001$). In light of these results, the hypothesized model ($M_1$) was retained and deemed to provide the best representation of the data.\footnote{In addition to these findings, separate SEM analyses supported the fit of the structural model for each of the 5 dimensions of OCB. This evidence, the high alpha coefficient obtained for OCB in this study (.94), and prior research suggesting OCB should be studied as a higher-order construct (Law, Wong, & Farh, 1998; Zhong & Farh, 2003) supports the use of an aggregate OCB measure in this study.}

In summary, results reported in Tables 6 and 7 provided strong support for the hypothesized path model. The hypothesized model appeared to reflect a good overall fit to the data (Table 5). Furthermore, comparisons with three alternative models (Table 6) confirmed the fit of the hypothesized model, and substantiated the specific pattern of mediation delineated in this model. Results from these model comparisons suggested: (a) LMX mediates the relationship between the dispositional and core process variables (e.g., perceived similarity, role ambiguity, affect toward supervisor) and job satisfaction; and (b) job satisfaction, in turn, partially mediates the influence of LMX on OCB. Given this...
empirical support for the proposed structural model, I will now provide a more detailed analysis of parameter estimates and study hypotheses advanced in the estimated model.

4.2.3 Tests of Study Hypotheses

Parameter estimates and results of significance tests for the study hypotheses are reported in Table 6. These results are also graphically depicted in Figure 2. In accordance with the ordering of the hypotheses, I first present results for the hypotheses delineated in stage 2 of Figure 1 ("Core Foundation of LMX"), then results for stages 1 ("Dispositional Antecedents") and 3 ("Employee Outcomes"), respectively.

4.2.3.1 Core Foundation of LMX

With respect to the direct antecedents of LMX, I hypothesized that subordinate affect toward their supervisor would relate positively to perceptions of LMX with their supervisor (hypothesis 1) while subordinate role ambiguity would relate negatively to LMX (hypothesis 2). Both hypotheses were empirically supported. Subordinate affect toward their supervisor was significantly and positively associated with LMX ($B = .76, p < .01$) and subordinate role ambiguity was significantly and negatively related to LMX ($B = -.30, p < .01$).

In addition to these direct predictors of LMX, an indirect effect of perceived similarity on LMX through these two immediate LMX antecedents was expected. Thus, it was hypothesized that subordinate perceived similarity to their supervisor would be significantly and positively related to subordinate affect toward their supervisor.
(hypothesis 3) and negatively related to subordinate role ambiguity (hypothesis 4). Results supported these hypotheses. Path estimates showed a significant positive relationship between perceived similarity and affect toward supervisor \((B = .73, p < .01)\) and a significant negative relationship between perceived similarity and role ambiguity \((B = -.43, p < .01)\). All told, results from these analyses in Stage 2 of the path model suggested that perceived similarity is a direct predictor of subordinate affect toward supervisor and role ambiguity, and these two variables, in turn, directly predict LMX.

### 4.2.3.2 Dispositional Antecedents

As illustrated in Stage 1 of Figure 1, subordinate and supervisor agreeableness were hypothesized to predict subordinate affect toward their supervisor (hypotheses 5 and 6) while subordinate and supervisor core self-evaluation were hypothesized to predict role ambiguity (hypotheses 7 and 8). As shown in Figure 2, both subordinate and supervisor agreeableness were significantly and positively related to subordinates’ affect toward their supervisor (subordinate agreeableness – affect toward their supervisor: \(B = .17, p < .05\); supervisor agreeableness – affect toward their subordinate supervisor: \(B = .14, p < .05\)), lending support to hypotheses 5 and 6. Likewise, substantiating hypotheses 7 and 8, both subordinate and supervisor core self-evaluation were significantly negatively associated with subordinate role ambiguity (subordinate core self-evaluation – role ambiguity: \(B = -.40, p < .01\); supervisor core self-evaluation – role ambiguity: \(B = -.20, p < .05\)).
Furthermore, it was postulated in Stage 1 of the proposed model that, in addition to the indirect effect of subordinate core self-evaluation on job satisfaction (via role ambiguity and LMX), subordinate core self-evaluation would exert a direct effect on job satisfaction (hypothesis 9). Consistent with this hypothesis, results revealed that subordinate core self-evaluation was significantly directly related to job satisfaction ($B = .38, p < .01$).

Finally, it was anticipated that supervisor–subordinate similarity on core self-evaluation would indirectly influence the core predictors of LMX via perceived similarity (hypothesis 10). In line with this hypothesis, there was a significant positive path coefficient between similarity in supervisor–subordinate core self-evaluation and subordinate perceived similarity ($B = .29, p < .01$).  

In summary, significance tests relating to each of the paths specified in the structural model supported each of the hypotheses specified in Stage 1 of the model. As predicted, subordinate and supervisor agreeableness directly influenced affect toward supervisor, while subordinate and supervisor core self-evaluation directly influenced role ambiguity. In addition to a direct effect on role ambiguity, subordinate core self-evaluation exerted a direct effect on job satisfaction. Lastly, results relating to the final hypothesis in Stage 1 indicated that supervisor–subordinate core self-evaluation similarity

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$^7$ Supervisor–subordinate core self-evaluation similarity was computed via a congruence (difference score) index, with higher differences between supervisor and subordinate scores on core self-evaluation reflecting less similarity. Accordingly, the reverse sign of the correlation coefficient between core self-evaluation similarity and perceived similarity was used in interpreting the direction of this relationship.
indirectly influenced the core antecedents of LMX (affect and role ambiguity) through perceived similarity.

4.2.3.3 Employee Outcomes

In stage 3 of the structural model, it was postulated that LMX would be directly related to OCB as well as indirectly related to OCB through job satisfaction. As shown in Table 6, parameter estimates in the structural model supported the hypothesized indirect and direct effects of LMX on OCB. In terms of the indirect effect, LMX was significantly and positively related to job satisfaction ($B = .51, p < .01$), and job satisfaction, in turn, was significantly and positively related to OCB ($B = .25, p < .05$). Complementing this indirect effect, there was also a significant positive relationship between LMX and OCB ($B = .35, p < .01$). Cumulatively, these results corroborated earlier model fit comparisons (Table 7) indicating that a partially mediated model of the LMX – OCB relationship provided the best fit to the data. In total, over 53% of the shared variance between LMX and OCB is attributable to the mediating effect of job satisfaction.
CHAPTER 5: DISCUSSION

5.1 Overview of Findings

The primary purpose of this study was to explore the process mechanisms linking supervisor and subordinate personality traits to LMX and OCB. While prior research has established that certain personality attributes predict LMX quality and OCB, very little research has systematically examined the means by which personality traits influence these two outcomes. Moreover, very little research has investigated the effects of the personality of both supervisor and subordinate on LMX or OCB. Drawing on Organ and Ryan's proposition that personality traits exert an indirect effect on OCB via "a generalized work morale factor", coupled with research suggesting LMX plays a significant role in shaping these perceptions, this study proposed that supervisor and subordinate personality traits would influence OCB via their effects on LMX. Specifically, it was proposed that supervisor and subordinate agreeableness and core self-evaluation would predict LMX quality via two core antecedents of LMX: role ambiguity and affect toward one's supervisor. Furthermore, it was postulated that supervisor–subordinate similarity on core-self evaluation would influence role ambiguity and affect toward one's supervisor via subordinate perceptions of similarity. Finally, anchored in the premise that work morale is a core determinant of OCB and may transmit the effects of personality (Organ & Ryan, 1995), job satisfaction was tested as a mediator of the LMX–OCB relationship.
Results from the model estimation procedure and structural model comparisons supported the proposed path model depicted in Figure 1. Consistent with the theoretical foundation of this proposed model, results indicated: (a) LMX fully mediated the effects of the dispositional antecedents (e.g., personality) and stage two variables (role ambiguity, affect toward supervisor, perceived similarity) on job satisfaction and OCB, and (b) job satisfaction partially mediated the effects of LMX on OCB. Overall, the hypothesized model wielded substantial explanatory power explaining 86% of the variance in LMX and 29% of the variance in OCB.

In response to debate regarding the relative importance of affective and role definition processes in the development of LMX, a key contribution of this study lies with the observed effects of subordinates' interpersonal affect toward their supervisor, and subordinates' role ambiguity, on LMX. As predicted, this study supported the role-related and affective underpinnings of LMX as postulated by Graen et al. (e.g., Graen & Uhl-Bien, 1995; Uhl-Bien et al., 2000) and Liden et al. (e.g., Liden et al., 1997; Liden et al., 1993), respectively. Given that interpersonal affect (53%) explained markedly more variance in LMX than role ambiguity (9%), perhaps affective processes exert more of an influence on subordinate reported LMX quality than do role perceptions. While additional research must examine the nature of these effects, it might be that subordinate role perceptions and behaviour have a critical influence on LMX quality at formative stages of the leader-subordinate relationship (when the subordinate is asked to carry out initial task assignments and the supervisor is forming an impression of the subordinate's competence); conversely, interpersonal affect may play a more pivotal role in the later
stages of the relationship. Results from a longitudinal study by Liden et al. (1993) are consistent with this view. They reported that supervisory ratings of employee performance were associated with LMX only at early stages of the relationship, whereas affect was related to LMX assessments across time periods.

With respect to the dispositional antecedents tested in the study, as predicted, both subordinate and supervisor agreeableness and core self-evaluation were significantly associated with subordinate affect toward their supervisor and role ambiguity, respectively. This study extends past research exploring the personality predictors of LMX by indicating that personality traits may influence LMX through different developmental processes. Subordinates higher in agreeableness reported higher levels of affect toward their supervisor perhaps partly owing to their generally more positive feelings toward others, but also likely as a function of their own likeability, which, may facilitate more favourable emotional transactions with their supervisor (Rafaeli & Sutton, 1987). Likewise, supervisors higher in agreeableness received higher ratings of interpersonal affect from their subordinates, perhaps as a function of their greater attention to the socioemotional needs of their followers (individualized consideration).

Contrary to these results, however, supervisor and subordinate core-self evaluation was indirectly related to LMX via role ambiguity. This finding suggests that perhaps the principal means by which supervisor and subordinate core self-evaluation influence LMX is through improved role definition. Given the motivational and task-related underpinnings of core self-evaluation (e.g., Bono & Judge, 2003), subordinates high in core self-evaluation may not only elicit greater task delegation from their
supervisor (by projecting higher levels of initiative and competence on the job), but they may also engage in more frequent role communications and info-seeking behaviours with their supervisor. A recent study by Janssen and VanYperen (2004) seems to support this view. Employees with a mastery goal orientation (i.e., those who strive to develop their competence, skills, and abilities while pursuing objectives) tended to form stronger exchange relationships with their supervisor in part due to their desire to discuss and learn how to best deal with emerging problems and opportunities in their jobs. Together, results from this study and Janssen and VanYperen signal that employees possessing higher levels of work motivation and self-confidence may spend more time with their supervisor discussing work-related issues and clarifying appropriate performance behaviours.

Findings from this study also suggest that leaders high in core self-evaluation may alleviate subordinate role ambiguity by enacting leader behaviours that more fully engage subordinates in the “role-making” process. Thus, contrary to agreeable supervisors who may have a greater propensity to display leader behaviours associated with the individualized consideration dimension of transformational leadership, supervisors with higher levels of core self-evaluation may be more inclined to exhibit a task-oriented leader style characterized by the use of initiating structure behaviours (e.g., delegating work to subordinates, assisting subordinate’s in developing performance objectives, providing feedback to subordinates regarding their performance) (Yukl, 2002). Given the importance of task-oriented leader behaviour to effective role-making (Graen & Scandura, 1987; Uhl-Bien & Graen, 1995), the greater use of initiating structure
behaviours on the part of leaders higher in core self-evaluation may explain the relationship between supervisor core self-evaluation and subordinate perceptions of role ambiguity.

In a meta-analysis of the relationship between the two Ohio State leadership behavioural dimensions of consideration and initiating structure, and specific work outcomes, Judge, Piccolo, and Ilies (2004) found both leadership dimensions predicted various work outcomes. Leader consideration, however, was more strongly related to measures of follower satisfaction (e.g., satisfaction with leader, job satisfaction, motivation), while leader initiating structure was more strongly related to indicators of leader performance (e.g., leader job performance, group-organization performance). Results from the present study suggest that leader agreeableness and core self-evaluation influence LMX through mechanisms comparable to consideration and initiating structure, respectively. These results, in conjunction with those of Judge et al. (2004), call for more research into the relationship between leader personality traits and behaviours. Research is needed into how these traits and behaviours impact the nature and complexion of the LMX relationship (e.g., affective vs. task emphasis), and how relationships with different affective and task emphases may influence various subordinate attitudes and behaviours. Likewise, to the extent that affect and role ambiguity appear to transmit the effects of subordinate agreeableness and core self-evaluation on LMX, more research probing the socioemotional and task processes that mediate the relationship between personality variables and LMX is warranted.
In addition to the direct effects of supervisor and subordinate agreeableness and core-self evaluation on the core antecedents of LMX, supervisor-subordinate similarity on core self-evaluation was found to exert an indirect effect on the core LMX antecedents via subordinate perceptions of similarity to their supervisor. Supervisor-subordinate core self-evaluation similarity was significantly associated with subordinate perceptions of similarity ($B = .29$), which in turn, predicted subordinate affect toward their supervisor ($B = .73$) and role ambiguity ($B = -.43$). Contrary to prior studies which have tended to adopt either affective or role-related perspectives on the relationship between personality similarity and LMX, these results suggest that both affective (i.e., “similarity-attraction”) and role-related (i.e., “role-making”) mechanisms may explain the relationship between interpersonal similarity and LMX. These data also reinforce earlier research suggesting that one’s self-concept provides a central frame of reference in perceptions of interpersonal similarity (e.g., Catrambone, Beike, & Niedenthal, 1996; Markus, Smith, & Moreland, 1985).

While these findings point to the influence of both relational and perceived similarity on LMX, it appears that perceptions of similarity may be a more proximal determinant of LMX than actual similarity. A recent study by Maslyn and Uhl-Bien (2001) seems to support this view. Maslyn and Uhl-Bien (2001) found that supervisor and subordinate perceptions regarding the balance of effort expenditure in the relationship was a key predictor of relationship quality. One’s own higher effort in conjunction with lower perceived effort by the dyad partner was associated with unmet expectations and lower reports of LMX. Taken together, results from this study and Maslyn and Uhl-Bien
(2001) underscore that motivational factors may play a key role in shaping LMX. They also suggest, however, that higher motivation will not optimize LMX unless this higher level of motivation is perceived to be shared by both dyad members.

Results from this study partly substantiate Graen’s (2003) contention that supervisor−subordinate similarity on self-esteem / self-concept clarity provides the optimal configuration for improving LMX. Graen (2003) suggests that need fulfillment and social identification processes play an important role in explaining the effects of member self-esteem / self-concept on supervisor-subordinate relationships involving transformational leaders. Likewise, recently, Shamir and colleagues (Howell & Shamir, 2005; Kark & Shamir, 2003) have argued that follower identification processes are influenced by follower self-concept clarity and may produce fundamentally different types of relationships involving charismatic leaders ("personalized" or "socialized"). Our results with respect to the relationship between core self-evaluation similarity and LMX (including the importance of both affective and role definition processes in mediating this effect), coupled with recent research indicating that social identification processes play a key role in driving leader-member relationship dynamics (e.g., Engle & Lord, 1997; Howell & Shamir, 2005; Kark & Shamir, 2003; Lord, Brown, & Frieberg, 1999; Lord & Smith, 1999) suggest that future research should inspect the social identification processes underlying LMX, and the role of subordinate and supervisor personality traits in influencing these processes.

Turning to results regarding Stage 3 in the model, LMX had both a direct effect on OCB as well as an indirect effect via job satisfaction. This finding supports the
proposition that job satisfaction is a partial mediator of the LMX – OCB relationship. In addition to employing more rigorous analytic procedures, this study augments results reported by Hackett and Lapierre (2004) by demonstrating that job-related affect (work morale) explains unique variance in the LMX – OCB relationship beyond dispositional affect (measured in terms of two affectively-laden personality traits from both the supervisor and subordinate’s perspective). This latter finding reinforces the argument that work morale is a direct precursor to OCB and transmits the effects of dispositional variables on OCB.

Although indicating that (a) work morale plays a vital role in mediating the effects of personality on OCB and (b) LMX directly contributes to work morale, results from this study also signal that LMX accounts for unique variance in OCB beyond this “work morale” factor. This finding suggests that instrumental or transactional components of the exchange process may play an integral role in cultivating employee OCB. Specifically, employees may perceive various OCBs to be formally required within their work role (Morrison, 1994), and may feel obligated to respond to (reciprocate) supervisor instrumental / transactional behaviour with certain OCBs. To advance our understanding of the linkage between LMX and OCB, future research should explore whether different employee personality traits and types of LMX relationships (affective or task-based) influence the breadth with which employees define their work role (i.e., amount of OCB in employee role definitions).

5.2 Practical Implications
This study provides practical implications for both individuals and organizations. With respect to individuals, this study suggests that the more an employee contributes to the quality of the relationship with their supervisor, whether through facilitating affective bonding or through clarifying one’s role, the more he/she is likely to experience job satisfaction and to receive favourable supervisory evaluations with respect to OCB.

The study also suggests two principal practical implications for the organization. First, since higher levels of LMX are associated with heightened employee work morale and OCB, organizations should invest in LMX training for their managers and supervisors. Contrary to prior LMX training interventions (e.g., Graen, Novak, & Sommerkamp, 1982), however, our results underscore that LMX-strategy / skill development activities should target both the role-making and affective components of LMX. Second, our results alert organizations to the potential value of including personality measures in their leader and employee selection systems. Specifically, they suggest that traits such as agreeableness and core self-evaluation may predict not only employee job satisfaction, but also LMX and OCB. Although representing a shift from the traditional person-job match selection paradigm, these findings support the adoption of a relationship-based approach to employee selection (Uhl-Bien et al., 2000) and suggest organizations should consider introducing measures of personality traits and interpersonal fit into their selection systems.

5.3 Limitations
Despite the methodological strengths of this study (e.g., data collection from different sources, high response rate, rigorous data analytic procedures), the study contains certain limitations. Although supervisors provided ratings of employee OCB and self-ratings of personality, subordinates self-reported on personality and on various perceptual measures. Thus, one of the primary limitations of this study is observed correlations among the variables self-reported by subordinates are susceptible to common method variance. It should be noted, however, that one of the central objectives of this study was to explore the perceptual processes that mediate the relationship between personality and OCB; therefore, examining the interrelations between employee perceptual variables was a necessary feature of the study. Nevertheless, statistical analyses suggested that common method variance exerted a minimal, if not negligible effect on parameter estimates. Although common method variance can not be ruled out based on these analyses alone, a confirmatory factor analysis incorporating each of the subordinate personality and perceptual variables substantiated the discriminability of these scales and failed to uncover any evidence of a common method factor.

A second shortcoming of this study is the cross-sectional nature of the research. This prohibits definitive casual inferences regarding the relationships in the estimated structural model. For example, it is possible that OCB may cause or be reciprocally related to LMX. While there is a strong theoretical basis for the direction of causality proposed in the model (and past research has modelled OCB as an outcome of LMX – Hackett, Farh, Song, & Lapierre, 2004; Podsakoff, 2000), future longitudinal or
experimental research designs are required for more definitive conclusions regarding the causal direction of these relationships to be drawn.

A final limitation of the study relates to its generalizability. Although conducted in a field setting and enlisting participants from across Canada, the study was confined to one organization and industry. To establish the external validity of these findings, future research should investigate the relations tested in this study in different organizations and industries.

5.4 Conclusion and Future Directions

Overall, this study responds to the need for more theoretically-grounded research that examines the complex relations between personality, LMX, and OCB. Results indicated that three “process” variables integral to LMX development (subordinate perceived similarity, role ambiguity, and affect toward their supervisor) mediate the effects of leader and follower personality traits on LMX. Despite supporting both affective and role definition process explanations for LMX development, this study suggests that various personality traits may exert differential effects on the affective and role definition processes underlying relationship development. Complementing these findings, results from this study indicate that both LMX and work morale play central roles in driving employee OCB and transmitting the effects of leader and subordinate personality on OCB. Taken together, these results substantiate the proposition that personality traits indirectly influence OCB via a “generalized work morale” factor (Organ & Ryan, 1995) and suggest that LMX is a key lynchpin in this process.
This study highlights a number of promising avenues for future research. First, insofar as both affective and role definition processes appear to foster LMX development, to augment our knowledge base regarding how personality traits influence LMX development, researchers should explore the specific trait expressive features (Tett & Burnett, 2003) of high LMX relationships and relationships that may differ in terms of their affective and task orientations.

Furthermore, while recently there has been a burgeoning literature exploring the emotional dynamics underlying workplace attitudes and behaviour (e.g., Ashforth & Humphrey, 1995; Ashkanasy, Hartel, & Zerbe, 2000; Brief & Weiss, 2002; Lord, Klimoski, & Kanfer, 2002; Payne & Cooper, 2001; Weiss & Cropanzano, 1996), considerable work remains to be done on the nature of the affective processes that fuel LMX development. Research investigating the effects of individual difference variables such as emotional intelligence (e.g., Mayer, Salovey & Caruso, 2000; Salovey & Mayer, 1990) and perspective-taking (e.g., Kuhnert & Lewis, 1987; Russell & Kuhnert, 1992) on LMX may provide added insight into the nature of these affective processes. Given the importance of interpersonal trust in the affective bonding process (Brower, Schoorman, & Tan, 2000; Mitchell & Uhl-Bien, 2004), additional study of the formation of affect-based trust in leader-member relationships should shed light on the affective processes that drive LMX.

Although the present study focussed on the impact of supervisor – subordinate similarity on LMX, future research should determine whether various forms of supervisor – subordinate dissimilarity may predict LMX quality. Drawing on interpersonal
interaction theory and the principle of complementarity (Kiesler, 1983), Glomb and Welsh (2005) recently found that supervisor–subordinate dissimilarity on the personality dimension of control is associated with subordinate’s satisfaction with their supervisor: specifically, subordinates reported higher levels of satisfaction with their supervisor when the supervisor (relative to the subordinate) was significantly higher on control. Grounded in theoretical frameworks such as interpersonal interaction theory, future studies should examine the role of complementarity (as opposed to similarity) in LMX and ascertain whether certain supervisor–subordinate personality and value differences may positively impact LMX quality. To the extent that extreme levels of various personality traits (e.g., extraversion, agreeableness, conscientiousness) may have negative effects on employee and supervisor affective and role-related behaviour, future research should also examine possible curvilinear relations between dyad member personality traits and LMX.

Finally, although this study investigated specific cognitive, affective, and perceptual processes linking the three individual and dyadic components of social capital (personality, LMX, and OCB), further empirical work is needed exploring how these variables influence social capital at the group and organization levels. Insofar as this study suggests that LMX mediates the effects of supervisor and subordinate personality traits on OCB, research examining the interface between personality, OCB, and other social exchange constructs (e.g., coworker exchange; Sherony & Green, 2002) may provide additional insight into the nature of relationship building in organizations. Despite encouraging findings from this study, however, social exchange processes should not be regarded as the only platform for the development of OCB (Zellars & Teppar,
2003). Future research should examine predictors and process mechanisms underlying OCB that are not directly associated with social exchange. Studies adopting a functionalist approach (e.g., Penner, Midili, & Kegelmeyer, 1997) aimed at identifying and explaining the core needs / functions (e.g., value-expressive, ego-defensive) that cultivate OCB may be particularly valuable in this regard.
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member exchange as a mediator of the relationship between transformational
leadership behavior and followers’ performance and organizational citizenship
behavior: Test of a structural equation model. *Academy of Management Journal*. 


Figure 1: Hypothesized Path Model of the Personality - Organizational Citizenship Behaviour Relationship

- Subordinate CSE
- Supervisor CSE
- Supervisor - Subordinate CSE Similarity
- Subordinate Agreeableness
- Supervisor Agreeableness
- Role Ambiguity
- Perceived Similarity
- Leader-Member Exchange
- Affect Toward Supervisor
- Job Satisfaction
- OCB

Stage 1: Dispositional Antecedents
Stage 2: Core Foundation of LMX
Stage 3: Employee Outcomes
Figure 2: Path Coefficients for Hypothesized Model of the Personality - Organizational Citizenship Behaviour Relationship

Stage 1: Dispositional Antecedents

Stage 2: Core Foundation of LMX

Stage 3: Employee Outcomes

* = all structural coefficients significant at $p < .05$
Table 1: Confirmatory Factor Analysis of Personality Variables: 2-Factor Model

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<td>( \chi^2 / df = 1.64 )</td>
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<td>(ECVI for 1 factor model = 7.19)</td>
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1. Agreeableness

- AGR1: \( .41^* \), 16
- AGR2: \( .67^* \), .45
- AGR3: \( .33^* \), .11
- AGR4: \( .72^* \), .52
- AGR5: \( .70^* \), .49
- AGR6: \( .35^* \), .12
- AGR7: \( .59^* \), .35
- AGR8: \( .54^* \), .29
- AGR9: \( .61^* \), .37
- AGR10: \( .55^* \), .30

2. Core Self-Evaluation

- CSE1: \( .59^* \), .35
- CSE2: \( .63^* \), .40
- CSE3: \( .41^* \), .17
- CSE4: \( .64^* \), .41
- CSE5: \( .44^* \), .19
- CSE6: \( .52^* \), .27
- CSE7: \( .69^* \), .48
- CSE8: \( .69^* \), .48
- CSE9: \( .58^* \), .34
- CSE10: \( .53^* \), .28
- CSE11: \( .40^* \), .16
- CSE12: \( .70^* \), .49

* = \( p < .05 \)
Table 2: Confirmatory Factor Analysis of “Process” Variables in Proposed Path Model: 5-Factor Measurement Model

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<td>PS3</td>
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<td>PS5</td>
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2. Affect Toward Supervisor

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3. Role Ambiguity

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4. Leader-Member Exchange

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<td>LMX3</td>
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<td>LMX7</td>
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5. Job Satisfaction

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<tr>
<td>JS4</td>
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* = p < .05
Table 3: Second-Order Confirmatory Factor Analysis of OCB: 5-Factor Model

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<tr>
<td>SP</td>
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* = p < .05

χ² = 161.02, df = 85, p = .00
χ² / df = 1.89
RMSEA = .083
TLI = .97
CFI = .98
AIC = 231.02
(AIC for 1 factor model = 628.81)
ECVI = 1.79
(ECVI for 1 factor model = 4.87)

Correlations

ALT ↔ CON = .85*
ALT ↔ CRT = .76*
ALT ↔ CV = .66*
ALT ↔ SP = .62*
CON ↔ CRT = .71*
CON ↔ CV = .63*
CON ↔ SP = .59*
CRT ↔ CV = .56*
CRT ↔ SP = .52*
CV ↔ SP = .46*
Table 4: Comparison of 1, 2, 3, and 5-Factor Measurement Models of OCB

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<tr>
<td>3-Factor Model</td>
<td>484.53</td>
<td>87</td>
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<td>.188</td>
<td>550.53</td>
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<td>3 Factor – Base M = 323.51*</td>
</tr>
<tr>
<td>2-Factor Model</td>
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<td>5.68</td>
<td>.87</td>
<td>.89</td>
<td>.210</td>
<td>680.81</td>
<td>4.90</td>
<td>2 Factor – Base M = 338.64*</td>
</tr>
<tr>
<td>1-Factor Model</td>
<td>568.81</td>
<td>90</td>
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<td>4.87</td>
<td>1 Factor – Base M = 407.79*</td>
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* = p < .001
<table>
<thead>
<tr>
<th>Table 5: Descriptive statistics for all study variables</th>
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</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>OrgTenure</td>
</tr>
<tr>
<td>JobTenure</td>
</tr>
<tr>
<td>RelTenure</td>
</tr>
<tr>
<td>SubCSE</td>
</tr>
<tr>
<td>SubAgree</td>
</tr>
<tr>
<td>SuperCSE</td>
</tr>
<tr>
<td>SuperAgree</td>
</tr>
<tr>
<td>CSESIm***</td>
</tr>
<tr>
<td>PercSim</td>
</tr>
<tr>
<td>RoleAmb</td>
</tr>
<tr>
<td>Affect</td>
</tr>
<tr>
<td>LMX</td>
</tr>
<tr>
<td>JobSat</td>
</tr>
<tr>
<td>OCB</td>
</tr>
</tbody>
</table>

Notes:
* = p<.05;  ** = p<.01
*** = correlations regarding CSESIm have been reversed in sign to reflect similarity (as opposed to dissimilarity indicated in overall difference score)
Gender = Male coded “0”; Female “1”
OrgTenure = length of subordinate service in organization (yrs.)
RelTenure = length of supervisor - subordinate relationship (yrs.)
SubCSE = subordinate core self-evaluation
SubAgree = subordinate agreeableness
SuperCSE = supervisor core self-evaluation
SuperAgree = supervisor agreeableness
CSESIm = supervisor-subordinate core self-evaluation similarity
PercSim = subordinate perceived similarity to supervisor
RoleAmb = subordinate role ambiguity
Affect = subordinate affect toward supervisor
LMX = subordinate leader-member exchange
JobSat = subordinate job satisfaction
OCB = subordinate organizational citizenship behaviour
Table 6: Results of Estimation of Hypothesized Structural Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Structural* Coefficients</th>
<th>S.E.</th>
<th>t-values</th>
<th>Goodness-of-Fit Indices</th>
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<tbody>
<tr>
<td>Independent → Dependent</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Structural* Coefficients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSESim → PercSim</td>
<td>.29</td>
<td>.06</td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td>SubCSE → RoleAmb</td>
<td>-.40</td>
<td>.09</td>
<td>-4.60</td>
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</tr>
<tr>
<td>SuperCSE → RoleAmb</td>
<td>-.20</td>
<td>.09</td>
<td>-2.37</td>
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</tr>
<tr>
<td>SubAgree → Affect</td>
<td>.17</td>
<td>.19</td>
<td>2.40</td>
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</tr>
<tr>
<td>SuperAgree → Affect</td>
<td>.14</td>
<td>.19</td>
<td>1.99</td>
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<tr>
<td></td>
<td>$\chi^2 = 56.79$, df = 32, p = .00</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\chi^2 / df = 1.77$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RMSEA = .075</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TLI = .94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CFI = .96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIC = 124.79</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>ECVI = .90</td>
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<td></td>
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</tr>
<tr>
<td>Stage 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PercSim → RoleAmb</td>
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<td>.05</td>
<td>-5.02</td>
<td></td>
</tr>
<tr>
<td>PercSim → Affect</td>
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<td>.07</td>
<td>10.80</td>
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<tr>
<td>RoleAmb → LMX</td>
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<td>.09</td>
<td>-5.20</td>
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</tr>
<tr>
<td>Affect → LMX</td>
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<td>.05</td>
<td>14.06</td>
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</tr>
<tr>
<td></td>
<td>Squared Multiple Correlations ($R^2$)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PercSim = .08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RoleAmb = .46</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Affect = .59</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>LMX = .86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JobSat = .51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OCB = .29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SubCSE → JobSat</td>
<td>.38</td>
<td>.11</td>
<td>4.05</td>
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<tr>
<td>LMX → JobSat</td>
<td>.51</td>
<td>.07</td>
<td>5.78</td>
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<tr>
<td>JobSat → OCB</td>
<td>.25</td>
<td>.13</td>
<td>2.05</td>
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<tr>
<td>LMX → OCB</td>
<td>.35</td>
<td>.09</td>
<td>3.10</td>
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</tbody>
</table>

* = all structural coefficients significant at p < .05
Table 7: Comparison of Hypothesized and Alternative Structural Equation Models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>AIC</th>
<th>ECVI</th>
<th>$\chi^2$ Difference Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M_1$: Hypothesized Model (Full Mediation LMX; Partial Mediation JS)</td>
<td>56.79</td>
<td>32</td>
<td>1.77</td>
<td>.94</td>
<td>.96</td>
<td>.075</td>
<td>124.79</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>$M_2$: Alternative Model 1 (No Mediation LMX; Partial Mediation JS)</td>
<td>153.54</td>
<td>27</td>
<td>5.69</td>
<td>.47</td>
<td>.74</td>
<td>.184</td>
<td>231.54</td>
<td>1.67</td>
<td>$M_2 - M_1 = 96.75^*$</td>
</tr>
<tr>
<td>$M_3$: Alternative Model 2 (Full Mediation LMX; No Mediation JS)</td>
<td>90.06</td>
<td>33</td>
<td>2.73</td>
<td>.87</td>
<td>.92</td>
<td>.112</td>
<td>156.06</td>
<td>1.12</td>
<td>$M_3 - M_1 = 33.27^*$</td>
</tr>
<tr>
<td>$M_4$: Alternative Model 3 (Full Mediation LMX; Full Mediation JS)</td>
<td>68.17</td>
<td>33</td>
<td>2.07</td>
<td>.92</td>
<td>.95</td>
<td>.088</td>
<td>134.17</td>
<td>.97</td>
<td>$M_4 - M_1 = 11.38^*$</td>
</tr>
</tbody>
</table>

* = $p < .001$
APPENDIX 1: LIST OF HYPOTHESES

Core Foundation of LMX (Stage 2)

Hypothesis 1: Subordinate affect toward their supervisor is positively related to perceptions of leader-member exchange with their supervisor.

Hypothesis 2: Subordinate role ambiguity is negatively related to perceptions of leader-member exchange with their supervisor.

Hypothesis 3: Subordinate perceptions of similarity to their supervisor are positively related to affect toward their supervisor.

Hypothesis 4: Subordinate perceptions of similarity to their supervisor are negatively related to subordinate role ambiguity.

Dispositional Antecedents (Stage 1)

Hypothesis 5: Subordinate agreeableness is positively related to subordinate affect toward their supervisor.

Hypothesis 6: Supervisor agreeableness is positively related to subordinate affect toward their supervisor.

Hypothesis 7: Subordinate core self-evaluation is negatively related to subordinate role ambiguity.

Hypothesis 8: Supervisor core self-evaluation is negatively related to subordinate role ambiguity.

Hypothesis 9: Subordinate core self-evaluation is positively related to subordinate job satisfaction.

Hypothesis 10: Supervisor–subordinate similarity on core self-evaluation is positively related to subordinate perceptions of similarity.

Employee Outcomes (Stage 3)

Hypothesis 11: Subordinate leader-member exchange is positively related to subordinate job satisfaction.

Hypothesis 12: Subordinate job satisfaction is positively related to subordinate organizational citizenship behaviour.

Hypotheses 13: Subordinate leader-member exchange is positively related to subordinate organizational citizenship behaviour
APPENDIX 2: SCALE ITEMS

Agreeableness

AGR1. Feel little concern for others. ®
AGR2. Am interested in people.
AGR3. Insult people. ®
AGR4. Sympathize with others’ feelings.
AGR5. Am not interested in other people’s problems. ®
AGR6. Have a soft heart.
AGR7. Am not really interested in others. ®
AGR8. Take time out for others.
AGR9. Feel others’ emotions.
AGR10. Make people feel at ease.

(5-point response scale: 1 = Very Inaccurate; 5 = Very Accurate)

Core Self-Evaluation

CSE1. I am confident I get the success I deserve in life.
CSE2. Sometimes I feel depressed. ®
CSE3. When I try, I generally succeed.
CSE4. Sometimes when I fail I feel worthless. ®
CSE5. I complete tasks successfully.
CSE6. Sometimes, I do not feel in control of work. ®
CSE7. Overall, I am satisfied with myself.
CSE8. I am filled with doubts about my competence. ®
CSE9. I determine what will happen in my life.
CSE10. I do not feel in control of my success in my career. ®
CSE11. I am capable of coping with most of my problems.
CSE12. There are times when things look pretty bleak and hopeless to me. ®

(7-point response scale: 1 = Strongly Disagree; 7 = Strongly Disagree)

Role Ambiguity

RA1. I feel certain about how much authority I have.
RA2. I have clear, planned goals and objectives for my job.
RA3. I know that I have divided my time properly.
RA4. I know what my responsibilities are.
RA5. I know exactly what is expected of me.
RA6. Explanation is clear of what has to be done.

(7-point response scale: 1 = Strongly Disagree; 7 = Strongly Disagree)
Affect Toward Supervisor

AS1. I like my supervisor very much as a person.
AS2. My supervisor is the kind of person one would like to have as a friend.
AS3. I get along well with my supervisor.

(7-point response scale: 1 = Strongly Disagree; 7 = Strongly Disagree)

Perceived Similarity

PS1. My supervisor and I have many of the same beliefs and values.
PS2. My supervisor and I have many of the same interests.
PS3. My supervisor reminds me of myself.
PS4. My supervisor and I approach things in the same manner.
PS5. My supervisor and I have similar personalities.

(7-point response scale: 1 = Strongly Disagree; 7 = Strongly Disagree)

Leader-Member Exchange

LMX1. Do you know “where you stand” with your supervisor?
(7-point response scale: 1 = “Never”; 7 = “Always”)

LMX2. How well does your supervisor understand your job problems and needs?
(7-point response scale: 1 = “Not at all”; 7 = “Always”)

LMX3. How well does your supervisor recognize your potential?
(7-point response scale: 1 = “Never”; 7 = “Always”)

LMX4. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your supervisor would use his/her power to help you solve problems in your work?
(7-point response scale: 1 = “Never” to 7 = “Always”)

LMX5. Regardless of how much formal authority your supervisor has, what are the chances he/she would go to great effort to help you even if this would involve personal sacrifice or expense?
(7-point response scale: 1 = “None” to 7 = “Very High”)

LMX6. I have enough confidence in my supervisor that I would defend and justify his/her decision if he/she were not present to do so.
(7-point response scale: 1 = “Never” to 7 = “Always”)

LMX7. How would you characterize your working relationship with your supervisor?
(7-point response scale: 1 = “Extremely Poor” to 7 = “Extremely Good”)

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Job Satisfaction

JS1. Generally speaking, I am very satisfied with my job at ____.
JS2. Generally speaking, I am satisfied with the kind of work that I do in my job at ____.
JS3. Overall, I am satisfied with co-workers at ____.
JS4. Overall, I am satisfied with the quality of supervision at ____.

(7-point response scale: 1 = Strongly Disagree; 7 = Strongly Disagree)

Organizational Citizenship Behaviour

Altruism
ALT1. Is always ready to lend a helping hand to those around him/her.
ALT2. Willingly helps others who have work-related problems.
ALT3. Helps others who have heavy work loads.

Conscientiousness
CON1. Is one of my most conscientious employees.
CON2. Believes in giving an honest day’s work for an honest day’s pay.
CON3. Attendance at work is above the norm.

Courtesy
CRT1. Considers the impact of his/her actions on coworkers.
CRT2. Takes steps to try to prevent problems with other employees.
CRT3. Is mindful of how his/her behaviour affects other people’s jobs.

Civic Virtue
CV1. Attends meetings that are not mandatory, but are considered important.
CV2. Keeps abreast of changes in the organization.
CV3. Attends functions that are not required, but help the company image.

Sportsmanship
SP1. Tends to make “mountains out of molehills”. ®
SP2. Always finds fault with what the organization is doing. ®
SP3. Always focuses on what’s wrong, rather than the positive side. ®

Overall OCB
GOCB1. Overall, this employee is a good “corporate citizen”.
GOCB2. This person makes significant positive contributions to both the social and psychological work environment at ____.

Note:

® = reverse-scored items