LMX, EMPLOYEE CONCEPTUALIZATIONS AND DISPLAYS OF OCB

THE EFFECTS OF LEADER-MEMBER EXCHANGE ON EMPLOYEE CONCEPTUALIZATIONS AND DISPLAYS OF ORGANIZATIONAL CITIZENSHIP BEHAVIOUR: A MEDIATIONAL MODEL

By

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A Dissertation

Submitted to the School of Graduate Studies

In Partial Fulfillment of the Requirements

For the Degree

Doctor of Philosophy

McMaster University

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DOCTOR OF PHILOSOPHY (2007) (Business Administration) McMaster University Hamilton, Ontario

 TITLE:
 The Effects of Leader-Member Exchange on Employee Conceptualizations and Displays of Organizational Citizenship Behaviour: a Mediational Model

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NUMBER OF PAGES: ix, 82

ABSTRACT

The literature on how employees conceptualize organizational citizenship behaviour (OCB) has not been well integrated. Research on employee conceptualizations of OCB is comprehensively reviewed and a model is proposed linking leader-member exchange (LMX), employee conceptualizations of OCB and supervisory ratings of OCB. I found support for the discriminant validity of three key facets of how employees conceptualize OCB: perceived role breadth, perceived instrumentality of OCB and perceived leader expectations for OCB. These facet conceptualizations mediated the relationship between LMX and OCB. My findings challenge past practices of blurring distinctions among facets of employee conceptualizations of OCB and provide new insights into the process by which LMX influences OCB. Implications for research and for practice are discussed.

ACKNOWLEDGEMENTS

First and foremost, I would like to express my special gratitude to my supervisor, Dr. Rick Hackett, who has been an exemplary leader and has been providing me a great deal of support with his knowledge, wisdom and encouragement throughout my Ph.D. studies. I regard it as an honor to have had the opportunity to work with him in the past several years.

I extend to my sincere thanks to my other committee members, Dr. Willi Wiesner and Dr. Aaron Schat, for their advice and support, for their insight into my dissertation, for the knowledge I learned from them and for their kindness.

In addition, I would thank Dr. Naresh Agarwal and Ms. Carolyn Colwell for their support and assistance throughout the five years of my study in the Human Resources & Management program. I also thank all the faculty members and colleagues in the program. I learned a lot from them both within and outside the classroom.

Furthermore, I am grateful to Ms. Hong Lin, for her help during my stay in Shenzhen and for her assistance in my data collection process.

Lastly, but most deeply, I thank my parents.

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CHAPTER 1: INTRODUCTION

1.1 Background

Organizations facing increasing competition and uncertain environments are shifting from bureaucratic structures to new organizational forms characterized as flat, networked, uncertain, flexible, and decentralized (Ancona, Kochan, Scully, Maanen, & Westney, 1996). Traditional task-based jobs, comprised of fixed packages of similar tasks, have been "unbundled" into "broader chunks of work that change over time" (Cascio, 1995:931), resulting in more ambiguous work roles. To function effectively, it is not enough for an organization to "depend solely upon its blueprints of prescribed behaviour" (Katz, 1964: 132). Organizations have accordingly been relying increasingly on their employees' willingness to contribute beyond formal job descriptions and on their leaders to inspire an empowered workforce. Organizational citizenship behaviour (OCB), originally conceptualized as extra-role behaviour valued by the organization but not explicitly recognized by formal reward systems (Organ, 1988), and leader-member exchange (LMX; Graen & Scandura, 1987), have much to offer for the effective functioning of these new forms of organizations.

Organ (1988) defined OCB as "individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (p. 4). This original conceptualization of OCB as "extra-role" and "non-contractually rewarded" (Organ, 1988) has been considered too "constraining" (e.g., Morrison, 1994), yet understanding what employees consider to be "extra-role" or "non-contractually rewarded" may provide

insights into the motivational underpinnings of OCB (Haworth & Levy, 2001; Hui, Lee, & Rousseau, 2004; Morrison, 1994). Morrison (1994) has urged researchers to investigate how OCB is conceptualized by organizational members, and Podsakoff, Mackenzie, Paine, and Bachrach (2000) have called for more research into the construct validity of employee conceptualizations of OCB. Tepper, Lockart, and Hoobler (2001) have further called for research into the factors that influence such conceptualizations. However, few researchers have taken up these calls.

While leaders play a key role in determining OCB, the mechanisms through which they exert their influence on OCB are not clear (Podsakoff et al., 2000). LMX quality is one of the most widely researched correlates of OCB and the relationship between LMX quality and OCB appears to be well accepted in the literature. Meta-analyses support the strength and generalizability of the correlation between LMX and OCB (Hackett, Farh, Song, & Lapierre, 2003; Ilies, Nahrgang, & Morgeson, 2006). Still, we know little about the processes that mediate between LMX and OCB (Hackett & Lapierre, 2004). While leader-member exchange has been presented within a "role making" framework (Graen & Scandura, 1987; Graen & Uhl-Bien, 1995) wherein role perceptions and expectations evolve as the leader-member relationship matures (Graen & Scandura, 1987), there has been no theoretically coherent delineation of *how* LMX influences OCB within this context of "role making".

Thus, there is a need for researchers to gain both a better understanding of how OCB is conceptualized by employees and the role of these conceptualizations in

explaining the association between LMX and OCB. The current study addresses this urgency.

1.2. Study Purpose and Contributions

This study is intended to enhance our understanding of how employees conceptualize OCB and how these conceptualizations relate to displays of OCB. This, in turn, may have implications for what organizations and leaders might do to influence the expression of OCBs among their employees.

1.2.1 Understanding the OCB Construct

First, although hundreds of studies have been done on OCB, most of this research has focused on substantive validity (the relationship between OCB and other constructs), rather than construct validity (Podsakoff et al., 2000). A primary purpose of this research is to enhance understanding of the OCB construct. While others have examined employee conceptualizations of OCB (e.g., Haworth & Levy, 2001; Hui et al., 2004; Morrison, 1994), I study the construct within the framework of a comprehensive, theoretically based model wherein the conceptualizations of OCB are rooted in perceptions of: (a) role breadth; (b) instrumentality; and (c) leader expectations.

Research has separately examined either role breadth (e.g., Morrison, 1994) or instrumentality of OCB (e.g., Hui et al., 2004). No one has investigated these together in the same study to ascertain, as I seek to do, whether they are empirically distinguishable and can provide unique prediction of OCB. This is important because there has been a great deal of confusion around the construct of role breadth. For example, although past

studies have claimed to measure role breadth (or role definition), there have been a

variety of different scale anchors and instructions used (see Table 1).

Studies	Anchors and/or Instructions
Tepper & Taylor (2003, p. 100); Tepper, Lockhart, & Hoobler (2001, p. 791) Zellars, Tepper, & Duffy (2002)	<u>Anchors</u> : "Definitely exceeds my job requirement" - "Definitely part of my job"
	<u>Instruction</u> : "Behaviors that are part of your job are those that you may be rewarded for doing or punished for not doing – behaviors that exceed your job requirements are those that you don't have to do-You wouldn't be rewarded for doing them, nor would you be punished if you didn't do them"
Hofmann, Morgeson, & Gerras (2003, p. 172)	<u>Anchors</u> : "Expected part of my job" - "Definitely above and beyond what is expected for my job"
Pond, Nacoste, Mohr, & Rodriguez (1997, p. 1531)	Instruction: "Whether OCB was formally evaluated or not?"
Morrison (1994, pp. 1549- 1550)	<u>Anchors</u> : "You see this as an expected part of your job"- "You see this as somewhat above and beyond what is expected for your job"
	<u>Instruction</u> : "We are not interested in whether you perform these activities. Rather, we are interested in whether you yourself see them as part of your job"
Kidder (2002, pp. 635-640)	<u>Anchors</u> : "In-role (a formal or informal job expectation for them)" - "extra-role (above and beyond expectations)" - "out of role (not appropriate)"
Coyle-Shapiro, Kessler, & Purcell (2004. p. 93)	<u>Anchors</u> : "I feel this is part of my work duty"- "I feel this is something extra"
Vey & Campbell (2004, pp. 125-126)	<u>Anchors</u> : "Expected as part of the job, indicating the behavior is one of the things all participants are expected to do as part of their job and for which they are paid" - "Above and beyond job requirements, indicating the behavior exhibits performance above and beyond things all participants are expected and paid to do"
Lam, Hui, & Law (1999, p. 596)	<u>Anchors</u> : the degree to which behaviours described in the OCB items "were an expected part of their jobs"
Blakely, Srivastava, & Moorman (2005, p. 108)	<u>Anchors</u> : "Definitely not part of my job" -"Definitely part of my job"

While some researchers measured employee role breadth as perceived by employees (e.g., Morrison, 1994; Blakely, Srivastave, & Moorman, 2005; Coyle-Shapiro, Kessler, & Purcell, 2004), others measured it in terms of the expectations of others (e.g., Hofmann, Morgeson, & Gerras, 2003; Pond, Nacoste, Mohr, & Rodriguez, 1997; Kidder, 2002; Lam, Hui, & Law, 1999). In other studies, role breath has been confused with instrumentality (e.g., Tepper et al., 2001; Tepper & Taylor, 2003; Vey & Campbell, 2004; Zellars, Tepper, & Duffy, 2002).

I argue that perceived instrumentality is mostly cognition based while perceived role breadth is rooted more in affect. Finally, I incorporate perceived leader expectations -- within a role-making framework (Katz & Kahn, 1966) -- as one facet of the way employees conceptualize OCB.

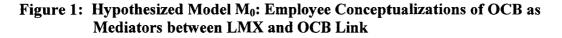
Thus, this research is the most comprehensive investigation of employee conceptualizations of OCB and challenges past research that has treated role breadth, perceived instrumentality and perceived expectation of OCB as part of the same construct in conceptualization and measurement.

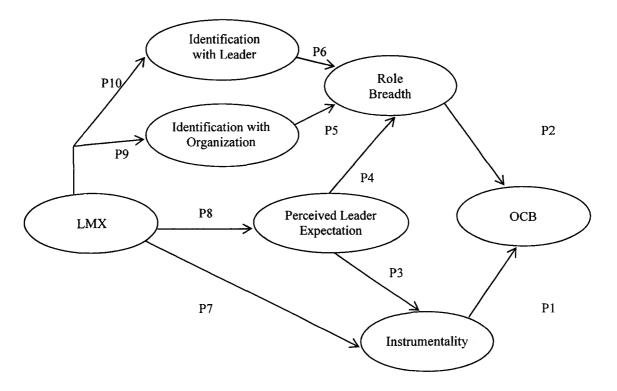
1.2.2 Understanding the LMX-OCB Link

I propose and test a model in which employee conceptualizations of OCB mediate between LMX and OCB, as shown in Figure 1. The theoretical underpinnings for each of the paths of this model will be explained.

Originating from the Vertical-Dyad Linkage (VDL) approach to leadership (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975), LMX theory describes the

LMX processes within a role-making framework (e.g., Graen & Scandura, 1987), stressing the importance of "role-making" processes in the development of employee work roles (e.g., Graen & Scandura, 1987). Recent LMX literature is founded in the social exchange perspective (e.g. Liden, Sparrowe, & Wayne, 1997). I examine the relationship between LMX and OCB by drawing from both the role-making and social exchange literatures. The motivational underpinnings of the model tested (Figure 1) also draw heavily from other theoretical perspectives on leadership influence, including social identity (e.g., Van Knippenberg, Van Knippenberg, De Cremer, & Hogg, 2004), "covenantal relationships" (Graham & Organ, 1993) and reciprocity (Sahlins, 1972).





Moreover, examining employee conceptualizations of OCB as mediating between LMX and OCB addresses recent calls to study the process by which LMX relates to OCB (Hackett & Lapierre, 2004). Finally, I examine how LMX can shift self-identity (with its emphasis on differentiating self from others) to social identity (with its emphasis on defining the self in connection to significant others or in terms of membership in a social unit) and whether this identity shift mediates the influence of LMX on employees' conceptualizations of OCB. By doing so, I explore whether perceived role breadth is founded more in cognition (e.g., perceived instrumentality) or in affect (e.g., social identity).

1.3. Organization of the thesis

My thesis is organized into five chapters. The first provides the background to this research, the contributions it intends to make, and the framework of my proposed model. Chapter 2 offers a review of the OCB literature, focusing particularly on how employees conceptualize OCB. Here, I argue for a multi-faceted employee conceptualization of OCB, and present a model in which role making and social exchange are considered within an LMX framework, with LMX quality influencing how employees conceptualize OCB. Subsequently, I present my hypotheses. In chapter three I provide an overview of research methods and the data analysis strategies employed. The results are presented in Chapter 4, and an interpretation of these results, and their contributions to advancing theory and practice are presented in Chapter 5.

CHAPTER 2: LITERATURE REVIEW, THEORIES AND HYPOTHESES

2.1 Organizational Citizenship Behaviour

Hundreds of studies on OCB have been published (Podsakoff et al., 2000). Several qualitative reviews (e.g., Podsakoff et al., 2000; Zellars & Tepper, 2003) and metaanalyses (e.g., LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff et al., 2000) have summarized this literature. Among the most widely studied antecedents of OCB are attitudinal variables (e.g., satisfaction, perceived fairness, commitment) and dispositional attributes (e.g., conscientiousness) (see Podsakoff et al., 2000 for a review). A shortcoming of this literature, however, is its almost sole attention to issues of "substantive validity" (associations OCB has with other constructs). Little attention has been given to understanding the nature and make-up of the construct itself (Podsakoff et al., 2000). This has hindered our ability to identify theoretically well-grounded predictors of OCB and our ability to provide compelling explanations for OCBs (Zellars & Tepper, 2003). The following section offers a review of past conceptualizations of OCB.

2.1.1 Conceptualizing OCB: A Literature Review

Organ and his colleagues (Bateman & Organ, 1983; Smith, Organ, & Near, 1983) introduced the concept of OCB to explain the weak empirical association between job satisfaction and job performance. Specifically, they argued that the weak link is attributable to an overly narrow conceptualization of job performance. They called for broadening the conceptualization of performance to include behaviours that go beyond

formal role requirements and are: "not easily enforced by the threat of sanctions"; "not easily governed by individual incentive schemes"; and which "lubricate the social machinery of the organization" (Smith et al, 1983: 654). They introduced the concept of OCB, which they defined as "individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that, in the aggregate, promotes the effective functioning of the organization" (Organ, 1988:4).

OCB contributes to team and organizational effectiveness (e.g., Podsakoff, Ahearn, & Mackenzie, 1997; Podsakoff & Mackenzie, 1994; Walz & Niehoff, 2000). It also contributes substantially and uniquely to supervisor ratings of overall job performance (e.g., Motowidlo & Van Scotter, 1994; MacKenzie, Podsakoff, & Fetter, 1991) as well as to compensation decisions (e.g., Kiker & Motowidlo, 1999). In addition, many employees consider as "part-and-parcel" of their job several of the behaviours traditionally defined as OCB (Morrison, 1994). Accordingly, defining OCB as "discretionary" and "non-contractually rewarded" is too limiting.

Graham (1991), building upon the heritage of citizenship within political science, viewed OCB as falling within the realm of "employee responsibilities". This view blurs the traditional distinction between in-role and extra-role performance, which presumes that the breadth with which employees define their work roles depends on the nature and depth of their relationship with their organization. The stronger the relational tie between employees and their organization, the more the boundaries between in-role and extra-role behaviour are blurred. This underscores the importance of differentiating the formal

proscribed job requirements of the organization from employees' interpretations of those requirements (a perceptual process).

In response to criticism of the use of the terms "discretionary" and "non-contractual rewards" to define OCB (e.g., Morrison, 1994), Organ (1997) redefined OCB to be consistent with the definition of contextual performance offered by Borman and Motowidlo (1993) -- non-task behaviour that contributes to the maintenance and enhancement of the social-psychological work environment that supports task performance. It therefore seems inappropriate to define OCB in terms of extra-role or non-contractual rewards. However, supervisors do distinguish OCB from task performance in their performance evaluation decisions (e.g., Motowidlo & Van Scotter, 1994; MacKenzie et al., 1991). Moreover, Organ (1997) suggested that OCB might differ from task performance "by degree in the matters of enforceable job requirements and guarantees of systematic rewards" (p. 92). OCB, in contrast to task performance, is *less likely* to be considered as an enforceable job requirement (Borman & Motowidlo, 1993) and is less likely to be linked to formal reward structures. This suggests that OCB and task performance are differentiated by employees in their cognitive schemas of job performance.

There also appears to be much variation in the degree to which individuals view OCB as in-role or extra-role, and expect rewards for such behaviours (e.g., Haworth & Levy, 2001; Lam, Hui, & Law, 1999). This variation is reflected in the process by which OCB measures have been developed. For example, Podsakoff, MacKenzie, Moorman, and Fetter (1990) created their OCB measure by presenting individuals with dimensional

definitions of OCB (Organ, 1988) and asking them to give examples of discretionary organizational behaviour. Using this measure, Lam et al., (1999) showed that, on average, across 4 nations, employees considered OCB to be part of their jobs, as did their supervisors, though considerable variance was evident.

Overall, published research suggests that organizational members distinguish OCB from task performance but that the degree to which OCB is viewed as "in-role" and contractually rewarded varies across individuals. These differences in how OCB is conceptualized are likely to explain differences among individuals in the frequency with which they display what has traditionally been considered as OCB (Haworth & Levy, 2001; Hui et al., 2004; Morrison, 1994).

2.1.2 A Multi-Faceted Employee Conceptualization of OCB

Research has examined how employees conceptualize OCB, in terms of perceived role breadth ("role definition"; e.g., Blakely et al., 2005; Coyle-Shapiro et al., 2004; Morrison, 1994) and its perceived instrumentality – whether rewards are expected for performing OCB (e.g., Haworth & Levy, 2001; Hui et al., 2000; Hui et al., 2004). Moreover, employees' perceptions of their supervisors' performance expectations are also likely to figure prominently in how they conceptualize OCB. I propose that there are three core facets to how employees conceptualize OCB: (1) role breadth; (2) the perceived instrumentality of OCB; and (3) employees' perceptions of their supervisors' OCB-performance expectations of them. I propose further that these conceptualizations influence how frequently employees display OCB. While these three facets are surely not exhaustive, they are considered "core". Role breadth and instrumentality are key

components in as much as they were considered in the original conceptualization of OCB (Bateman et al., 1983; Organ, 1988; Smith et al., 1983). They are also helpful in explaining OCB (e.g., Haworth & Levy, 2001; Hui et al., 2004; Hui, Lam, & Law, 2000; Morrison, 1994; Tepper et al., 2001). The third facet– perceptions of leader expectations – draws from role theory (Katz & Kahn, 1966), underscoring the influence of role expectations (especially those of leaders) on employee workplace behaviours.

2.1.3 Linking Conceptualizations to OCB

In the following sections I provide a clearer distinction of the three proposed facets of employees' conceptualizations of OCB and hypothesize how each relates to OCB.

2.1.3.1 Perceived Instrumentality

Organizational behaviour has both cognitive and affective underpinnings (Weiss & Cropanzano, 1996), as does OCB (Lee & Allen, 2002). Cognition includes an appraisal of situational circumstances in one's life against some standard, whereas affect entails individual hedonic feelings that are less deliberative in nature (Organ & Near, 1985). According to expectancy theory (Vroom, 1964), perceived instrumentality refers to the belief in an association between a particular behaviour and outcomes. Employees are more likely to perform behaviours for which they are rewarded. OCB is related positively to employees' expectations that such behaviours will be rewarded (Hui et al., 2004) and Hui et al. (2000) found in a quasi-experimental field study that employees who viewed OCB to be instrumental to promotion engaged in more OCB than did employees who did not have these views. Perceptions of the instrumentality of OCB are more cognitively based than affectively based, because they entail a calculative determination of reward

contingencies (Haworth & Levy, 2001; Hui et al., 2000, 2004). This literature is consistent with an impression management perspective, which places maximizing desirable rewards as the primary motives of impression management behaviours in general (Leary & Kowalski, 1990) and of OCB in particular (Bolino, 1999).

Together, the above literature suggests that perceived instrumentality, as a cognitively based motive, relates positively to OCB.

Hypothesis 1: Employees' perceptions of the instrumentality of OCB relates positively to supervisory ratings of their OCB (Path 1 of Figure 1).

2.1.3.2 Perceived Role Breadth

Perceived role breadth refers to the extent to which employees consider OCB to be part of their job (Morrison, 1994). Studies on perceived role breadth show that: a) many employees consider several of the traditionally defined OCB behaviours as more "in role" than "extra-role" (Morrison, 1994); b) employees with broader role definitions exhibit OCB with greater frequency (Morrison, 1994); c) there is much variation in employee perceived role breadth (Morrison, 1994; Wilson, 2003); and d) the variability in role breadth is predictable from measures of employee affect, such as job satisfaction and organizational commitment (Morrison, 1994).

Tepper and his colleagues (Tepper et al., 2001; Tepper & Taylor, 2003) did not separate perceived role breadth from the instrumentality of OCB when measuring "role definition". Likewise, Morrison's (1994) proposed association between perceived role breadth and OCB was premised on the notion that "employees are more inclined to fulfill

task performance requirements than to engage in OCB because of the greater likelihood of the former garnering rewards and warding off sanctions (Morrison, 1994:1545)". This view implicates a cognitive/instrumental motive explanation for the relationship between role breadth and OCB. However, perceived role breadth and perceived instrumentality of OCB are different constructs with different motivational underpinnings. Specifically, instrumentality perceptions are predominantly cognition based, while perceptions of role breadth are more rooted in affect as explicated below.

Graham (1991) suggests that the breadth with which employees define their work roles depends on the nature and depth of their relationship with their organization, with stronger relational ties engendering a more inclusive role definition. In particular, Graham and Organ (1993) contrasted covenantal exchanges, social exchanges and transactional exchanges. They argued that the motivational "driver" of a purely transactional relationship is the desire to maximize satisfaction of self-interests, resulting in few behaviours that extend beyond what is formally and contractually expected (e.g., OCB). However, inherent in social exchange relationships are expectations of fairness/equity and reciprocity in the exchange of "intangibles" over ill-defined time frames. Here subordinates' OCB is founded on trust and faith that their contributions will be recognized and rewarded, therein laying the theoretical basis for expecting a positive relationship between perceived instrumentality and OCB.

Covenantal relationships also involve open-ended and non-transactional obligations that are left unspecified in advance (Graham & Organ, 1993; Van Dyne, Graham, & Dienesch, 1994). However, in contrast to social exchange, with its predominant reliance

on notions of fairness (Graham & Organ, 1993; Organ, 1990), covenantal relationships are founded more on mutual commitment and an intrinsic motivation to satisfy the needs, and enhance the welfare, of one's dyadic partner. Here, behaviour is rooted in affectladen, normative values (as contrasted with purer notions of social exchange, founded predominantly on maintaining fairness/equity; Van Dyne et al., 1994). It follows that employees in a covenantal relationship with the organization are likely to define their job broadly so as to include OCB, with this inclusiveness rooted more in employee affect toward the organization than in beliefs that OCB will be rewarded (Graham & Organ, 1993).

Available evidence, though not abundant, seems to be consistent with such reasoning. For example, although Morrison (1994) suggests that the positive association between perceived job breadth and OCB largely reflects cognitions, it may better reflect affect-based motives. Specifically, Morrison (1994) found that perceived role breadth mediated between *affective* organizational commitment and OCB (e.g., organizational commitment \rightarrow perceived role breadth \rightarrow OCB), but did not mediate between job satisfaction and OCB. The four-item job satisfaction measure (Quinn & Staines, 1997) she used emphasized the *cognitive* components of employee attitudes, as noted by Tepper et al., (2001).

Tepper and his colleagues (Tepper et al., 2001; Tepper & Taylor, 2003) used a measure of role definition that did not separate perceived role breadth from perceived instrumentality (See Table 1). This composite measure of role definition did not mediate the effects of procedural justice (a cognitive component) on OCB. Tepper et al. (2001)

argued that had the perceived job breadth component of their scale simply assessed perceived instrumentality (cognitive laden) a mediation effect may well have been found (e.g., procedural justice \rightarrow perceived instrumentality \rightarrow OCB). Perhaps had Tepper et al. (2001) used separate measures of role breadth and instrumentality, instrumentality (but not role breadth) would have mediated the relationship between justice and OCB. Thus, based on the concept of covenantal relationship and the aforementioned empirical studies, role breadth should relate positively to displays of OCB.

Hypothesis 2: Role breadth, as reported by employees to include OCB, relates positively with supervisory ratings of their OCB (Path 2 of Figure 1).

2.1.3.3 Perceived Leader Expectation

As noted above, researchers have studied how employees conceptualize OCB, within the framework of role breadth and instrumentality, both of which have ties with Organ's (1988) original definition of OCB (e.g., extra-role and not explicitly rewarded, respectively). "Leader expectations" represent a third component of employees' conceptualizations of OCB, reflecting their perceptions of how broadly their supervisor has defined their work roles. Katz and Kahn (1966), for example, explicitly defined roles in terms of the expectations of the "role sender".

"Expectations" for OCB have been measured in previous studies (e.g., whether OCB is an *expected* part of the job, Hofmann et al, 2003; Kidder, 2002; Lam et al, 1999) and were found to have a positive association with employee OCB (Hofmann et al, 2003; Kidder, 2002). However, those studies did not purport to examine the association

between perceived expectations and OCB; rather they made theoretical arguments in terms of role breadth and operationalized role breadth in terms of "expectations" by others and thus confused role breadth with expectations. There is no published theoretically-grounded research that has examined the relationship of supervisory expectations to employees' OCB. Support for a positive relationship rests on a qualitative study of the motivational bases of OCB by Wilson (2003). Most of the employees interviewed by Wilson (2003) mentioned that fulfilling their bosses' expectations was a motive for displaying OCB. As noted by Katz and Kahn (1966),

"It is the received [or perceived] role, which is the immediate influence on employee behaviour and the immediate source of employee motivation for role performance" (p. 177).

Accordingly, I expect that the more employees believe that their supervisors expect OCB from them the more they will display OCB. Moreover, I expect that this relationship is mediated by how broadly employees perceive their work roles and by the instrumentality that employees attach to OCB. These relationships are depicted in Figure 1 and explained in greater detail below.

According to the "role-making model" of Katz and Khan (1966), employees interpret the role expectations they receive from their supervisor and then redefine their roles and modify their role behaviour accordingly. In this sense, when employees believe their supervisors expect OCB from them, they are likely to define their work roles more broadly to include OCB, which should lead them to display OCB more frequently (see Figure 1). Similarly, the more employees believe that their supervisors expect OCB from

them, the greater the instrumentality they are likely to attach to this behaviour. The theoretical foundation for this lies with Graen's (1976) interpersonal role-making model. It holds that supervisors attempt to shape their follower's behaviours by sending expectations of how members are to fulfill their work roles. Followers' rejections of these expectations result in the supervisor's withdrawing offers of rewards, including access to privileged information, support and attention. Followers' acceptance of these expectations, on the other hand, brings further such offers (Graen & Cashman, 1975). Accordingly, the more employees believe that their supervisors expect OCB from them, the more they are likely to attach instrumentality to these behaviours, which should result in more frequent displays of OCB (Figure 1).

Supervisors' expectations are likely to have a stronger relationship with OCB than with task performance given the subtle and unstructured nature of the former, compared to the latter (Wilson, 2003). Specifically, task expectations can be clearly communicated through formal channels (e.g., job descriptions) and are explicitly mandated through contracts. This is much less the case with OCB.

Following from the above arguments, and as shown in Figure 1, I hypothesized:

Hypothesis 3a: The more employees perceive that their supervisors expect OCB from them, the more broadly they will define their work roles, which in turn will result in them displaying more OCB (Paths 4 & 2 of Figure 1).

Hypothesis 3b: The more employees perceive that their supervisors expect OCB from them, the more they will perceive OCB as instrumental to receiving

desired personal rewards from their supervisors, which will be result in them displaying OCB more frequently (Paths 3 & 1 of Figure 1).

2.1.3.4 Distinctiveness of the Three Facets of Employees' Conceptualizations of OCB

Further to my earlier discussions on distinctions between perceived instrumentality and role breadth, the degree to which employees believe their supervisors expect OCB from them may not align well with how they define their job or with the instrumentality they attach to such behaviours. As noted by Graen (1976), job incumbents could hold role preferences that are discrepant from or incompatible with what they perceive their supervisors' expectations are of them. For example, a supervisor may want her subordinates to work overtime to meet the deadline for an important project. This expectation might or might not be consistent with subordinates' role definitions (role breadth) or with whether they believe that the overtime work will be rewarded (instrumentality). Some subordinates might not comply with their leader's expectations of them because they do not think they *should* work overtime. This is consistent with the role-making model advanced by Kahn and colleagues (Kahn, Wolfe, Quinn, Snoeck, & Rosenthal, 1964), which suggests that the convergence of leader-defined expectations and employee-defined role expectations (e.g., role breadth) depends on other organizational, social and personal factors. Some subordinates might not work overtime because they do not believe they will be rewarded for doing so. Whether rewards are perceived to follow from employees fulfilling their supervisors' role expectations of OCB for them depends on many factors, including the supervisor's leadership approach (e.g., contingent reward; Bass & Avolio, 1994). Accordingly, while the OCB-related expectations supervisors

have of their subordinates are likely to relate positively to the frequency with which subordinates display OCB, they are distinguishable from role breadth and the perceived instrumentality of OCB. It is therefore hypothesized:

Hypothesis 4: Employees' perceptions of role breadth, instrumentality of OCB and the role expectations their leaders have of them for OCB are independent but correlated constructs.

2.2. Employees' Conceptualizations of OCB Mediating the Effects of LMX on OCB

In this section, LMX theory is described in terms of role-making, social exchange, and reciprocity. Within this framework, bolstered by the concept of "covenantal relationship" and the social identity perspective of leadership, I discuss how LMX quality is likely to influence employees' conceptualizations of OCB. I also argue that employees' conceptualizations of OCB mediate the effects of LMX on OCB.

2.2.1 LMX as Role-Making and Social Exchange Processes

LMX theory is grounded in role theory (Kahn et al., 1964). LMX development has been described in terms of a sequential three-phase process of role-*taking*, *role-making* and *role-routinization* (Graen & Scandura, 1987). *Role-taking* is characterized as an economic transaction. Here, the supervisor communicates role expectations to the subordinate. The subordinate receives the "sent role" and decides the degree to which it will be accepted or rejected. The supervisor evaluates the employee's response and makes attributions with respect to the employee's commitment and capabilities. In the *role-making phase*, the supervisor and the subordinate work on defining the nature of

their relationship with a particular emphasis on clarifying the subordinate's role responsibilities. Social exchange plays a key role in this stage in determining whether the relationship will reach "maturity". In the *role-routinization* phase, behaviours of the supervisor and the subordinate become "interlocked" and mutual expectations become clearer and stable.

Similarly, Graen and Uhl-Bien (1995) described LMX as developing over three stages wherein the supervisor views the subordinate as "stranger", then as "acquaintance" and finally as "partner". In the first of these three stages, the LMX relationship is characterized as "cash and carry", purely contractual and governed by expectations of immediate reciprocation. Formal job descriptions largely dictate the currencies and terms of supervisor-subordinate exchanges. In stage 2, a more personalized relationship develops, characterized by some degree of *social* exchange. Yet the principles of exchange equity and immediacy of reciprocation largely prevail. As LMX reaches stage 3 ("partnership"), the social exchange becomes open-ended, characterized as "in-kind" with ill-defined time spans for reciprocation. Moreover, the exchange is not purely behavioral but also socio-emotional, characterized by mutual trust, respect, and felt obligation or loyalty.

Liden et al. (1997) extended LMX theory by giving more attention to the nature of the exchange between dyadic members. Specifically, they drew from Sahlins's (1972) reciprocity continuum in describing how low LMX relationships adhere to the principles of equity and immediacy of reciprocal exchanges. In contrast, high LMX relationships adhere to the principles of generalized reciprocity, wherein reciprocal exchanges are of

low equivalence and low immediacy. High quality LMX is governed by unselfish devotion, non-calculative compliance and mutual concern, affection, and admiration.

Overall, LMX theory (Graen & Scandura, 1987; Graen & Uhl-Bien, 1995; Liden et al, 1997) describes LMX in terms of both role-making and social exchange processes. As the quality of the LMX relationship matures, it moves from a predominantly economic, contractual exchange, where self-interest prevails, to a social exchange where mutual and collective interests dominate. In higher quality LMX relationships, the non-calculative, affective-based motivations governing social exchanges assume increasing importance while cognitive, calculative motivational forces diminish (Liden et al., 1997). However, not all LMX relationships reach maturity, allowing for some differentiation in the relationships supervisors develop with their employees. Accordingly, role-making and exchange processes can impact employees' conceptualizations of OCB with respect to perceived leader expectations, perceived instrumentality of OCB and perceived role breadth. In turn, how employees conceptualize OCB will likely influence how frequently they display OCB (Figure 1).

The role making foundation of LMX theory (Graen & Scandura, 1987; Graen & Uhl-Bien, 1995) suggests that employees' work roles evolve over repeated leadermember interactions and that the leader will typically have a more significant impact on how employees define their work roles than will other individuals (Graen, 1976). It is likely that LMX plays a critical role in shaping employees' perceptions of job responsibilities. Moreover, LMX likely plays a more important role in forming followers' conceptualizations of OCB than it does in forming their conceptualizations of task

performance requirements because LMX is most influential with respect to subordinate displays of unstructured (versus structured) and high discretion (versus low discretion) activities (Graen & Scandura, 1987). As noted previously, task responsibilities tend to be clearly communicated in formal job descriptions and/or dictated by the structure inherent in the tasks.

2.2.2 LMX and Employee Conceptualizations of OCB

In the sections that follow, I describe how LMX can influence employees' conceptualizations of OCB through their perceptions of leader expectations, role breadth and the instrumentality of OCB.

2.2.2.1 LMX and Perceived Leader Expectations

LMX is likely to affect positively how employees perceive their supervisors' expectations of them (Figure 1). First, subordinates in high (low) exchange relationships may perceive high (low) expectations from their leaders (individualized expectation). Second, supervisors tend to define subordinates' work roles more broadly than do their subordinates (average expectation) (Lam et al., 1999), which is more likely to be communicated to subordinates in high exchange relationships. An explication of these expected relationships follows.

In the role making process, leaders send role expectations to their subordinates. Subordinates filter the "noise", interpret and react to this "sent role". Research has provided insights into how LMX quality influences perceived leader expectations of subordinates. LMX is positively associated with the frequency and quality of leader

member interactions during the role-making process. High quality LMX relationships are characterized by frequent and open communication exchanges (Graen & Scandura, 1987). These high quality exchanges are also characterized by close alignment and accommodation of values, non-routine problem solving, support and coaching. In contrast, low quality LMX exchanges are characterized by "polarizing" perspectives, close performance monitoring, competitive conflict and "power games" (Fairhurst, 1993). Thus it is likely that in higher exchange dyads, subordinates believe their leaders expect more from them – for example, to contribute OCB to enhance leader and unit effectiveness and the social and psychological work environment.

In addition, supervisors generally define their subordinates' work roles more broadly than do their subordinates (Lam et al., 1999). But in high quality LMX relationships there is more open dialogue between supervisors and their subordinates, providing the medium through which supervisors can more clearly communicate their expectations. Accordingly, higher quality LMX relationships facilitate a closer alignment between supervisors and subordinates on work role expectations. Indeed, higher LMX is positively associated with higher role clarity reported by subordinates (Gerstner & Day, 1997). Similarly, there is less incongruence in role expectations of the supervisor and the role expectations and preferences of their subordinates in high quality LMX relationships (Graen, Orris, & Sommerkamp, 1973; Morrison, 1994). Due to the tendency of supervisors to define their subordinates' work roles more broadly than do their subordinates, combined with a greater likelihood that such broader role expectations will be communicated most clearly in high quality LMX relationships, I hypothesized:

Hypothesis 5a: LMX quality is related positively to employees' perceptions of the expectations their supervisors have of them for OCB (Path 8 of Figure 1).

2.2.2.2 LMX and the Perceived Instrumentality of OCB

LMX is also likely to influence followers' perceptions of the instrumentality of OCB. While OCB is related positively to overall evaluations of performance (e.g., Johnson, 2001; Motowidlo & Van Scotter, 1994; Van Scotter & Motowidlo, 1996), employees are typically less confident that monetary and other rewards will follow from OCB than from exemplary task performance (Organ, 1997). Moreover, it generally takes time for supervisors to recognize OCB. Organ (1997) noted that: "it is doubtful that the persons rendering these contributions [OCB] would see a one-to-one correspondence between discrete instances of such contributions and near term payoffs" (p. 93). LMX quality is likely to be an important factor influencing performers' "confidence" that OCB will be rewarded.

In explaining the relationship between LMX and OCB, Wayne, Shore, and Liden (1997) rely heavily on social exchange theory (Blau, 1964), with its emphasis that "only social exchange tends to engender feelings of personal obligation, gratitude and trust; purely economic exchange as such does not" (Blau, 1964:94). High quality LMX is associated with mutual respect, trust and obligation and with ill-defined time frames for reciprocation, whereas low quality LMX is associated with purely contractual, economic and immediate exchange (Graen & Scandura, 1987; Graen & Uhl-Bien, 1995). Thus, employees in high quality LMX relationships will likely experience confidence and trust that their OCB will garner valued rewards over the long term. Stated alternatively, high

quality LMX is likely to enhance employees' perceptions of the instrumentality of OCB, which in turn are likely to increase their OCB performance (Figure 1; Path 7, 1). Accordingly I hypothesized:

Hypothesis 5b: *LMX quality is related positively to employees' perceptions of the instrumentality of OCB (Path 7 of Figure 1).*

2.2.2.3 LMX and Perceived Role Breadth

The literatures on covenantal relationships (e.g., Graham, 1991; Graham & Organ, 1993; Van Dyne et al., 1994) and the proposed continuum of reciprocity used to describe LMX quality (Liden et al., 1997) can also aid our understanding of the relationship between LMX and perceived role breadth. In particular, Graham and Organ (1993) contrasted covenantal exchanges, social exchanges and transactional exchanges. They argued that the motivational "driver" of a transactional relationship is the desire to maximize satisfaction of self-interests, resulting in few behaviours that extend beyond what is formally and contractually expected (e.g., OCB). In contrast, inherent in social exchange are expectations of fairness/equity and reciprocity with respect to the exchange of "intangibles" over ill-defined time frames. In such relationships, subordinates' OCB is founded on trust and faith that their contributions will be recognized and rewarded. This establishes theoretically the positive association between perceived instrumentality and OCB in high quality LMX relationships, as noted earlier.

Covenantal relationships also involve open-ended and non-transactional obligations that are left unspecified in advance (Graham & Organ, 1993; Van Dyne et al., 1994).

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However, in contrast to social exchange, with its predominant reliance on notions of fairness (Organ, 1990; Graham & Organ, 1993), covenantal relationships are founded more on mutual commitment and an intrinsic motivation to satisfy the needs, and enhance the welfare, of one's dyadic partner. Here, behaviour is founded on affect-laden, normative values (as contrasted with purer notions of social exchange, founded predominantly on maintaining fairness/equity; Van Dyne et al., 1994). It is in this sense that a covenantal relationship is characterized as a generalized reciprocity (Sahlins, 1972), as is manifested in a high quality LMX relationship of unselfish devotion, deep concern for the other, mutual affection and admiration (Liden et al. 1997). Accordingly, as LMX quality increases, the affective component of LMX increases and the exchange becomes more characteristic of a covenantal relationship.

How does LMX quality influence the broadness with which subordinates define their work roles? Wilson (2003) has noted that followers define their jobs more broadly to include OCB because they wish to contribute to the functionality and social and psychological environment of the workplace (Borman & Motowidlo, 1993). This is consistent with findings by Rioux and Penner (2001) who investigated motivational causes of OCB. Specifically, they found that organizational concern (e.g., "Because I care what happens to the company") was a motivational factor underlying OCB. Stated alternatively, employees who are concerned with the effective functioning of their workplace will define their work roles more broadly. LMX can enhance employee concern for the effective functioning of the workplace directly or indirectly. Firstly, LMX can contribute to the affective bond employees form with their organization, in that

supervisors are agents of the organization and provide the "lens though which the entire work experience is viewed" (Gerstner & Day, 1997: 840). Indeed, meta-analysis has shown a strong relationship between LMX and affective organizational commitment (Gerstner & Day, 1997). Accordingly, employees in high quality LMX relationships may have entered into high covenantal ties with their organization (e.g., higher commitment). With this enhanced commitment, their desire to contribute to the functionality of their organization (or unit) is expressed as OCB.

High quality LMX may expand employees' perceptions of role breadth in other ways. For example, subordinates may contribute OCB in order to enhance supervisor performance (e.g., by making unit performance enhancing suggestions, or by engaging in pro-social behaviours that facilitate team productivity). Here, OCB is an expression of the employees' affective bonds with the supervisor, and desire to enhance the productivity of their unit (and indirectly, the productivity of their supervisor; Podsakoff & Mackenzie, 1997). In this sense, employees may feel that OCB is something that they "should do" (e.g., a felt-obligation; normative commitment).

The preceding theoretical arguments suggest that high quality LMX positively relates to broadened role definitions held by subordinates. I further hypothesized that social identity mediates this relationship as explained in the following section.

2.2.2.4 LMX, Social identity and Perceived Role Breadth

The recent social identity perspective on leadership (e.g., Lord, Brown, & Freiberg, 1999; Van Knippenberg & Hogg, 2003; Van Knippenberg et al., 2004), developed from

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social identity theories (e.g., Tajfel, 1982) may also help in understanding the relationship between LMX and the follower's defined role breadth. This perspective suggests the follower's identification can mediate the leader's influence on the follower's behaviour. In contrast to personal identity, with an emphasis on individual differentiation from others, social identity is based on the extent to which an individual defines the self in connection to significant others (relational identity) or in terms of membership in social groups (collective identity) (Brewer & Gardner, 1996; Lord et al., 1999).

A number of studies have shown that leadership (e.g., transformational leadership) may affect follower identification with the collective, which in turn, influences follower attitudes and behaviour (see Van Knippenberg et al., 2004 for a review). Although empirical evidence on leadership in influencing relational identity is scarcer (Knippenberg et al., 2004), scholars have argued that leadership can promote follower identification with the leader (e.g., Conger & Kanungo, 1998; Kark, Schmir, & Chen, 2003). In particular, Kark et al. (2003) found that transformational leadership correlates highly with personal identification with leader (e.g., view the success of one's leader as one's own success) (r = 0.73) and moderately with identification with the unit (e.g., view the success of the unit as one's own success) (r = .43).

Although no study has explicitly examined the relationship between LMX and social identity, high-quality LMX relationships, similar to transformational leadership (Graen & Uhl-Bien, 1995) are likely to be positively associated with follower identification with the leader and with the affiliated work group. In fact, Wang, Law, Hackett, Wang and Chen (2005) showed that LMX fully mediates the effect of

transformational leadership on OCB. Lord et al. (1999) also suggest that leader-member relations affect follower identification, which in turn, leads to social and organizational processes. First, LMX can contribute to the collective identity employees form with their work group/organization since, as mentioned, LMX is a strong factor that influences the affective bond employees form with their work group/organization (with the leader as the agent of the organization). At the same time, the affective bond that employees form with their leader in high LMX relations can promote their identification with their leader (relational identity).

The shift of identity from self-identity to social identity is postulated to be associated with changes in the nature of social motivation (Brewer & Gardner, 1996). In contrast with self-interest based individual identity, social identity has been characterized as intrinsic and altruistic, rendering mutual benefits with the identified partner (e.g., leader) and collective (e.g., work group or organization) (Brewer & Gardner, 1996, 2004; Van Knippenberg et al., 2004). An extended self identity to include social identity may lead employees to define their work roles more broadly to include OCB, which promotes the interests of their leader and the welfare of their social unit.

The forgoing discussion indicates that higher LMX quality is associated with higher levels of social identity (relational and collective), which, in turn, mediates the relationship between LMX and employees' defined role breadth with respect to OCB (see Figure 1: Paths 9, 5; and 10, 6).

Accordingly, a social identity perspective is consistent with perspectives of social exchange, covenantal tie and reciprocity in explaining how LMX quality influences

employee perceived role breadth. These perspectives emphasize a shift from self-serving behaviour to behaviour that is intrinsically motivated, affectively based, and demonstrative of sincere concern for one's dyadic partner as LMX quality grows. This shift is accompanied by employees defining their work role more broadly to include OCB.

Accordingly, I hypothesized:

Hypothesis 6a: Employees' identification with their leader mediates the positive relationship between LMX quality and the breadth with which employees define their work roles to include OCB (Paths 10 & 6 of Figure 1).

Hypothesis 6b: Employees' identification with their organization mediates the positive relationship between LMX quality and the breadth with which employees define their work roles to include OCB (Paths 9 & 5 of Figure 1).

The rationale underlying the effects of LMX on role breadth is different from, though perhaps intertwined with, the rationale underlying the influence of LMX on perceived instrumentality of OCB. The former is based on employees' covenantal relationships, generalized reciprocity and extended identification with their supervisor or the organization, which is founded predominantly on affect. To gain a deeper insight into this effect, I propose a mediation process, in which social identity mediates between LMX and perceived role breadth. In contrast, positioning the perceived instrumentality of OCB as partially mediating the effects of LMX on OCB is founded predominantly on the notion of equity in the social exchange process.

Building on my discussion of how LMX is likely to influence employees' conceptualizations of OCB, and how these conceptualizations in turn are likely to influence employees' OCB (Figure 1), I hypothesized:

Hypothesis 7: The relationship between LMX and OCB is mediated by employees' conceptualizations of OCB, with respect to: (a) their perceptions of whether their supervisors expect OCB from them; (b) the degree to which they define their work roles to include OCB (role breadth); and (c) their perceptions of the instrumentality of OCB.

Together, a mediation model (Figure 1) is presented wherein LMX is positioned as a key variable influencing how employees conceptualize OCB, which in turn, positively influences how frequently they display OCB.

CHAPTER 3: METHOD

This chapter consists of three sections. The first describes the sample and procedures used, while the second details the measures. The final section provides an overview of the data analytic methods employed in evaluating the psychometric integrity of the measures used and in testing the path analytic model of Figure 1.

3.1 Sample and Procedure

Data were collected from a mid-sized financial company located in Shenzhen in South China. Drawing from the employee list provided by the HR department of the company, questionnaires were mailed through the company's internal mail system. A cover letter explained the purposes of the study and guaranteed anonymity of responses. Two sets of questionnaires were sent: one to subordinates and the other to their immediate supervisors.

The subordinates' questionnaires contained measures of LMX, role breadth with regard to OCB, instrumentality of OCB, perceived leader expectations of OCB, identification with the supervisor (relational identity) and identification with the company (collective identity). The supervisors were asked to rate subordinates' performance of OCB. To match subordinate responses with those of their supervisors, an identification number was assigned to each employee and to his or her immediate supervisor's questionnaires. Two hundred and thirty-one subordinate questionnaires and 85 supervisor questionnaires were distributed to employees. Each supervisor was asked to rate no more than three of her/his subordinates so as to guarantee the quality of their ratings. 201

completed questionnaires were returned by subordinates and 69 were collected from supervisors. After dropping those questionnaires that could not be matched between subordinates and their direct supervisors, I was left with 170 supervisor-subordinate dyads (67 supervisors).

Of the 170 participating subordinates, 52 percent were female and 48 percent were male. Means of relevant demographics of this sample were: age 28.4 years, work experience 6.2 years, organizational tenure 1.1 years and dyadic tenure .73 years. Eighty-five percent of subordinates held a college diploma or higher educational credential. The low organizational and dyadic tenures are due to the short history of this company and its rapid growth in last several years.

In the sample of 67 supervisors, 51 percent were female and 49 percent were male. Means of relevant demographics were: age 34.9 years, work experience 12.9 years, and organizational tenure 1.4 years. Each manager supervised 6 employees on average. Ninety-eight percent of subordinates held a college diploma or higher educational credential.

3.2 Measures

The following is a description of the measures, all employing 5-point Likert scales. The items comprising each scale are presented in Appendix 4.

All measures were originally developed in the U.S., Canada and Western Europe. However, most of them have been used with Chinese samples. The translation and back translation process was used to assure equivalence of meaning (Ady, 1994; Brislin,

1980). I translated all the items in the questionnaire into Chinese. Then this Chinese version was translated back into English by another Ph.D. student fluent in both English and Mandarin. The back-translated version and the original version were compared and the discrepancies between these two versions were addressed and resolved. In addition, two HR professionals in China reviewed the questionnaire and ensured that they were grammatically correct and made sense for their Chinese employees.

Organizational Citizenship Behaviour. Subordinates' OCB was assessed with 24 items drawn from Podsakoff et al.'s (1990) OCB scale (Altruism, Conscientiousness, Sportsmanship, Courtesy, Civic Virtue) (see Appendix 4). Sample items include: "Helping others who are experiencing work-related problems" (Altruism); "Exercising care and perseverance (being conscientious) in completing work tasks (Conscientiousness); "Taking special care to avoid/prevent problems with other employees" (Courtesy); "Attending functions that are not required but help the company's image" (Civic Virtue); "Avoiding 'making mountains out of molehills"" (Sportsmanship). Supervisors were asked to rate the frequency with which their subordinate performed these behaviours (from "1-never" to "5-always").

Role breadth, instrumentality and leader expectations. Following Hui et al. (2004), I used the construct definitions of the dimensions of OCB to measure role breadth, instrumentality and leader expectations. The five dimensional definitions are: 1) altruism: assisting others on work-related matters; 2) conscientiousness: going beyond the minimum role requirements of the organization; 3) courtesy: being considerate in preventing work-related problems with others from occurring; 4) sportsmanship:

tolerating less than ideal circumstances without complaining; 5) civic virtue: being concerned with the development of the organization. For each dimension, specific OCB items were presented to facilitate respondents' understanding of these dimensions (see Appendix 4).

To measure role breadth, for each OCB dimension, employees were asked to indicate:

"the extent to which you consider each behaviour as part of your job (not whether you perform these behaviours, but the extent to which you consider each of them to be a part of your job)" (from "1-definitley not part of my job" to "5- definitely part of my job")

To measure perceived instrumentality of OCB, for each OCB dimension, employees were asked to indicate:

"the extent to which you agree that your supervisor will value and reward you formally or informally for performing these behaviours" (from "1definitley not" to "5- definitely")

To measure perceived leader expectations, for each OCB dimension, employee were asked to indicate:

"the extent to which you think your supervisor expects you to perform these behaviours" (from "1-definitley not" to "5- definitely")

Leader-Member Exchange. Subordinates' perceptions of leader-member exchange were assessed with Liden and Maslyn's (1998) multi-dimensional measure of

LMX (LMX-MDM) (see Appendix 4). It assesses four sub-factors: affect, loyalty, professional respect and contribution. Sample items in this 11-item measure include: "I like my supervisor very much as a person" (affect); "my supervisor would come to my defence if I were "attacked" by others" (loyalty); "I do work for my supervisor that goes beyond what is specified in my job description" (contribution); and "I am impressed with my supervisor's knowledge of his/her job" (professional respect).

Identification with organization. Following Kark et al. (2003), identification with the employing organization was measured using five items adopted from the "identification scale" developed by Mael and Ashforth (1992) and Shamir, Zakay, Breinin, and Popper (1998) (see Appendix 4). Employees were asked to indicate the extent of agreement on items measuring their identification with their organization (from "1-strongly disagree" to "5-strongly agree"). A sample item is "my company's successes are my successes."

Identification with leader. Following Kark et al. (2003), five items that are similar to those measuring identification with the collective (Mael and Ashforth, 1992; Shamir et al., 1998) were used, but in this case employees were asked to use their leader as the referent (rather than the organization) (from "1-strongly disagree "to "5-strongly agree") (see Appendix 4). A sample item is "my supervisor's successes are my successes."

<u>Control variables.</u> Also, information on work relationship (dyad) tenure, organizational tenure, job tenure, education, gender and age was collected from both the

subordinates and their supervisors. The number of employees each supervisor oversaw was also collected.

3.3 Method of Data Analysis

First, descriptive statistics, including means, standard deviations, reliability coefficients and zero-order correlation of all variables were computed. Second, structural equation modeling (SEM) was employed to estimate specific path coefficients and overall model fit. A two-step process of analysis, following the "two-step" SEM approach recommended by Anderson and Gerbing (1988), was employed. The first consisted of a series of confirmatory factor analyses (CFA) and model comparisons to test the measurement models and to verify the distinctiveness of the key variables of the study. In the second step, the full path model depicted in Figure 1 was tested and a series of model comparisons between the proposed model and competing models were conducted, using $\chi 2$ difference statistics.

3.3.1 The Measurement Models.

Supervisor rated OCB. CFAs were conducted on the OCB scale. Drawing on Organ's (1988) conceptualization of OCB and earlier construct validation work on the OCB scale developed by Podsakoff et al. (1990), a five-factor dimensional structure of OCB (altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions) was compared against competing one- (e.g., LePine et al., 2002), two- (OCB-Organizational and OCB-Interpersonal; Williams & Anderson, 1991,), and three- (OCB-

Organizational, OCB-Interpersonal and OCB-Task; Coleman, & Borman, 2000) factor

measurement models of OCB.

Social identity: Items measuring identification with the organization and

identification with the leader were submitted to a CFA to test a two-factor model.

LMX: Items measuring LMX were submitted to CFA to test a four-factor model

with an overall second-order factor.

Table 2 Three-Factor Model and Five-Factor Model of Employee Conceptualizations of OCB

Three Factor Model: Assume that within facet correlations of role breadth, instrumentality and leader expectation are higher than within dimension correlations of altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions

Role breadth	Instrumentality	Leader Expectation
Altruism-role breadth	Altruism-Instrumentality	Altruism-Expectation
Conscientiousness-role breadth	Conscientiousness- Instrumentality	Conscientiousness-Expectation
Courtesy-role breadth	Courtesy-Instrumentality	Courtesy-Expectation
Civic virtue-role breadth	Civic virtue-Instrumentality	Civic virtue-Expectation
Sportsmanship-role breadth	Sportsmanship-Instrumentality	Sportsmanship-Expectation

Five Factor Model: Assume that within dimension correlations of altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions are higher than within dimension correlations of role breadth, instrumentality and leader expectation

Altruism	Conscientiousness	Courtesy
Altruism-Role breadth	Conscientiousness-Role breadth	Courtesy-Role breadth
Altruism-Instrumentality	Conscientiousness-Instrumentality	Courtesy-Instrumentality
Altruism-Expectation	Conscientiousness-Expectation	Courtesy-Expectation
Civic virtue	<u>Sportsmanship</u>	
Civic virtue-Role breadth	Sportsmanship-Role breadth	
Civic virtue-Instrumentality	Sportsmanship-Instrumentality	
Civic virtue-Expectation	Sportsmanship-Expectation	

Role breadth, instrumentality and leader expectations. To test the discriminant

validity of role breadth, instrumentality and leader expectation it is necessary to show that

items measuring employee conceptualizations of OCB converge on these three facets,

rather than on one factor or the five established dimensions of OCB (altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions). To this end, I conducted CFAs to test: a one-factor model; a three-factor model; and a five-factor model (see Table 2). Then the three-factor model of OCB conceptualizations was compared against the one-factor model and the five-factor model, with the three-factor model expected to show the best fit.

3.3.2 The Path Models.

In the second step of data analysis, structural equation modeling was employed to test the overall fit of the path model and to examine the individual hypotheses (i.e., paths) specified in the path model.

As illustrated in Figure 1, the baseline model (M_0) positions three facets of employee conceptualizations of OCB as fully mediating the effect of LMX on OCB, wherein identification with the leader and identification with the organization mediate the effect of LMX on role breadth and the effect of leader expectation on OCB is mediated by role breadth and perceived instrumentality.

Against the hypothesized model (M_0) , I tested three nested models and one nonnested competing model (Figures 2, 3, 4, 5 in Appendix 1).

The first nested model (M_1 , Figure 2) proposes that LMX has a direct impact on employees' OCB in addition to the effects mediated by employee conceptualizations of OCB (role breadth, leader expectation and instrumentality). This is because Hofmann et al. (2003) found LMX related positively to employee safety citizenship behaviour, but

"role definition" (measured as expectations) with respect to safety citizenship behaviour did not mediate this relationship as hypothesized. This could imply that LMX has a direct impact on employee OCB.

Morrison (1994) relied on an instrumentality explanation to interpret the relationship between role breadth and OCB. If this explanation is valid, it could imply that role breadth and perceived instrumentality will not predict OCB beyond each other and removal of either path will not impact the model fit. I tested two nested models to examine whether role breadth and perceived instrumentality uniquely predict OCB and the removal of role breath or perceived instrumentality will decrease the model fit. The first one (M_2 , Figure 3) removes the path linking role breadth and OCB from the hypothesized model and the second one (M_3 , Figure 4) removes the path linking perceived instrumentality and OCB from the hypothesized model.

I also tested a non-nested alternative model (M_4 , Figure 5), which proposes that identification with the leader and identification with the organization mediate between LMX and perceived instrumentality, in contrast to the baseline model, in which identification mediates between LMX and perceived role breadth. This analysis attempts to distinguish instrumentality belief from role breadth by showing that while role breadth is rooted mostly in employee affect (e.g., identity), instrumentality is not.

CHAPTER 4: RESULTS

This chapter reports descriptive statistics of study variables, results from validation of the measures, estimation of the hypothesized research model, comparisons to alternative models and testing of the study's hypotheses.

4.1 Descriptive Statistics

Zero-order correlations, means, standard deviations, and alpha reliability coefficients for all variables are reported in Table 3. It shows that alpha coefficients were moderate to high, ranging from .71 (Role Breadth) to .94 (overall OCB).

	Mean	S.D.	1	2	3	4	5	6	7
1. OCB	3.99	.47	(.94)						
2. MDLMX	3.81	.72	.33**2	² (.91)					
3. Role Breadth	4.26	.49	.24**	.45**	(.71)				
4. Instrumentality	3.52	.90	.25**	.50**	.33**	(.92)			
5. Leader Expectation	4.08	.66	.20*	.38**	.46**	.32**	(.86)		
6. Identification with Leader	3.57	.78	.25**	.63**	.41**	.49**	.37**	(.84)	
7. Identification with Organization	4.13	.64	.16*	.52**	.53**	.32**	.45**	.56**	(.84)

Table 3 Descriptive Statistics for All Study Variables

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

4.2 Confirmatory Factor Analyses

² Concern may arise that the correlation between the MDLMX and OCB is due to construct overlap because of the inclusion of the "contribution" factor in the MDLMX (e.g. I do work for my supervisor that goes beyond my job description). An analysis of the correlation between MDLMX and LMX-7 developed by Graen, Novak, and Sommerkamp (1982) revealed a high correlation (r = .85) and MDLMX had a comparable correlation with OCB (r = .33) to that between LMX-7 and OCB (r = .33). "Contribution" is not represented in LMX-7. Thus construct overlap is unlikely of concern for the relationship between MDLMX and OCB observed here.

To test the construct validity of the measures, CFAs were conducted on OCB, LMX, identification with leader and identification with organization, as well as on employees' conceptualizations of OCB (role breadth, perceived instrumentality and leader expectation).

In the CFA analyses and the SEM analyses that follow, maximum likelihood estimation in LISREL 8.54 was used to analyze the covariance matrixes. I report fit indices of χ^2 , RMSEA, CFI and TLI, which are among the most widely reported fit indices (McDonald & Ho, 2002). I relied on RMSEA, CFI and TLI to test fit because χ^2 test is overly stringent (Tabachnick & Fidell, 2001). In fact, in my CFA and SEM analyses, most of the other fit indices, such as RMR, SRMR, NFI and IFI led to similar conclusions in judgment of fit. McDonald & Ho (2002) indicates that a RMSEA of less than .08 corresponds to an acceptable fit and CFI and TLI larger than .90 are regarded acceptable.

4.2.1 Organizational Citizenship Behaviour

I conducted CFAs to test: (a) a five-factor model (altruism, conscientiousness, courtesy, civic virtue, and sportsmanship dimensions) with an overall second-order factor $(\chi^2 = 754.44, df = 247; RMSEA = .10; CFI = .94; TLI = .93);$ (b) a one-factor model (overall "OCB", Lepine et al., 2002; $\chi^2 = 961.46, df = 252; RMSEA = .13; CFI = .92; TLI = .91);$ (c) a two-factor model (OCB – Organizational and OCB-Interpersonal, William & Anderson, 1991; $\chi^2 = 893.95, df = 251; RMSEA = .12; CFI = .92; TLI = .92);$ and (c) a three-factor model (OCB-Organizational, OCB-Interpersonal, OCB-Job / Task; Coleman & Borman, 2000; $\chi^2 = 818.40, df = 248; RMSEA = .12; CFI = .93; TLI = .93).$

Chi-square difference tests showed that the five factor model fit the data significantly better than did the one-factor model ($\Delta \chi^2 = 207.02$, $\Delta df = 5$, p<.01), a two-factor model ($\Delta \chi^2 = 139.52.52$, $\Delta df = 4$, p<.01) and a three-factor model ($\Delta \chi^2 = 63.96$, $\Delta df = 1$, p<.01). Although the RMSEA value (.10) is marginal, other fit indices indicate an acceptable fit (CFI = .94; TLI = .93; RMR=. 04; SRMR=. 07; NFI=. 91; IFI=. 94). I retained the five-factor measurement model of OCB. Items loaded significantly on their expected OCB dimension, and each of the five OCB dimensions was strongly related to overall OCB (standardized factor loadings: .91 altruism, .94 conscientiousness, .92 courtesy, 82 sportsmanship, .78 civic virtues).

4.2.2 Leader-Member Exchange

I conducted a CFA to test a four dimensional structure of LMX-MDM. A fourfactor model, with an overall second-order factor, fit the data well ($\chi^2 = 81.31$, df = 40; RMSEA = .07; CFI = .98; TLI = .97). The competing one factor model ($\chi^2 = 190.41$, df = 44; RMSEA = .14; CFI = .94; TLI = .93) fit the data significantly worse than did the four factor model ($\Delta \chi^2 = 109.10$, $\Delta df = 4$, p<. 01).

4.2.3 Identification with Leader and Identification with Organization

I conducted a CFA to test a two-factor model of identification with leader and identification with organization, which fit the data well ($\chi^2 = 85.51$, df = 34; RMSEA = .08; CFI = .97; TLI = .96). The competing one factor model ($\chi^2 = 268.09$, df = 35; RMSEA = .20; CFI = .88; TLI = .84) did not fit the data well.

4.2.4 Employee Conceptualizations of OCB: Role Breadth, Instrumentality and Leader Expectation

I conducted a CFA to test the hypothesized three-factor model (role breadth, instrumentality and leader expectation). The three-factor structure fit the data within an acceptable range ($\chi^2 = 197.27$, df = 87; RMSEA = .08; CFI = .94; TLI = .93). The onefactor model did not provide an acceptable level of fit to the data ($\chi^2 = 884.65$, df = 90; RMSEA = .23; CFI = .75; TLI = .71). To demonstrate the discriminant validity of role breadth, instrumentality and leader expectation, it must be shown that items measuring these facets converge on these three facets, rather than on the five established OCB dimensions (altruism, conscientiousness, courtesy, civic virtue, and sportsmanship). Recall that each OCB-conceptualization facet was measured along each of the five OCB dimensions. Accordingly, I conducted a CFA to test a five-factor model, with items measuring employee conceptualizations of OCB converging on the five OCB dimensions. The five-factor model did not fit the data well ($\chi^2 = 851.67$, df = 80; RMSEA = .24; CFI = .76; TLI = .68).

Together, these analyses support hypothesis 4. That is, employees' perceptions of role breadth, the instrumentality of OCB and leader expectations represent three independent constructs.

4.2.5 The Overall Measurement Model

Anderson and Gerbing (1988) recommend a two-step procedure for model testing in which one first estimates and tests a measurement model prior to estimating and testing the full model that incorporates both measurement and structural parameters.

Accordingly, I first conducted a CFA to test a seven-factor overall measurement model, which embraced all study variables, including OCB, LMX, identification with leader, identification with organization, role breadth, perceived instrumentality, and perceived leader expectation. Before testing this model, I reduced the number of items by treating the four dimensions of LMX as its indicators and the five dimensions of OCB as its indicators. For other variables in the model, the individual items were used as indicators. The seven-factor model fit the data well ($\chi^2 = 941.61$, df = 506; RMSEA = .07; CFI = .95; TLI = .94). Having established the fit of the measurement model, I proceeded to test the full latent variable model.

4.3. Structural Model Estimations

SEM analyses were conducted to compute the overall fit and parameter estimates of the hypothesized and competing structural models.

In testing the hypothesized model and the competing models, I treated the four dimensions of LMX as its indicators and the five dimensions of OCB as its indicators as I did in testing the overall measurement model. Under the two-step procedure, in addition to the overall measurement model and the theoretically hypothesized model, Anderson and Gerbing (1988) suggested testing models in which one or more parameters estimated in the theoretical model are constrained and models in which one or more parameters constrained in the theoretical model are estimated. Following this two-step procedure, I tested three nested alternative models. I also tested a non-nested alternative model.

Demographic variables were excluded in these SEMs since studies have failed to reveal their relationships with OCB (see Podsakoff et al., 2000 for a review) and analyses

of correlations between those demographic variables collected in this study (e.g. age, gender, and years of work experience, organizational, job and dyadic tenures) and OCB identified no significant relationship.

4.3.1. Testing the Hypothesized model

For the sake of simplicity, Figure 6 only presents the standardized path coefficients and associated t-values in the hypothesized model. Detailed results of estimation of the structural model are reported in Table 5 and Table 6 in Appendix 2. Goodness-of-fit indices are reported in Table 4. Table 4 showed that the hypothesized model exhibited a good fit to the data ($\chi^2 = 998.37$, df = 517; RMSEA = .07; CFI = .95; TLI = .94).

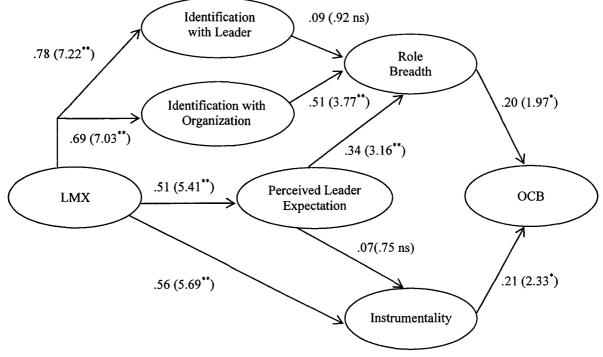


Figure 6: Standardized Path Coefficients and t values for the Hypothesized Model

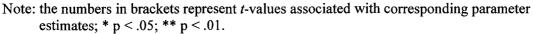


Table 4 also presents goodness-of-fit indices of the three nested alternative models and the non-nested alternative model. The first alternative model (M₁, Figure 2) draws a direct path from LMX to OCB in addition to the mediating path. As shown in Table 4, this alternative model ($\chi^2 = 998.37$, df = 516; RMSEA = .07; CFI = .95; TLI = .94) did not provide better fit to the data ($\Delta \chi^2 = .70$, $\Delta df = 1$, ns), which supported the retention of the hypothesized model under the principle of parsimony.

Table 4 Comparisons of the Hypothesized and the Alternative Models

Model	χ2	df	CFI	TLI	RMSEA	Δdf	Δχ2
M ₀ : Baseline Model	998.37	517	.95	.94	.07		
M ₁ : LMX has a direct path to OCB	997.67	516	.95	.94	.07	1	.70 ns
M ₂ : Role breadth not relating to OCB	1002.34	518	.95	.94	.07	1	3.97*
M ₃ : Instrumentality not relating to OCB	1005.59	518	.95	.94	.08	1	7.22**
M₄: Identification as mediating between LMX and Instrumentality	1020.19	517	.94	.94	.08		

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

The second nested alternative model (M₂, Figure 3) does not have role breadth linked to OCB. As shown in Table 4, this alternative model ($\chi^2 = 1002.34$, df = 518; RMSEA = .07; CFI = .95; TLI = .94), although showing an acceptable fit to the data, fit significantly worse to the data than did the baseline model ($\Delta \chi^2 = 3.97$, $\Delta df = 1$, p<. 05). Similarly, the third nested alternative model (M₃, Figure 4) without the link between perceived instrumentality and OCB fit the data within an acceptable range ($\chi^2 = 1005.59$, df = 518; RMSEA = .08; CFI = .95; TLI = .94), but significantly worse than did the hypothesized model ($\Delta \chi^2 = 7.22$, $\Delta df = 1$, p<. 01). Both model comparisons provided additional evidence to support that the removal of either role breadth or instrumentality from the hypothesized model resulted in a decrease in the model fit and that role breadth and perceived instrumentality represent independent constructs. Altogether, the nested model comparisons supported the retention of the hypothesized model.

The non-nested alternative model (M₄, Figure 5) positions *identification with leader* and *identification with organization* as mediators between LMX and perceived instrumentality, in contrast to the baseline model, in which identification mediates between LMX and perceived role breadth. Fit indices showed that M₄ fit the data well (χ^2 = 1020.19, df = 517; RMSEA = .08; CFI = .94; TLI = .94), although slightly worse than did the baseline model (M₀: AIC = 1154.37, RMSEA = .07, CFI=. 95; M₄: AIC = 1176.19, RMSEA = .08, CFI=. 94). Because M₄ is not nested within the hypothesized model, a χ^2 difference test can not be performed. However, in M₄, *identification with organization* was not significantly related to *perceived instrumentality* (β = -.01, ns), whereas *identification with leader was* (β = .52, p< .01).

4.3.2 Tests of Study Hypotheses

Parameter estimates and results of significance tests for all the hypotheses are presented in Figure 6 and in Table 6 of Appendix 2.

4.3.2.1 The Conceptualizations and Display of OCB

I hypothesized that role breadth and perceived instrumentality relate positively to employees' OCB (Hypotheses 1 and 2). Both hypotheses were supported. Role breadth related positively to OCB performance ($\beta = .20$, p<. 05) as did perceived instrumentality

(β = .21, p<.05). I hypothesized that leader's expectations for OCB as perceived by employees positively influence the frequency with which they display OCB, and that this relationship is mediated by role breadth (H3a) and perceived instrumentality (H3b). H3a was supported, as leader expectations predicted role breadth (β = .34, p<.01), which, in turn, predicted OCB (β = .20, p<.05). H3b was not supported, however, since perceived leader expectations did not relate significantly to perceived instrumentality (β = .07, ns).

Moreover, role breadth and perceived instrumentality independently predicted employee OCB (Role breadth \rightarrow OCB: β = .20, p<. 05; Perceived instrumentality \rightarrow OCB β = .21, p<. 05).

4.3.2.2. LMX and Employee Conceptualizations of OCB

I hypothesized that LMX influences employees' conceptualizations of OCB with regard to leader expectations, perceived instrumentality and role breadth (H5a, b and c). These hypotheses were supported. LMX directly predicted perceived leaders' expectations ($\beta = .51$, p<. 01), instrumentality ($\beta = .56$, p<. 01), and indirectly predicted role breadth via identification with the organization. In particular, in support of H6b, LMX predicted identification with the organization ($\beta = .69$, p<. 01), which, in turn, predicted role breadth ($\beta = .51$, p<. 01). However, although LMX was strongly related to identification with the leader ($\beta = .78$, p<. 01), identification with the leader did not predict role breadth ($\beta = .09$, ns), contrary to hypothesis H6a.

Taken together, the results above provided general support for the hypothesized model wherein the effects of LMX on OCB are mediated by employees'

conceptualizations of OCB (perceived leader expectation, perceived instrumentality and role breadth) (H7).

CHAPTER 5: DISCUSSION

In this chapter, I first review the findings and contributions of this study. Then the implications for research and for practice are discussed. Finally, the study's limitations are considered.

5.1. Overview of Findings

One of the primary purposes of this study was to enhance understanding of how employees conceptualize OCB and to determine the impact of these conceptualizations on the frequency with which they display OCB. While some scholars have examined components of employees' conceptualizations of OCB separately, including role breadth and the perceived instrumentality of OCB (e.g., Haworth & Levy, 2001; Hui et al., 2004; Morrison, 1994), no study has studied these components together. More importantly, researchers have blurred distinctions between role breath, instrumentality and leader expectations. The current study extends prior research by including role breadth, perceived instrumentality and leader expectations within a single investigation and in so doing shows that the three facets of OCB conceptualizations are empirically distinguishable and uniquely predict OCB. These findings challenge the findings of past research that offer an instrumentality explanation for the link between role breadth and OCB (e.g., Morrison 1994). They also challenge past practices of measurement that "muddied" distinctions among role breadth, instrumentality and perceived expectations, often measuring role breadth (or role definition) in terms of instrumentality and/or

expectations (e.g., Hofmann et al., 2003; Kidder, 2002; Pond et al., 1997; Tepper et al. 2001; Tepper & Taylor, 2003; Vey & Campbell, 2004; Zellars, Tepper, & Duffy, 2002).

I also found that employees' identification with their organization predicted role breadth in the hypothesized model (M₀) but not their perceptions of the instrumentality of OCB in the last alternative model (M₄). These findings suggest that employees who come to identify with their organization define their work roles more broadly to include OCB, and engage in more OCB than their counterparts who are less identified with their organization. These findings further bolster the argument for distinguishing role breadth from perceptions of the instrumentality of OCB and are consistent with the notion that instrumentality perceptions are predominantly cognition-based while role breadth is rooted more in affect. They are also consistent with Graham (1991) who argued that broader role definitions reflect stronger relational ties (e.g., covenantal relationships) between employees and their organizations, expressed in higher organizational commitment and an intrinsic motivation to satisfy the needs, and enhance the welfare, of one's organization.

The second primary purpose of this study was to shed light on the process by which LMX influences OCB. LMX appears as an important factor influencing how employees conceptualize OCB. Specifically, consistent with the reciprocity perspective of LMX theory -- that LMX quality is characterized as generalized reciprocity (Liden et al., 1997) -- and with past research on how high quality LMX can enhance employees' affective bonds with their organization (Gerstner & Day, 1997), LMX predicted role breadth, which partially mediated the effect of LMX on OCB. In line with the social

exchange perspective of LMX theory (e.g., Wayne et al., 1997), which underscores the role of LMX in enhancing employees' confidence and trust that their contributions will be rewarded, LMX quality related positively to employees' perceptions of the instrumentality of OCB. Perceived instrumentality, along with role breadth, mediated the relationship between LMX and OCB. LMX also related positively to employees' perceptions of the OCB-related expectations their supervisors held for them. This finding is consistent with the role-making foundation of LMX theory (Graen & Scandura, 1987; Graen & Uhl-Bien, 1995) which emphasizes the leaders' influence in shaping subordinates' work role, and with the generalized reciprocity perspective of LMX theory, which emphasizes mutual concern (Liden et al., 1997).

At odds with my hypothesis, however, perceived leader expectations were not significantly associated with the perceived instrumentality of OCB. However, there may be conditions under which perceived leader expectations raise employees' beliefs that their OCB performance is to be rewarded. For example, leaders who practice a contingent reward leadership style are likely to strengthen this relationship. Ad hoc analysis supported this. ³ When leaders demonstrated contingent leadership behaviour, their employees' perceptions of their leaders expectations for OCB related more strongly and positively to the perceived instrumentality of OCB than when leaders did not demonstrate such behaviour.

³ I conducted moderated hierarchical regression analyses to the test the moderation effect. I regressed instrumentality on leader expectation and contingent reward leadership using the five-item measure from Podsakoff et al. (1990) in the first regression equation, and then entered the cross-product term of leader expectation and contingent reward leadership into the regression equation. The interaction effect was supported ($\beta_{\text{Interaction}} = 1.34$, p < .01; $\Delta R^2 = .03$, p < .01).

Contrary to expectations, employees' identification with their leader did not mediate the relationship between LMX and role breath. This finding is in stark contrast to employees' identification with their organization mediating between LMX quality and role breadth. It appears that only when LMX enhances an employees' organizational identification will they broaden their role definition to include OCB. These findings are supportive of Flynn's (2005) interpretation of relationships between identity and exchange forms. More specifically, Flynn (2005) argues that employees identifying at the relational level (e.g., supervisor) rely on the norm of reciprocity to guide their behaviour, whereas employees identifying with the collective (e.g., organization) subscribe to the notion of generalized exchange, where goals and interests of the collective become important.

In contrast to isolating identifications at these two levels, it is possible relational identification promotes collective identification given the role of leaders as agents of the organization in influencing employees' experience within work groups and organizations (Gerstner & Day, 1997). In support of this, Kark et al. (2003) reported a correlation of .57 between identification with the leader and identification with the work unit and Johnson, Selenta and Lord (2006) reported a correlation of .45 between relational self-concept and collective self-concept. In the present study, adding a path from identification with the leader to identification with the organization improved the fit to the data above the baseline model ($\Delta \chi^2 = 4.08$, $\Delta df = 1$, p<. 05). The path from identification with the leader to role breadth remained nonsignificant (.09, ns), but the path to identification with the organization ($\beta = .33$, p<. 05). The path coefficient from

LMX to identification with the organization dropped from .69 (p < .01) to .40 (p < .01). Other estimated path coefficients were quite similar to those estimated in the baseline model. The results of this analysis provided support for the proposition that identification with the leader is instrumental to broadening employees' role definition indirectly through enhanced identification with the organization. While the result should be interpreted with caution, given this path was not predicted a priori, it suggests a need for theoretical and empirical work to clarify the relationship between relational identity and collective identity and their interplay in predicting employee attitudes and behaviours.

5.2. Future Research Directions

My study highlights a number of promising avenues for future research on OCB, on employee conceptualizations of OCB and on LMX.

5.2.1. OCB Research

OCB performers have been likened to "good soldiers" (Organ, 1988) or good citizens with the promise that employees perform OCB to benefit others and their organization (e.g. Organ, 1988; Smith et al, 1983) or alternatively "good actors" expressing self-serving motives wherein OCB is displayed as a tactic to impress others for personal rewards (e.g. Bolino, 1999; Bolino, Varela, Bande, & Turnley, 2006; Hui, et al., 2000). My research showed that both motives can influence how frequently employees display OCB. However, no research has been done to assess whether each motive can assume differential importance in influencing employees' OCB under various conditions. Future research should be undertaken to examine this matter to inform practitioners' choices to promote employees' OCB. Secondly, research has shown that

OCB can contribute substantially to group or organizational performance (Podsakoff et al., 1997, 2000). Research should explore whether employees' OCB can influence group performance differentially when it is driven primarily by a concern for organizational interest or by a concern for self-interest. For example, while Bolino (1999) proposes that the relationship between within-group OCB and organizational performance is weaker when impression-management concerns drive employees' OCB. This proposition has not been tested. Answers to this question can influence choices of management practices to motivate employees' OCB.

Both perceived expectations and instrumentality belief that employees attach to OCB can influence their actual expression of these behaviours. Should we explicitly incorporate OCB in formal performance evaluations? A number of studies have shown that OCB does influence supervisory judgment of employees' overall performance (e.g., Motowidlo & Van Scotter, 1994; MacKenzie, Podsakoff, & Fetter, 1991). However, there are practical difficulties to formally evaluating employees' OCB because while task behaviours are more unique to specific jobs, OCB is not and; while the importance of task performance for organizational effectiveness is more straightforward, the importance of OCB is realized by improving others' performance and by influencing the social and psychological climate of the workplace (Motowidlo & Schimit, 1999). In addition, OCB dimensions such as "cooperation" and "initiative" look much like trait-oriented descriptors (Werner, 2000). These may pose challenges to formally evaluating OCB. Before we draw conclusions as to whether to formally evaluate OCB, further research is needed to answer questions, such as how accurately can OCB be evaluated by managers?

To what extent will incorporating OCB in formal evaluations be accepted by managers and employees? How does incorporating OCB into formal evaluations influence employees' perception of appraisal fairness.

5.2.1. Employee conceptualizations of OCB as mediators

A myriad of research has examined factors influencing employee OCB, including individual characteristics, task characteristics, organizational characteristics and leadership behaviours (Podsakoff et al., 2000). However, the mechanisms by which these factors exert their influence on OCB are not well articulated (Podsakoff et al., 2000). How employees view OCB provides the lens through which we can understand the process by which individual, task, organizational and leadership factors influence OCB. My findings suggest that there are different paths through which the antecedents of OCB impact how employees conceptualize OCB, thereby influencing their display of OCB. For example, perceived organizational support (POS) may be instrumental in broadening employees' role definition and enhancing the frequency of OCB because POS can create a felt obligation toward promoting the organization's welfare and goals (Rhoades, Eisenberger, & Armeli, 2001). Organizational commitment (which involves a sense of belonging to and identification with the organization and a desire to pursue organizational goals) may lead to a broadening of role definitions to include OCB, resulting in greater OCB (Morrison, 1994).

Likewise, transformational leadership may broaden employees' role definition, given the central premise of transformational leadership motivating employees to transcend self-interest for the sake of collective interest (Bass, 1985; Shamir, House, &

Arthur, 1993). Organizational justice and transactional leadership, however, may influence employee OCB through boosting employees' instrumental beliefs that their OCB will be rewarded. Research is needed to examine both role breadth and instrumentality together, and to explore different paths between antecedents and OCB.

Recently, researchers have shown interest in examining cultural orientation and cross-culture effects of OCB. For example, Moorman and Blakely (1995) and Van Dyne, Vandewalle, Kostova, Latham, and Cummings (2000) found collectivism related positively to OCB. Blakely et al. (2006) found, in a structural equation model, that Chinese managers defined their jobs more broadly to include OCB -- and reported more OCB -- than did their U.S. counterparts. This nationality effect of OCB difference was mediated by nationality differences in role breadth. However, no published research has directly tested whether cultural orientation, for example collectivism, is related to role breadth and whether role breadth mediates the effects of cultural orientation on OCB. More research is needed to examine the cross-cultural and cultural orientation effects on OCB.

In addition, given that role breadth, perceived leader expectation and instrumentality belief represent different constructs, research should include anchors and explicit instructions that are consistent with the distinct conceptual definitions of these constructs and measure them separately.

5.2. 3. LMX-OCB Process

Several studies have investigated the influence of LMX on OCB (Ilies et al., 2006). Yet, we have little understanding of the processes by which these influences

occur. Equally important, Zellars and Tepper (2003) have criticized researchers' heavy reliance on social exchange explanations for OCB. My finding (which shows the influence of LMX being mediated through role breadth, perceived leader expectations and perceptions of the instrumentality of OCB) suggests that it is beneficial to understand LMX from both social exchange and role making perspectives. More specifically, more research is needed to explore role-making mediators (e.g., perceived leader expectations) of the LMX-OCB relationship.

5.3. Implications for Practice

Both task performance and OCB are important to organizational effectiveness (Motowidlo & Schmit, 1999). The evidence that role breadth and perceived instrumentality can independently contribute to employees' OCB suggests that both motives of being "good citizens" (having broader role definition to embrace OCB) and being "good actors" (performing OCB to impress leaders for potential rewards) can promote employee OCB. Thus organizations intent on promoting OCB among their employees should adopt management practices that can broaden their employees' work roles and establish clear links between employee OCB and rewards. This is particularly so for organizations relying highly on employees' OCB contributions for their effectiveness and survival, such as organizations in which teams prevail and work is less structured (Motowidlo & Schmit, 1999).

That employees' identification with their organizations is associated with broader work roles defined by employees suggests a need for contemporary organizations to scrutinize the fundamental relationship they form or intend to form with their employees.

Given the increasingly dynamic and ambiguous work roles in organizations driven by ever changing environments (Cascio, 1995:931), building a covenantal relationship with organizational members, who are highly identified with their organization, may provide a survival advantage to contemporary organizations (Graham & Organ, 1993).

While there has been little research to shed light on the question of whether OCB should be included in formal performance evaluations, the findings of this study suggests that organizational leaders can play an important role in promoting employees' OCB. Consistent with past research (Ilies et al., 2006), the positive relationship between LMX and OCB suggests the need for improving LMX quality. That the effect of LMX on OCB was mediated by employees' conceptualizations of OCB further suggests that organizational leaders should clearly communicate their OCB performance expectations to their subordinates, establish clearer links between OCB and rewards and build affective bonds with their followers, as a means to internalizing their subordinates' commitment and getting them to define their work roles more broadly to include OCB.

5.4. Strengths and Limitations

One strength of my research resides in having collected data from both supervisors and subordinates. But subordinates completed measures of LMX, identification with their leader, identification with their organization, role breadth, perceived instrumentality, and perceived leader expectation. The large number of measures collected from subordinates raises concerns of common source, common method bias. However, given the central purpose of this study was to examine how employees conceptualize OCB, sourcing data from employees is necessary. Given the mediation variables of identification with leader,

identification with organization, role breadth, perceived instrumentality, and perceived leader expectations shared variance with measures of LMX quality and OCB and the latter two constructs were measured using data from different sources, the relationships reported in this study can not be attributed purely to common source biases. Nevertheless, I conducted a CFA on six employee reported variables of LMX, identification with leader, identification with organization, role breadth, perceived instrumentality, and perceived leader expectation. The six-factor model demonstrated an acceptable fit to the data ($\chi^2 = 753.74$, df = 352; RMSEA = .08; CFI = .95; TLI = .94). A competing model, which assumed all items measure a common factor, did not fit the data well ($\chi^2 = 2079.13$, df = 377; RMSEA = .16; CFI = .83; TLI = .84). While the influence of common method variance on my results can not be ruled out, this CFA failed to support a common method factor among the measures provided from subordinates. This suggests that common method bias is unlikely to have had a significant influence on the parameter estimates obtained.

Secondly, each supervisor was asked to rate no more than 3 subordinates and, on average, each of them rated only 2.54 employees. This better assured high quality supervisory ratings on the one hand while limiting possible rater bias effects. However, multiple ratings of subordinates' OCB by any one supervisor raises concern as to whether path coefficients estimated were influenced by rater bias. I randomly selected one subordinate from each supervisor and repeated the model estimation. The results showed a quite similar pattern of path coefficients among variables in the model, although *t*values associated with path coefficient estimations decreased significantly. This is

understandable given the significantly reduced sample size. Nevertheless, this analysis provided preliminary evidence that the estimated path coefficients are not much influenced by rater bias.

Thirdly, although I drew from several theoretical frameworks to infer the paths of my baseline and competing models, and found clear evidence for my hypothesized model over the alternatives, the cross-sectional design of this study precludes me from making causal statements. Longitudinal designs must be undertaken if we are to examine with confidence the proposed causal paths of my hypothesized model.

Lastly, the data were collected from China, a more collectivistic and less individualistic culture than that of North America (Hofstede, 1980; Oyserman, Coon, & Kemmelmeier, 2002). The fact that the model is built largely on theories developed (and research evidence accumulated) in western countries suggests that these findings may hold in a more individualistic cultural context. However, research has shown a relationship between cultural orientation (e.g., collectivism) and OCB (e.g., Moorman & Blakely, 1995) and a nationality effect on role breadth (Blakely et al., 2006). Thus the generalizability of these findings is subject to empirical replications and validations within different cultural contexts. It is possible that the strength of the relationships among variables estimated in this study could vary when contextualized in different cultures.

5.5. Conclusion

By integrating three components of employees' conceptualizations of OCB (role breadth, perceived instrumentality and perceived leader expectations) into a single

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investigation, I have provided support for the discriminant validity of three core facets of how employees conceptualize OCB. This enhances our understanding of employee conceptualizations of OCB while at the same time challenging past research that has confused these facets in definition and measurement. In showing that employees' conceptualizations of OCB mediate relationships between LMX and OCB I have responded to recent calls to look into the LMX-OCB "black box" process, and thereby advanced our understanding how LMX influences OCB.

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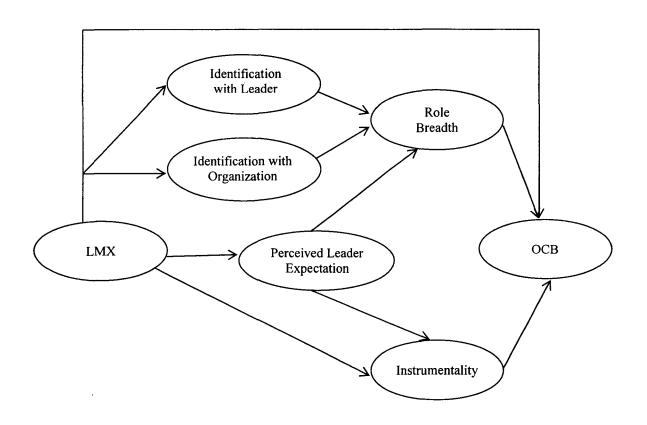
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APPENDIX 1: The Alternative Path Models

Figure 2: Nested Alternative Model M₁: Employee Conceptualizations of OCB as Partial Mediators between LMX and OCB Link



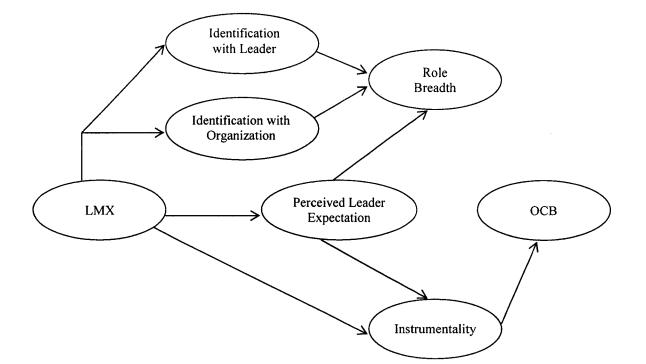


Figure 3: Nested Alternative Model M₂: Role Breadth not Relating to OCB

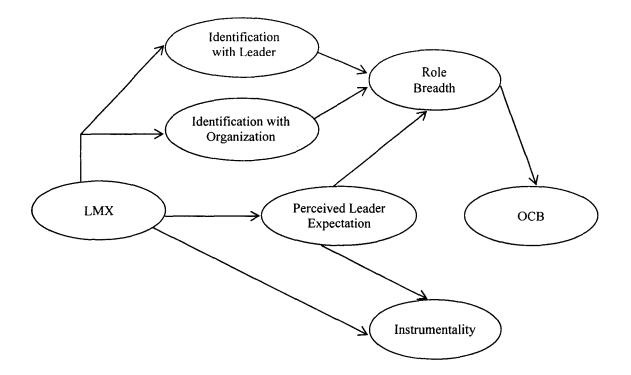
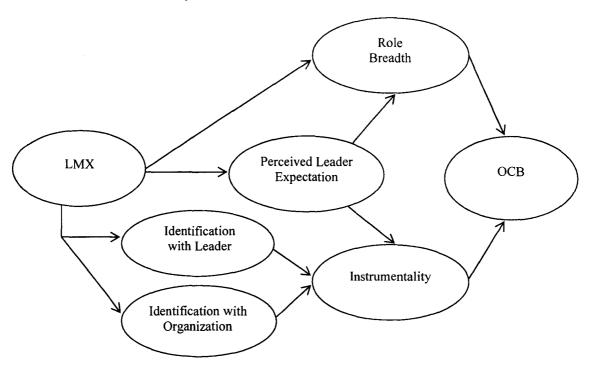


Figure 4: Nested Alternative Model M₃: Perceived Instrumentality not Relating to OCB

Figure 5: Non-Nested Alternative Model M₄: Identification with Leader and Identification with Organization Mediating between LMX and Perceived Instrumentality



Variables	Items	Loadings ^a	S.E.	\mathbf{R}^2	t-values
LMX			······		····-
	Loyalty	1.00 (.71)		.65	
	Affect	0.86 (.61)	.08	.56	10.30
	Respect	0.79 (.56)	.09	.44	8.86
	Contribution	1.04 (.73)	.09	.62	10.91
Identification v	with Leader (IdenL)				
	IdenL1	1.00 (.64)		.41	
	IdenL2	0.94 (.66)	.13	.44	7.29
	IdenL3	1.32 (.84)	.15	.70	8.69
	IdenL4	1.32 (.85)	.15	.71	8.76
	IdenL5	0.90 (.64)	.13	.41	7.15
Identification v	with Organization (IdenC))			
	IdenO1	1.00 (.70)		.48	
	IdenO2	0.68 (.65)	.09	.42	7.66
	IdenO3	1.00 (.75)	.11	.56	8.72
	IdenO4	0.99 (.71)	.12	.50	8.28
	IdenO5	0.84 (.83)	.09	.68	9.46
Leader Expect	ation (Lxp)				
-	Lxp1	1.00 (.68)		.47	
	Lxp2	1.05 (.76)	.12	.57	8.56
	Lxp3	1.26 (.81)	.14	.66	9.06
	Lxp4	1.05 (.73)	.13	.54	8.34
	Lxp5	0.97 (.71)	.12	.51	8.15
Role breadth ()	Role)				
	Role1	1.00 (.47)		.22	
	Role2	1.21 (.53)	.27	.28	4.53
	Role3	1.08 (.53)	.24	.28	4.52
	Role4	1.50 (.62)	.31	.39	4.90
	Role5	1.59 (.66)	.32	.43	5.02
Instrumentality	1				
	Instrumentality1	1.00 (.82)		.67	
	Instrumentality2	1.01 (.81)	.08	.66	12.31
	Instrumentality3	1.08 (.84)	.08	.71	12.95
	Instrumentality4	1.05 (.83)	.08	.69	12.60
	Instrumentality5	1.11 (.86)	.08	.74	13.30
OCB	-				
	Altruism	1.00 (.84)		.71	
	Conscientiousness	1.01 (.82)	.07	.68	12.57
	Courtesy	1.08 (.85)	.06	.72	13.15
	Sportsmanship	1.05 (.75)	.08	.57	11.08
	Civic Virtue	1.11 (.68)	.07	.46	9.62

APPENDIX 2: Results of Estimation of the Hypothesized Structural Model Table 5 Results of Estimation of the Measurement Model

^a Numbers in brackets represent standardized loadings.

Paths	Structural Coefficients ^b	S.E.	t-values
$LMX \rightarrow$ Identification with leader	.73 (.78)	.10	7.22
$LMX \rightarrow$ Identification with organization	.63 (.69)	.09	7.03
$LMX \rightarrow Leader expectation$.42 (.51)	.08	5.41
$LMX \rightarrow Instrumentality$.65 (.56)	.11	5.69
Identification with leader \rightarrow Role breadth	.04 (.09)	.05	0.92
Identification with Organization	h .24 (.51)	.06	3.77
Leader expectation \rightarrow Role breath	.18 (.34)	.06	3.16
Leader expectation \rightarrow Instrumentality	.09 (.07)	.13	0.75
Role breadth \rightarrow OCB	.33 (.20)	.17	1.97
Instrumentality \rightarrow OCB	.13 (.21)	.06	2.33
Squared Multiple Correlations (R ²)	Goodness-of-Fit Indices		
Identification with leader .60			
Identification with Organization .48	$\chi 2 = 998.37$ df = 517		
Leader expectation .26	CFI = .95		
Role breath .58	TLI = .94		
Instrumentality .35	RMSEA = .07		
OCB .12			

Table 6 Results of Estimation of the Hypothesized Structural Model

^bNumbers in brackets represent standardized structural coefficients.

APPENDIX 3: HYPOTHESES

Hypothesis 1: Employees' perceptions of the instrumentality of OCB relates positively to supervisory ratings of their OCB (Path 1of Figure 1).

Hypothesis 2: Role breadth, as reported by employees to include OCB, relates positively with supervisory ratings of their OCB (Path 2 of Figure 1).

Hypothesis 3a: The more employees perceive that their supervisors expect OCB from them, the more broadly they will define their work roles, which in turn will result in them displaying more OCB (Paths 4 & 2 of Figure 1).

Hypothesis 3b: The more employees' perceive that their supervisors expect OCB from them, the more they will perceive OCB as instrumental to receiving desired personal rewards from their supervisors, which will be reflected in them displaying OCB more frequently (Paths 3 & 1 of Figure 1).

Hypothesis 4: Employees' perceptions of role breadth, instrumentality of OCB and the role expectations their leaders have of them for OCB are independent but correlated constructs.

Hypothesis 5a: LMX quality is related positively to employees' perceptions of the expectations their supervisors have of them for OCB (Path 8 of Figure 1).

Hypothesis 5b: LMX quality is related positively to employees' perceptions of the instrumentality of OCB (Path 7 of Figure 1).

Hypothesis 6a: Employees' identification with their leader mediates the positive relationship between LMX quality and the breadth with which employees define their work roles to include OCB (Paths 10 & 6 of Figure 1).

Hypothesis 6b: Employees' identification with their organization mediates the positive relationship between LMX quality and the breadth with which employees define their work roles to include OCB (Paths 9 & 5 of Figure 1).

Hypothesis 7: The relationship between LMX and OCB is mediated by employees' conceptualizations of OCB, with respect to: (a) their perceptions of whether their supervisors expect OCB from them; (b) the degree to which they define their work roles to include OCB (role breadth) and; (c) their perceptions of the instrumentality of OCB.

APPENDIX 4: SCALE ITEMS

<u>LMX</u>

- 1. I like my supervisor very much as a person
- 2. My supervisor is the kind of person one would like to have as a friend
- 3. My supervisor is a lot of fun to work with
- 4. My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question
- 5. My supervisor would come to my defence if I were "attacked" by others
- 6. My supervisor would defend me to others if I made an honest mistake
- 7. I do work for my supervisor that goes beyond what is specified in my job description.
- 8. I am willing to apply extra efforts beyond those normally required, to further the interests of my work group
- 9. I am impressed with my supervisor's knowledge of his/her job
- 10. I respect my supervisor's knowledge of and competence on the job
- 11. I admire my supervisor's professional skills

Identification with leader

- 1. When someone criticizes my supervisor, it feels like a personal insult
- 2. I am very interested in what others think about my supervisor
- 3. My superior's successes are my successes
- 4. When someone praises my supervisor, it feels like a personal compliment
- 5. I am proud to be under his/her command

Identification with organization

- 1. When someone criticizes my company, it feels like a personal insult
- 2. I am very interested in what others think about my company
- 3. My company's successes are my successes
- 4. When someone praises my company, it feels like a personal compliment
- 5. I am proud to be a member of my company

Organizational Citizenship Behaviour

Altruism

- 1. Helping others around him/her (e.g., co-workers)
- 2. Helping others who are experiencing work-related problems
- 3. Helping others whose work has "piled up" during their absence
- 4. Helping others who have heavy work loads
- 5. Helping orient people to a new job/unit

Conscientiousness

- 6. Forgoing entitled job breaks in order to manage urgent matter/crises or to complete a due assignment/task
- 7. Maintaining personal work attendance above organization norms
- 8. Exercising care and perseverance (being conscientious) in completing work tasks
- 9. Providing an "honest day's work" for an "honest day's pay"
- 10. Obeying organizational rules and regulations even when no one is watching

Courtesy

- 11. Taking special care to avoid/prevent problems with other employees
- 12. Being "mindful" of how her/his behaviour affects coworkers and their jobs
- 13. Being considerate of the impact of his/her actions on coworkers
- 14. Avoiding creating problems for coworkers
- 15. Respecting the rights of others

Sportsmanship

- 16. Avoiding "making mountains out of molehills"
- 17. Avoiding complaining about trivial matters
- 18. Emphasizing the "positive" over the "negative" on the job
- 19. Avoiding being the classic "squeaky wheel that always needs greasing"
- 20. Avoiding being critical of the organization

Civic Virtue

- 21. Attending organizational meetings that, while not mandatory, are "important"
- 22. Attending functions that are not required, but help the organization's image
- 23. Reading and keeping up with organization announcements, memos, and so on
- 24. Keeping abreast of changes in the organization

OCB/Role Breadth/Instrumentality/Leader Expectation

Altruism: Assisting others on work-related matters

E.g., helping others who are experiencing work-related problems, or whose work has "piled up" during their absence, or who have heavy work loads

- *Conscientiousness:* Going beyond the minimum role requirements of the organization E.g., Forgoing entitled job breaks in order to manage urgent matter/crises or to complete an assignment that is due; maintaining personal work attendance above organization norms; exercising care and perseverance (being conscientious) in completing work tasks
- *Courtesy*: Being considerate in preventing work-related problems with others from occurring

E.g., Taking special care to avoid/prevent problems with other employees; being "mindful" of how one's behaviour affects coworkers and their jobs; avoiding creating problems for coworkers

- Sportsmanship: Tolerating less than ideal circumstances without complaining E.g., Avoiding complaining about trivial matters; avoiding "making mountains out of molehills"; avoiding being critical of the company
- *Civic Virtue:* Being concerned with the development of the organization E.g., Attending organizational meetings that, while not mandatory, are "important"; attending functions that are not required, but help the organization's image; keeping abreast of changes in the organization