Does the feeling of obligation for reciprocation really explain a LMX-Performance relationship?

SeungYong Kim
College of Management Dongguk University
(tosykim@dongguk.edu)

Since first proposed by Graen and his colleagues, LMX has been suggested to have a positive effect on an individual's performance because of the added support, feedback, resources, and opportunities (Feldman, 1986). The behind rationale for this expectation is that when a subordinate gets the supervisor's physical and emotional support through the high quality of LMX relationship, s/he may feel an obligation to reciprocate the leader's support (Deluga, 1994). And, such a sense of obligation to reciprocate would motivate the subordinate to perform better (Wayne & Green, 1993). Although this rationale sounds intuitive, it has never been tested; it has simply been assumed. As a result, some inconsistencies, especially in studies linking LMX and subordinates' performance (e.g., Vecchio, 1982), have not been appropriately addressed (Gerstner & Day, 1997).

To test the alleged rationale, the current study proposes a model that incorporates perceived accountability capturing the sense of obligation to reciprocate as a mediator that carries the effect of LMX onto specified performance behaviors. In this model, the concept of perceived accountability is defined in a phenomenological way and operationalized in terms of its source and objective. While the source of perceived accountability is limited to respondents' supervisors, the objectives of perceived accountability encompass both traditional and non-traditional performance elements, which are often referred as contextual performance or OCB (Organizational Citizenship Behaviors).

A series of hierarchical regression analyses and structural equation modeling analysis of the data collected from 409 supervisor-subordinate dyads rendered evidence supporting the proposed model. That is, it is shown that perceived accountability acts as a mediator between LMX and the performance elements. Not only does this result add more direct empirical evidence for the rationale behind the allegedly positive LMX-performance relationship, it also provides an explanation for the inconsistent findings on the LMX-performance relationship. That is, in the case of the studies (e.g., Scandura, 1999; Scandura & Schriesheim, 1994; Schriesheim, Neider, & Scandura, 1998; Wayne & Ferris, 1990) that reported a positive relationship, the respondents might feel accountable for the performance elements measured, whereas the participants of the studies (e.g., Vecchio, 1982; Vecchio & Gobdel, 1984) that reported an insignificant relationship might not for some reasons.

The current findings also provide an important managerial implication for supervisors to manage subordinates' performance. To utilize a good relationship maximally for fostering an employee's performance behaviors, a supervisor needs to make his/her support through the relationship specific enough so that they can be clearly perceived by the subordinate as related to one of the three linkages (i.e., identity -event, event-prescription, identity-prescription) of the accountability model. Otherwise, a good relationship would not lead a subordinate to experience a high level of perceived accountability, and no effect on the subordinate's performance would take place. This means that supervisors need to be careful in communicating what they think and expect on subordinates' job-dedicated behaviors and task performance.

Key words: LMX, contextual performance, task performance, perceived accountability

논문접수일: 2005. 4 게재확정일: 2005. 7

Ⅰ. Introduction

The area of management has a long tradition of looking for effective ways of securing high performance. Among various means studied by the academic community for achieving and maintaining high performance is leadership (Bass, 1985), which has been evolved into the concept of Leader-Member Exchange (LMX) during 1980s. LMX refers to the differentiated relationship between a leader and a subordinate. Unlike traditional leadership theories, leader-member exchange theory maintains that a leader would develop differentiated relationships with different subordinates because of several situational and personal factors posed on the leader and the members (Graen & Uhl-Bien, 1995).

Since first proposed by Graen and his colleagues, LMX has drawn intensive research attention and been reported to have positive effects on various aspects of organizational effectiveness, such as performance (see Dienesch & Liden, 1986). Although performance has been expected to be positively related to LMX in general, its highlighted role in the literature has varied from as an antecedent to as an outcome. For example, performance has been identified as an antecedent of LMX in the literature that focused on identifying what factors would contribute to the development of LMX relationship (e.g., Bauer & Green, 1996; Dienesch & Liden, 1986; Graen & Uhl-Bien, 1995). Regarding such an identification, Graen and Scandura (1987: 190) speculated that a supervisor is likely to use a subordinate's current performance information to select "*...those members...who are dependable in the sense that they can be counted on to complete the superior's task when necessary, and who are effectively teamed with the superior.*" This speculation was echoed by Bauer and Green (1996) who argued that a subordinate's high performance would lead the supervisor to consider more delegation by reducing risks entailed by the delegation and found that a positive relationship between a subordinate's performance and the quality of LMX in the later stage (r = .35).

In contrast to the aforementioned studies that identified performance as an antecedent of LMX, another stream of research (e.g., Deluga, 1994; 1998; Graen & Cashman, 1975; Wayne & Green, 1993) identified performance as an outcome of LMX and showed supporting evidence. For example, Graen and Cashman (1975) postulated that subordinates in high quality dyadic exchanges are more likely to exhibit higher levels of performance because of the additional resources they typically receive from the leader. Wayne and Green (1993) also stated that "*when the supervisor engages in helping behavior*

toward the employee,...the employee incurs obligations to repay the supervisor so that the exchange is mutually beneficial (Blau, 1964). OCB(Organizational Citizenship Behaviors) *is a set of behaviors that employees may use to reciprocate."*

Although each of these research streams conceptualized the LMX-performance relationship in different ways with different rationale, they may not be in conflict each other, because they emphasized different perspectives. That is, the former focused on a supervisor's point of view in establishing the early stage of the LMX relationship, whereas the latter focused on a subordinate's reaction to the current LMX quality. When taken together, these streams of research suggest that the LMX performance relationship is cyclical and an *on-going* process as implied by Graen and Scandura's descriptive model of role making (1987: 180-185) and represent the two dimensions of LMX (1987: 192). Therefore, it can be said that theoretical conceptualization and its empirical collaboration in both of the research streams have contributed to our understanding on LMX.

However, our current understanding on LMX still holds a hole to be filled, and that is about the theoretical rationale for the relationship of LMX → performance. While the rationale for the relationship of performance → LMX quality has been at least partially addressed by Bauer and Green (1996), the rationale for the relationship of LMX→ performance has never been scrutinized. It has been simply assumed that when a subordinate gets the supervisor's physical and emotional support through the high quality of LMX relationship, s/he may feel an obligation to reciprocate the leader's support (Deluga, 1994; 1998) and such a sense of obligation to reciprocate would motivate the subordinate to perform better (Wayne & Green, 1993). Although this rationale sounds intuitive, lack of its empirical collaboration has left some inconsistencies reported in studies linking LMX and subordinates' performance unaddressed (Gerstner & Day, 1997). After reviewing 43 studies examining LMX-performance studies, Gerstner and Day (1997) suggested that the inconsistency might be attributable to the use of different operationalizations of performance. In their meta-analysis, they found that when individual performance was measured by objective indicators, the correlation coefficient corrected for measurement errors and sampling errors was relatively low (r = .11). In contrast, when performance ratings were used, the corrected correlation coefficients were above .30. This suggests that performance ratings may tap broader performance domain including both task performance and contextual performance than objective performance measurements,

such as absences, production rates, sales, and the like (Borman, 1991).

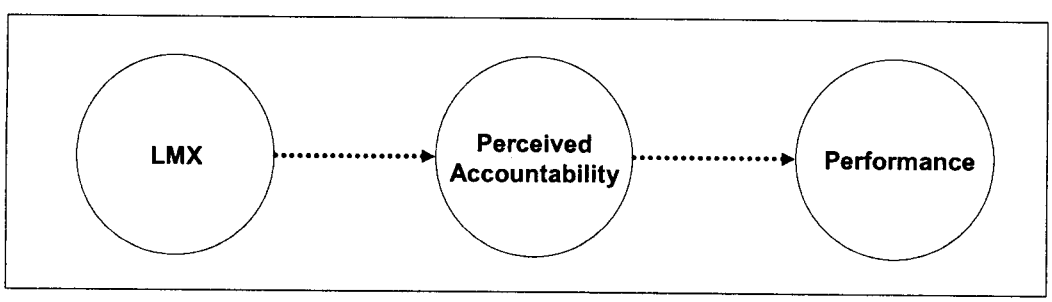
Considering that organizational members' performance determines the overall organizational competitiveness, dissolving the inconsistency in the literature is very important not only for theoretical advancement on the subject but also for getting practical insights.

To test the alleged rationale, the current study proposes and tests a model that incorporates perceived accountability capturing the sense of obligation to reciprocate as a mediator that carries the effect of LMX onto the performance. As will be discussed in the following section in detail, perceived accountability is in this study defined as a phenomenological concept, which requires the performance concept to be further specified. Therefore, this study will employ Motowidlo & Van Scotter's (1994) performance typology, which specifies three performance elements: task performance, job dedication, and interpersonal facilitation. With these variables, the primary premise of this study is that the effect of LMX on performance will be mediated by perceived accountability. The conceptual model of this premise is shown in the 〈Figure 1〉 and will be further elaborated as perceived accountability and performance elements are discussed in the following sections.

II. Perceived Accountability

As depicted in the 〈Figure 1〉, perceived accountability is employed to capture a subordinate's feeling of obligation to reciprocate a supervisor's support through the high quality of LMX relationship. Since the development of LMX is based on the characteristics of the working relationship (Graen & Uhl-Bien, 1995), when a subordinate feels obligated to reciprocate the supervisor's support, the way of reciprocation would most likely involve work-related behaviors, that is, performance. Therefore, perceived accountability, which refers an individual's

〈Figure 1〉 A Premise of the Current Study



feeling of obligation and need to justify one's actions to others or self (Frink & Klimoski, 1998), can be a good proxy of a subordinate's feeling of obligation for reciprocation with some necessary conceptual adjustments.

As the term implies, perceived accountability is a phenomenological (i.e., state of mind) concept (Frink & Klimoski, 1998) and different from a formal or official accountability set by an organization based on delegated authority and responsibility, etched in organizational structure and positions, and often manifested through requirements to report to a supervisor. Since even the externally set and posed accountability is interpreted by people and their perceived accountability level may vary (Frink, 1994), an individual's behaviors are likely to be a function of his or her perceived accountability rather than of objective accountability.

Conceptualization of perceived accountability in a phenomenological way means that its conceptual boundary should be clarified further, because the very same person may experience different levels of perceived accountability for different behaviors. According to London and others' (1997) model, the level of perceived accountability may vary depending on a couple of factors, such as actor, source of accountability, objective of accountability, accountability forces, and mechanism. Among these elements are the source and objective of accountability most relevant to the current discussion. The source of accountability refers to whether individuals feel accountable for behaviors that are self-imposed or for behaviors that are imposed by others (London, Smither, & Adsit, 1997). In other words, this element is about to whom an individual is held accountable (e.g., supervisors, coworkers, or self). Meantime, the objective of accountability describes the target behaviors for which individuals feel accountable. For example, a subordinate may feel accountable for poor performance to his/her supervisor, but not to his/her children. Thus, an individual's perceived accountability refers to the extent to which an individual feels accountable for what kind of behaviors to whom.

Regarding these boundary elements, the source of accountability (target audience) in this paper will be limited to supervisors, primarily because they are one of the dyadic parties of LMX relationship. Also, the target behaviors of perceived accountability encompass not only the traditional task performance but also two types of contextual performance (Borman & Motowidlo, 1993; Motowidlo & Van Scotter, 1994). The following section will discuss these performance elements.

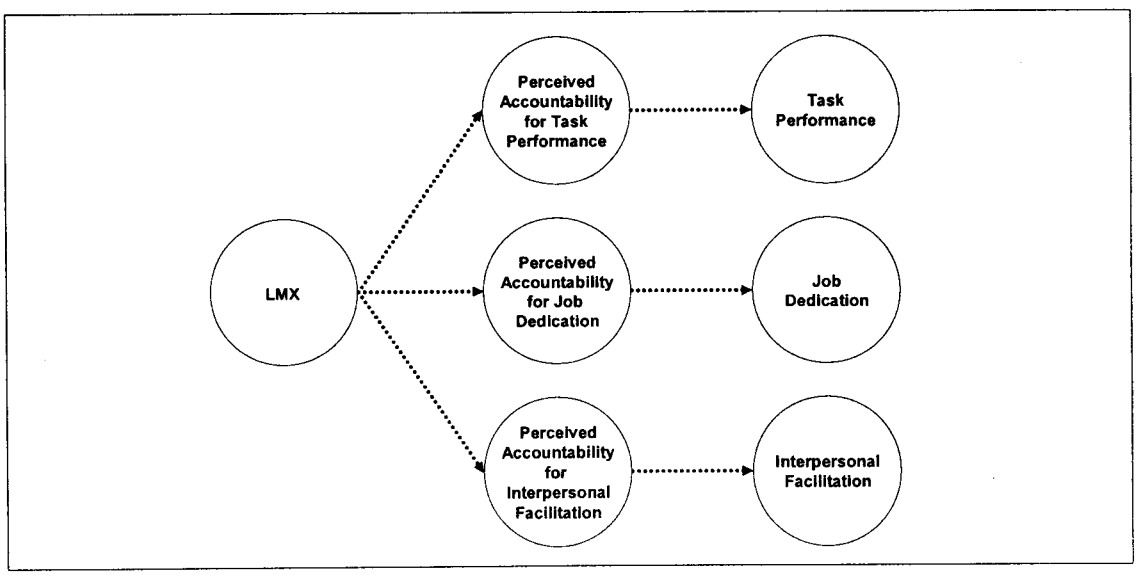
III. Performance Elements

While performance has been defined primarily in terms of task performance elements (Borman, 1991), researchers started incorporating non-traditional performance behaviors, described as contextual performance (Borman & Motowidlo, 1993), into performance domain. Contextual performance (Borman & Motowidlo, 1993; Motowidlo & Van Scotter, 1994) refers to activities that differ from job-specific *task performance*, which focuses on job efficiency, but are still important for achieving organizational goals by helping organizations cope with volatile and dynamic business environments (Katz, 1964). While various typologies and taxonomies of contextual performance have been suggested, the current study employs Van Scotter & Motowidlo's (1996) typology for the sake of parsimony (see Coleman & Borman, 2000 for detail.) In their typology, an individual's contextual performance encompasses two domains: *job dedication* and *interpersonal facilitation* (Conway, 1999; Van Scotter & Motowidlo, 1996). Interpersonal facilitation refers to interpersonally oriented behaviors that involve the cooperative, considerate, and helpful acts that assist co-workers' performance. Job dedication refers to self-disciplined, motivated behaviors, such as working hard, taking initiative, and following rules to support organizational objectives. One conceptual difference between these two elements is that while the former focuses on interpersonal relationships, the latter is primarily concerned with personal motivation to perform one's own job. Also, the construct validity of these three dimensions (i.e., job dedication, interpersonal facilitation, and task performance) has been supported by empirical studies showing that each dimension makes a unique contribution to overall performance (Conway, 1999; Van Scotter & Motowidlo, 1996) and other organizational effectiveness measures (Podsakoff, Ahearne, & MacKenzie, 1997; Van Scotter, 2000) and is associated with different antecedents (Borman & Motowidlo, 1997; Organ, 1997; Van Scotter, 2000; Van Scotter, Motowidlo, & Cross, 2000). For example, in Van Scotter and Motowidlo's (1996) study, each of the dimensions made a unique contribution to the overall performance ratings (job dedication: $\Delta R^2 = .07$, $p \leq .01$; interpersonal facilitation: $\Delta R^2 = .04$, $p \leq .01$; task performance: $\Delta R^2 = .08$, $p \leq .01$). Conway's (1999) study also reported the similar results. A structural equation modeling analysis showed that all path coefficients from the three dimensions to overall performance rating were significant (job dedication: $r = .31$; interpersonal facilitation: $r = .21$; task performance: $r = .48$). Moreover, his multitrait-multirater correlation analysis rendered clear

evidence for convergent validity of the dimensions. In his study, correlations for the same dimension rated by different raters (i.e., supervisor, peer, self) were consistently higher than those for different dimensions rated by the same raters. Meantime, studies that examined the antecedents of the dimensions provide evidence supporting discriminant validity of the dimensions. Task performance is shown to be predicted by job experience, skills, knowledge, and ability (Hunter & Hirsh, 1987; Hunter & Hunter, 1984; Schmitt, Gooding, Noe, & Kirsch, 1984). In contrast, interpersonal facilitation is associated with agreeableness (Costa & McCrae, 1989; Organ & Ryan, 1995), positive affectivity (Watson, Clark, & Tellegen, 1988), and extroversion (Costa & McCrae, 1989; Van Scotter & Motowidlo, 1996) and job dedication is related to conscientiousness (Borman, Hanson, Oppler, Pulakos, & White, 1993; Borman, White, & Dorsey, 1995; Borman, White, Pulakos, & Oppler, 1991) and goal orientation (Malouff et al., 1990).

Drawing on the aforementioned conceptualization of perceived accountability and the typology of performance dimensions, the previous conceptual model (see Figure 1) depicting the premise of the current study can be further specified as shown in 〈Figure 2〉.

〈Figure 2〉 A Conceptual Model of LMX-Perceived Accountability-Performance



Note: This model is the structural portion of the hypothesized model tested by using LISREL in the analysis section later.

3.1 LMX Perceived Accountability

It is the primary premise of LMX literature on LMX-performance relationship that with a high quality of LMX relationship, a subordinate would feel obligated to reciprocate the supervisor's support. This suggests a positive relationship between LMX and perceived accountability. To elaborate this alleged premise into more specific hypotheses, this study draws on Schlenker and his colleagues' accountability model (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994; Schlenker & Weigold, 1989) as a bridge theory.

This model explains the effect of accountability on individuals by employing three elements: event, identity, and prescriptions. Event is the unit of action and its consequences that the audience and the focal person regard as a unified segment for an evaluation purpose. It includes individuals' behavior or performance. Identity refers to a component of one's self-concept, which locates the self in socially recognizable categories (e.g., an employee of a company or a parent of a family). Finally, prescription represents a set of rules for what should be done and how things should occur. It serves as codes or rules for conduct and explicitly or implicitly includes information about the goals and standards for performance and the appropriate ways of reaching those goals.

Schlenker and his colleagues (Schlenker et al., 1994; Schlenker & Weigold, 1989) suggested that the linkages among these three elements would determine the degree to which an individual feels accountable for a certain type of behaviors. The identity-event linkage refers to the extent to which an individual is seen as having responsibility for the event. This linkage is strong, primarily when an individual is seen to have control over the event. The identity-prescription linkage indicates the extent to which an individual is bound or committed to the rules or standards associated with the event. This would be affected by the extent to which the individual is socialized to hold the same rules as the organization (Dose & Klimoski, 1995). The prescription-event linkage represents the extent to which there are clear rules or standards for behaviors in the situation. They maintained that the stronger the linkages are, the higher level of accountability an individual perceives.

Drawing on this model, the current paper proposes that a high quality of LMX relationship would strengthen these linkages. As the LMX studies have shown, with a high quality LMX, a supervisor provides the focal subordinate with more physical (e.g., resources), organizational (e.g., personal networking channels), and emotional support in carrying out given tasks. As more support is given to a subordinate, s/he would be

seen having more control on her/his tasks by other people. And, other people would expect better work outcome. Such other people's cognition and expectation would act as a mechanism that strengthen the identity event linkage (Tetlock, Skitka, & Boettger, 1989) and eventually lead the subordinate to feel accountable for his/her performance. Also, intensive communication entailed by a high quality of LMX relationship carries more information on rules, procedures, rewards, and even sanctions. The more information on these elements is provided to the subordinate, the more likely the subordinate feel a high level of accountability. It is because this information would provide the subordinate with more opportunities for acknowledging that there are rules and procedures that will be applied to a certain type of work outcome. Therefore, the event-rescription linkage is likely to be strengthened. Finally, the identity-prescription linkage is likely to be heightened when a high quality of LMX relationship exists between a subordinate and a supervisor. As social exchange theory suggests, the reciprocation must entail something valued by the supervisors. Otherwise, the reciprocation would not be appreciated by the supervisors. So, a subordinate in a good relationship with his or her supervisor would be highly loyal to the supervisor and try not to cause any problem, which is unlikely to be appreciated by the supervisor. Therefore,

Hypothesis 1a: As the quality of LMX increases, the perceived accountability level for task performance experienced by a subordinate will increase.

Hypothesis 1b: As the quality of LMX increases, the perceived accountability level for job dedicated behaviors experienced by a subordinate will increase.

Hypothesis 1c: As the quality of LMX increases, the perceived accountability level for interpersonally facilitative behaviors experienced by a subordinate will increase.

3.2 Perceived Accountability - Performance Elements

Perceived accountability conceptualized as aforementioned is expected to be positively associated with the performance elements. More specifically, if an individual feels accountable for task performance, job dedicated behaviors, and interpersonally facilitative behaviors to his or her supervisor, then he or she is likely to display these behaviors. This expectation is based on the premise of accountability theory: accountability has an influence on people's decision-making by affecting both what people think and how they think (Frink & Klimoski, 1998; Klimoski & Inks, 1990; London &

Smither, 1995; Tetlock, 1985b; Tetlock, 1992; Tetlock et al., 1989). It has been suggested and found that when people feel obligated to explain their decision to other people (i.e., audience), their perceived accountability increases (Klimoski & Inks, 1990), and that individuals understand the prevalence and viability of accountability for behaviors and put themselves into positions where the defense for their behaviors is most likely to be successful to build and maintain social acceptance and approval (Tetlock, 1985b; Tetlock, 1992). In doing so, people may either conform to other people's expectation, try to generate high-quality and justifiable decisions (Tetlock & Kim, 1987), or simply defend their existing opinions (Tetlock & Boettger, 1989).

In organizational context, individuals would likely choose to conform to other people's expectation rather than attempt to develop alternative justifiable decisions or defend their opinions, especially when the expectation of the audience is well known (Tetlock & Boettger, 1989; Tetlock & Kim, 1987; Tetlock et al., 1989). Since people are generally cognitive misers (Fiske & Taylor, 1991; Tetlock, 1992), the latter two strategies that require much more resources than simply complying for other people's expectation are less likely to be attractive than the former one. The idea that people frequently choose the most clearly defensible action open to them has been supported by some experimental studies on negotiation behavior. For example, Klimoski (Klimoski, 1971) found that negotiators who did not have to justify bargaining outcomes to the groups they represented more easily arrived at mutually compromising agreements than their counterparts under the justification pressure. Negotiators under the justification pressure responded by employing more competitive bargaining tactics, which are perceived as socially desirable or required by the audience to protect their image in the eyes of the audience (Carnevale, 1985).

This finding would particularly be the case in high accountability situations where a formal authority exists between the audience and the focal person as in a supervisor-subordinate relationship. Because supervisors usually exercise a significant amount of influence on employees as the agent of an organization, and because supervisors' expectations and criteria for rewards or sanctions for specific behaviors are usually well known to employees (Frink & Ferris, 1998; Jones & Wortman, 1973; Tetlock, 1985a; Tetlock et al., 1989), subordinates would likely perceive higher accountability to their supervisors than to other audiences. In addition to the formal authority, a high quality of LMX relationship would allow the supervisor to exercise more powerful influence on the subordinate's perceived

accountability level for the corresponding behaviors. Therefore, when an individual perceives high accountability for each of the performance behaviors to his or her supervisor, he or she is likely to display more of the corresponding behaviors.

Hypothesis 2a: As a subordinate perceives a higher level of accountability for task performance, the subordinate is likely to show better task performance.

Hypothesis 2b: As a subordinate perceives a higher level of accountability for job dedicated behaviors, the subordinate is likely to display more of the corresponding behaviors.

Hypothesis 2c: As a subordinate perceives a higher level of accountability for interpersonally facilitative behaviors, the subordinate is likely to display more of the corresponding behaviors.

Meantime, these hypotheses taken altogether with the hypotheses on the LMX-perceived accountability imply that perceived accountability would mediate the effect of LMX on the performance dimensions at least partially. This is the alleged premise of the literature on the LMX-performance relationship.

Hypothesis 3a: Perceived accountability for task performance will mediate the effect of LMX on task performance.

Hypothesis 3b: Perceived accountability for job dedicated will mediate the effect of LMX on job dedication.

Hypothesis 3c: Perceived accountability for interpersonally facilitative behaviors will mediate the effect of LMX on interpersonal facilitation.

Ⅳ. Method

4.1 Data Collection Design

The perceived accountability is the core concept to test the premise of the current study. Because subjects are not likely to experience the same level of perceived accountability in an experimental setting as in an actual situation (Frink & Ferris, 1998), a field study design was employed (Erdogan, Sparrowe, Liden, & Dunegan, 2001; Frink, 1994; Frink & Klimoski, 1998). Also, the data were collected from employees working for various companies located in the southeastern United States to secure enough variance in the perceived accountability, since accountability researchers noted that accountability conditions are likely to be very similar for most people within the same specific social context (Frink, 1994; Frink & Klimoski, 1998).

Finally, the data for LMX and performance elements were collected from their supervisors to prevent social desirability bias and reduce the risk of common method variance (Roberts & Glick, 1981), while the subordinates provided the data for the perceived accountability.

4.2 Procedure & Sample

Supervisor-subordinate dyadic data were collected from people working for various companies in terms of the size and industry located in the southeastern United States. Voluntary participants were recruited from graduate classes of a university located in the southeastern United States. With a brief explanation about the purpose of the study and instructions on the questionnaire, the questionnaires for subordinates were administered in classes and collected right away. The questionnaires for supervisors were distributed through the subordinates with a detailed instruction package which explained the study purpose and participation process. Supervisors were instructed to mail their responses directly back to the researcher by using an enclosed envelop. Once both supervisors' and subordinates' responses were collected, they were combined into one data set by using identification numbers, which were labeled on each questionnaire and the envelope.

710 dyadic questionnaires were administered through the process described above and 409 complete and usable dyadic data (subordinate return rate: 76.7%; supervisor return rate: 57.6%) was collected. The demographic characteristics of the participants are as follow. The subordinates were typically white (55.4%) males (48.1%) and 24.3% of the total sample was African-American (34%) female (51.9%). In the case of supervisors, the participants were white (54.6%) males (52.9%) and 19.9% of the total sample was African-American (35.5%) female (47.1%). The average ages of subordinates and supervisors were 25 (SD = 6.35) and 40 (SD = 11.52) respectively. Subordinates' and supervisors' job experience measured in tenure on the current position were about 3 years (SD = 4.28) and 9 years (SD = 8.01) respectively, the average supervisory time was about 2 years (SD = 2.71).

4.3 Measures

4.3.1 Control Variables

The performance literature (Van Scotter, 1994; Van Scotter & Motowidlo, 1996) shows that contextual performance behaviors are significantly related to some individual difference variables, such as personality traits and job experience (Organ & Ryan, 1995). If the effects of these variables are

not controlled, an alternative explanation that the variance in contextual performance behaviors explained by the perceived accountability derived from the quality of LMX relationship is actually the same variance due to the individual variables cannot be excluded. So, these personality traits (i.e., conscientiousness, extraversion, and agreeableness) were measured by using Goldberg's (1999) scales. Also, job experience was measured by tenure on the current position, because a job incumbent is likely to perform similar tasks on the same position and the number of times performing the same task predicts performance better than other types of tenure, such as organizational tenure or occupational tenure (Quinones, Ford, & Teachout, 1995; Sego, Ford, & Teachout, 1995). Meantime, job experience was measured by asking supervisors subordinates' tenure on the current position (Quinones et al., 1995). Also, Ferris and others (1997) reported a significant correlation ($r = .18$, $p \leq .05$) between hierarchical organizational level and accountability. To control for the effect of the hierarchical organizational position on subordinates' perceived accountability level, subordinates' organizational level information was obtained from supervisors.

4.3.2 Performance Elements

Supervisors' ratings of job dedication and interpersonal facilitation were obtained by using the scales developed by Van Scotter and Motowidlo (1996). In their study, both job dedication and interpersonal facilitation showed high internal consistency (α=.94 and .89 respectively). Their task performance scale needed to be revised for the current study, because it was designed for blue-collar workers, while the current sample was not restricted to blue collar workers or to any specific occupation.

To develop a new task performance scale for accommodating a wide range of subjects, the current study employed a worker-oriented approach to job analysis. The most important criterion for performance criteria is job-relevance (Borman, 1991), and job analysis provides the basis for determining the job-relevance. Between two primary approaches to job analysis, task-oriented approach and worker-oriented approach, the latter seems more appropriate for the purpose of the current study, because it focuses on general understanding of worker activities (Harvey, 1991). Since worker-oriented approach is based on the idea that a coherent order or structure underlies the observed domain of work activities and this underlying structure can be described in terms of a relatively small number of dimensions (McCormick, 1976), meaningful comparison can be made among jobs that are highly dissimilar at the task levels (Harvey, Friedman, Hakel, &

Cornelius, 1988). Some techniques and tools employing this approach include Position Analysis Questionnaire (McCormick, Jeanneret, & Mecham, 1972) and Job Element Inventory (JEI: Cornelius & Hakel, 1978).

With this approach, Van Scotter & Motowidlo's (1996) task performance scale was augmented by adding some items from Harvey and others' work (1988). Harvey and his colleagues extracted five factors from JEI. Those factors include 'decision making/communication/general responsibility,' 'skilled job activities,' 'information processing activities,' 'physical activities/related environmental conditions,' and 'using equipment/providing services.' Since Van Scotter and Motowidlo's (1996) task performance scale focused on the 'skilled job activities,' some items representing the other factors were extracted from Harvey and others' study (1988) and added to the task performance scale.

In the case of job dedication and interpersonal facilitation behaviors, the supervisors were asked to indicate the extent to which the employee who passed the questionnaire to them would likely display each of the performance behaviors by marking between 1 ("not at all") and 7 ("extremely likely"). While task performance items were also presented in a 7-point Likert style format, different anchors were assigned (1: much below average, 4: average, 7: Much above average). In responding to the task performance, the supervisors were also allowed to check 0 ("never perform") for each of the item, if their subordinates' job did not require such behaviors.

4.3.3 Perceived Accountability

While most accountability studies have taken an experimental design and the level of accountability was measured only for the purpose of a manipulation check (Frink, 1994; Seigel-Jacobs & Yates, 1996; Tetlock & Boettger, 1989; Tetlock & Kim, 1987; Tetlock, 1985a; Yarnold, Mueser, & Lyons, 1988), only two recent studies (Ferris et al., 1997; Frink, 1994) used a self-report measure for perceived accountability. Ferris and others (1997) developed four-item scale, including: (1) "To what extent are employees checked for adherence to the rules?;" (2) "To what extent do people who do the same work you do feel they are constantly being watched to see that they obey the rules?;" (3) "To what extent are you required to follow strict operating procedures at all times?;" (4) "In your job, to what extent do you have to justify your work-related decisions and performance to your superior?" These items were measured on a 1-5 Likert-type scale (1=no extent, 5=great extent). Although this scale tapped some portion of the perceived accountability for performance

behaviors, it still seems too general. Also, the internal consistency of the scale was somewhat low (α=.60; n=209). Therefore, a new scale that specifically measures the perceived accountability for each of the performance dimensions was developed by using Van Scotter and Motowidlo's (1996) scale. The subjects were asked to indicate how much they feel accountable for the behaviors captured by the job dedication scale to their supervisors with an instruction: "Each statement below describes some common activities in the work place. By using the scales, please indicate the extent to which you feel accountable for each of these behaviors to your supervisor to whom you will pass the other questionnaire. Please note that you are not asked to indicate how much you are formally or officially accountable for these activities. Instead, we want to know about your feeling of obligation and need to justify your behaviors on these activities to your supervisor."

4.3.4 LMX

Since LMX is a dyadic construct, one measurement issue with respect to LMX is which party's perspective should be measured (Gerstner & Day, 1997). In their meta-analysis, Gerstner and Day (1997) found that the strength of the relationship between LMX and other variables depended on which perspective was measured. The current study measured LMX from the supervisors' perspectives by using Bauer & Green's (1996) LMX-8 scale to avoid the aforementioned common method variance problem.

V. Analyses and Results

Before used for testing hypotheses, all of aforementioned measures were subject to reliability test and factor analysis to obtain an interpretable factor structure and an acceptable level of internal consistency. The factor analysis employed a traditional approach (i.e., maximum likelihood method for factor extraction with varimax rotation) in an iterative process. That is, if an initial factor analysis showed that some measurement items loaded on an inappropriate factor or loaded on an appropriate factor but had factor loadings that were too low (i.e., $|\lambda| <$ .30), they were dropped one by one to get a clearer factor structure. Then, the remaining measurement items were put into another factor analysis and examined through the same process. This process was repeated until an acceptable factor structure was obtained (factor structure table provided upon request by the author). The final set of measurement items from the process was

rechecked for the internal consistency. If the internal consistency was also acceptable, then an index score for a construct was calculated by averaging the actual scores of the final set of measurement items. As shown on the diagonal of the 〈Table 1〉, the internal consistency 's of all the measures are acceptable.

The patterns of the correlations between the control variables and the performance elements are consistent with the literature. The personality traits do not correlate with task performance, while conscientiousness and agreeableness correlate with the contextual performance elements. In addition, agreeableness correlates more significantly with interpersonal facilitation than with job dedication ($t=1.66$, $p\leq.05$, Cohen & Cohen, 1983). However, job experience measured in position tenure did not significantly correlate with task performance.

Since all of the hypotheses in this study are stated in the form of a correlation between two variables, a correlation analysis provides a piece of evidence supporting or rejecting those hypotheses. As shown in the 〈Table 1〉, all the hypothesized relationships are significant. Moreover, the correlation coefficients of LMX with perceived accountability for the performance elements ($.19 \leq r \leq .35$) were greater than those with the performance behaviors ($.14 \leq r \leq .23$). Therefore, these correlations render a piece of supporting evidence for the hypothesis 1a , 1b, 1c, 2a, 2b, and 2c.

However, this does not exclude the potential influence of individual differences, such as personality traits, job experience, and organizational position on the perceived accountability and performance elements. So, a series of hierarchical regression analyses were conducted. In each of these analyses, individual difference variables were entered at the first step. At the second step, LMX and perceived accountability were entered respectively.

As shown in the 〈Table 2〉 and 〈Table 3〉, the hierarchical regression analyses showed the same results as the correlation analysis did. That is, each of the perceived accountability for the performance elements accounted for a significant amount of variance in each of the performance behaviors (i.e., task performance, job dedication, and interpersonal facilitation) above and beyond those addressed by the individual differences variables. LMX also explained a significant amount of variance in each of the perceived accountability for the performance elements after the effects of individual differences were controlled. Therefore, hypothesis 1a, 1b, 1c, 2a, 2b, and 2c are supported.

A couple of statistical analysis techniques are available for testing the hypotheses on the mediation effects of perceived accountability (hypothesis 3a, 3b, and 3c). One of

〈Table 1〉 Correlations and Descriptive Statistics[a]

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. LMX	5.41	1.33	(.94)[b]											
2. Perceived Accountability - Job Dedication	5.79	.98	.35**	(.88)										
3. Perceived Accountability - Interpersonal Facilitation	5.41	1.21	.35**	.71**	(.93)									
4. Perceived Accountability - Task Performance	4.37	1.46	.19**	.33**	.35**	(.91)								
5. Job Dedication	5.66	.95	.23**	.22**	.17**	.09	(.88)							
6. Interpersonal Facilitation	5.67	1.02	.26**	.19**	.22**	.05	.63**	(.86)						
7. Task Performance	5.21	1.18	.14**	.05	-.03	.15**	.55**	.37**	(.87)					
8. Conscientiousness	5.49	1.00	.18**	.38**	.25**	.21**	.13**	.15**	.04	(.71)				
9. Extraversion	4.86	1.28	.20**	.17**	.18**	.16**	.04	.08	.07	.25**	(.82)			
10. Agreeableness	5.40	.97	.18**	.21**	.22**	.11*	.10*	.18**	.01	.32**	.26**	(.80)		
11. Subordinates' Job Experience	2.93	4.28	.06	-.02	-.02	-.07	.16**	.15**	.07	.02	-.04	.06	(-)	
12. Organizational Level	5.65	2.65	.15**	.08	.08	-.02	.24**	.24**	.15**	.08	.03	.04	.19**	(-)

Note: * $p \leq .05$ (two-tailed) ** $p \leq .01$ (two-tailed)

a. $404 \leq n \leq 541$.

b. The figures in parentheses on the diagonal are Cronbach's α.

〈Table 3〉 Hierarchical Regression Analyses of LMX on Perceived Accountability

Variable	*B*	*SE B*	*β*	*Adj.R²*
Step 1				.05**
Conscientiousness	.25	.07	.17**	
Agreeableness	.04	.07	.02	
Extraversion	.12	.05	.11**	
Subordinates' Organizational Level	-.01	.03	-.02	
Subordinates' Job Experience	-.02	.01	-.05	
Step 2				.07**
Conscientiousness	.23	.07	.16**	
Agreeableness	.01	.07	.01	
Extraversion	.10	.05	.09**	
Subordinates' Organizational Level	-.02	.03	-.03	
Subordinates' Job Experience	-.02	.01	-.06	
Perceived Accountability for Task Performance	.16	.05	.15**	
Step 1				.15**
Conscientiousness	.32	.04	.33**	
Agreeableness	.09	.04	.09*	
Extraversion	.04	.03	.06	
Subordinates' Organizational Level	.02	.02	.04	
Subordinates' Job Experience	-.01	.01	-.03	
Step 2				.22**
Conscientiousness	.29	.04	.30**	
Agreeableness	.06	.04	.06	
Extraversion	.01	.03	.02	
Subordinates' Organizational Level	.00	.02	.01	
Subordinates' Job Experience	-.01	.01	-.05	
Perceived Accountability for Job Dedication	.20	.03	.29**	
Step 1				.09**
Conscientiousness	.22	.05	.18**	
Agreeableness	.17	.06	.14**	
Extraversion	.09	.04	.10*	
Subordinates' Organizational Level	.03	.02	.05	
Subordinates' Job Experience	-.01	.01	-.03	
Step 2				.16**
Conscientiousness	.18	.05	.15**	
Agreeableness	.14	.05	.11**	
Extraversion	.05	.04	.06	
Subordinates' Organizational Level	.01	.02	.02	
Subordinates' Job Experience	-.01	.01	-.04	
Perceived Account. For Interpersonal Facilitation	.26	.04	.29**	

Note: n = 409; * $p \leq .05$ ** $p \leq .01$

〈Table 2〉 Hierarchical Regression Analyses of Perceived Accountability on Performance Elements

Variable	*B*	*SE B*	*β*	*Adj.R²*
IV: Perceived Accountability for Task Performance				
Step 1				.01*
Conscientiousness	.02	.04	.02	
Agreeableness	-.02	.05	-.02	
Extraversion	.04	.03	.06	
Subordinates' Organizational Level	.05	.02	.12*	
Subordinates' Job Experience	.01	.01	.04	
Step 2				.02**
Conscientiousness	.00	.05	.00	
Agreeableness	-.02	.05	-.02	
Extraversion	.03	.03	.04	
Subordinates' Organizational Level	.06	.02	.12**	
Subordinates' Job Experience	.01	.01	.05	
Task Performance	.08	.03	.11**	
IV: Perceived Accountability for Job Dedication				
Step 1				.07**
Conscientiousness	.07	.04	.08	
Agreeableness	.04	.04	.05	
Extraversion	.00	.03	.00	
Subordinates' Organizational Level	.08	.02	.19**	
Subordinates' Job Experience	.02	.01	.12**	
Step 2				.09**
Conscientiousness	.02	.04	.03	
Agreeableness	.03	.04	.03	
Extraversion	.00	.03	-.01	
Subordinates' Organizational Level	.07	.02	.19**	
Subordinates' Job Experience	.02	.01	.12**	
Job Dedication	.14	.04	.17**	
IV: Perceived Account. for Interpersonal Facilitation				
Step 1				.08**
Conscientiousness	.07	.04	.08	
Agreeableness	.10	.04	.11**	
Extraversion	.01	.03	.02	
Subordinates' Organizational Level	.08	.02	.20**	
Subordinates' Job Experience	.02	.01	.10**	
Step 2				.09**
Conscientiousness	.05	.04	.05	
Agreeableness	.09	.04	.10*	
Extraversion	.00	.03	.01	
Subordinates' Organizational Level	.08	.02	.19**	
Subordinates' Job Experience	.02	.01	.11**	
Interpersonal Facilitation	.10	.03	.13**	

Note: n = 409; * $p \leq .05$ ** $p \leq .01$

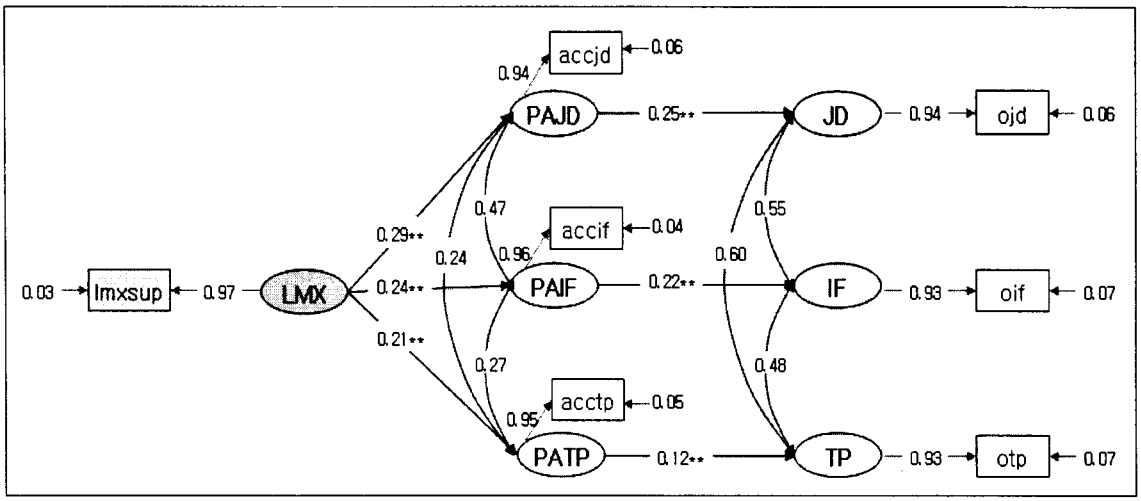
them is a causal step method suggested by Baron and Kenny (1986) and Judd and Kenny (1981). This method employs a series of hierarchical regression analyses through which the regression coefficients of a focal independent variable are compared to see whether they meets a set of four conditions: 1) the path from variable X (an independent variable) to variable Y (a dependent variable) must be significant; 2) the path from variable Y to variable Z (a mediator) must be significant; 3) the path from variable X to variable Z should be significant; 4) the coefficient of variable X on Z should be no longer significant in a regression model that includes variable Y (Judd & Kenny, 1981).

Another way of testing a hypothesis for mediation effect is to use structural equation modeling (SEM) by using LISREL (Jöreskog & Sörbom, 1996). In contrast to the causal step method that focuses on an identification of a single mediator, SEM focuses on testing a hypothesized model itself by taking measurement errors into account. Another advantage of SEM over the former is that not only are all path coefficients estimated simultaneously, the covariance among exogenous latent variables (ξs) or the covariance of endogenous latent variables (ηs) can also be estimated in terms of Ψ_{ij} or Φ_{ij}. Following one of the anonymous reviewer's suggestion to take advantage of these features, the mediation hypotheses were tested by employing SEM.

To test the hypotheses, a covariance matrix was used as input to LISREL. Following the procedures outlined by Settoon, Bennett, and Liden (Settoon, et al., 1996), manifest indicators for each latent construct were created by averaging the items for each scale. The primary reason for this practice was that with an item approach an item measurement model would have 55 paths estimated with 1,253 degrees of freedom. The addition of the structural portion would result in the estimation of 6 more paths with 1261 degrees of freedom (Rigdon, 1994). This is far beyond the LISREL's capability of determining how well the structural portion of the model holds up with the current sample (Settoon, Bennett, & Liden, 1996). Because a covariance matrix was used as input, the path coefficients (λ_{ij}s) were set to the square root of the reliability of the measurement items and the error variance of the manifest items (δ_{ij}s and ε_{ij}s) were set to the product of the variance of the average of the items by scale and the quantity one minus the reliability of the scale. The endogenous variables were assumed to be correlated each other because they belong to the same umbrella constructs, such as perceived accountability and performance.

〈Figure 3〉 shows the path diagram of the hypothesized model. The fit indices for the

〈Figure 3〉 Path Diagram of the Hypothesized Model



+ LMX: Leader-Member Exchange; PAJD: Perceived Accountability for Job Dedication; PAIF: Perceived Accountability for Interpersonal Facilitation; PATP: Perceived Accountability for Task Performance; JD: Job Dedication; IF: Interpersonal Facilitation; TP: Task Performance

++ All Ψ_{ij}s are significant.

** $p \leq .01$

model ($x^2(9) = 16.36$, $p = .06$; RMSEA = 0.04; RMR = .02; NFI = .99; CFI = .99; GFI = .99) showed that the data fit the hypothesized model well. In addition to the model fit indices satisfying generally recommended level, all the path coefficients are significant and consistent with the results of the hierarchical regression analyses reported earlier.

However, this does not exclude a possibility that an alternative model, in which the direct paths from LMX to the performance elements (JD, IF, and TP) are freed, also well explains the variance patterns observed in the current data. Therefore, the hypothesized model was compared with the alternative model by employing a nested-model comparison technique proposed by Anderson and Gerbing (1988). As summarized in 〈Table 4〉, difference in x^2 between

〈Table 4〉 Results of Model Comparisons

Model	x^2	*Df*	RMSEA	RMR	NFI	CFI	GFI	$\Delta x^2(df)$
Hypothesized model	16.36	9	.05	.03	.99	.99	.99	
Alternative model	10.64	6	.04	.02	.99	.99	.99	5.72(3)

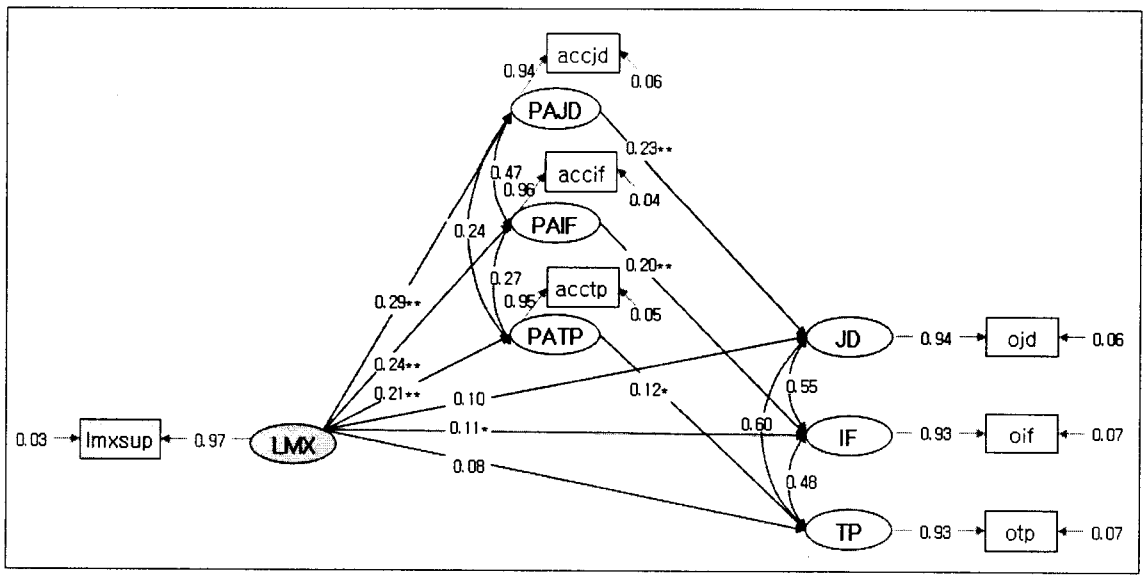
the models was just 5.72, which is smaller than 7.82 (Schumacker & Lomax, 1996: 273). What this means is that the estimation of the direct paths from LMX to the performance elements did not improve the overall model fitness.

In fact, the only path significant at .05 level was the one from LMX to IF (Interpersonal Facilitation), while the other direct paths were not (see Figure 4.) Therefore, the hypothesized model is preferred over the alternative model because the former is more parsimonious.

VI. Summary & Discussion

Since the LMX concept was proposed, a couple of conceptual studies that identified performance as an outcome of LMX suggested that LMX would have a positive effect on a subordinate's performance by drawing on the norm of reciprocity (Gouldner, 1960) and social exchange theory. That is, a subordinate who develops and maintains a high quality of LMX relationship would perform better to reciprocate the supervisor's

〈Figure 4〉 Path Diagram of the Alternative Model



+ LMX: Leader-Member Exchange; PAJD: Perceived Accountability for Job Dedication; PAIF: Perceived Accountability for Interpersonal Facilitation; PATP: Perceived Accountability for Task Performance; JD: Job Dedication; IF: Interpersonal Facilitation; TP: Task Performance

++ All Ψ_{ij}s are significant.

** $p \leq .01$

* $p \leq .05$

physical, social, and emotional support. Even though the explanation sounds intuitive, it has never been subject to empirical scrutiny. And, the lack of such empirical scrutiny has left some inconsistencies on the LMX-performance relationship observed in the literature unanswered (Gerstner & Day, 1997).

The current paper was prepared to test the alleged rationale behind the LMX-performance relationship. To do so, a model that incorporates perceived accountability and contextual performance elements was developed. This model stated that 1) LMX would affect perceived accountability for the performance elements; 2) the perceived accountability for the performance elements would affect the corresponding performance behaviors; 3) the effect of LMX on performance behaviors would be mediated by the perceived accountability for the performance elements.

The model was tested on 409 subordinate-supervisor dyadic data set. A series of hierarchical regression analyses in which the effects of individual difference variables were controlled and structural equation modeling analysis by using LISREL rendered evidence supporting the hypothesized model over the alternative model. This result supports the rationale behind the allegedly positive LMX-performance relationship and provides a possible explanation for the inconsistency reported in the LMX-performance literature (Gerstner & Day, 1997). In the case of the studies (e.g., Scandura, 1999; Scandura & Schriesheim, 1994; Schriesheim, Neider, & Scandura, 1998; Wayne & Ferris, 1990) reported a positive relationship, the respondents might feel accountable for the performance elements measured, whereas the participants of the studies (e.g., Vecchio, 1982; Vecchio & Gobdel, 1984) that reported an insignificant relationship might not for some reasons. In fact, in Vecchio's (1982) study, the performance of 45 US Air Force enlisted members was measured in terms of their performance on several training tasks for which the participants were less likely to feel accountable.

While all the hypotheses were supported by the data, they have not come without a limitation: cross-sectional study design. Although all the hypotheses were developed based upon relevant theories and some indirect evidence shown in the literature, lack of a longitudinal design precludes asserting causal relationships among the variables. Therefore, the results reported here should not be taken as evidence for direct causal relationships. They show only that causal relationships are possible and require cautious interpretation.

Despite this limitation, the current findings will extend our knowledge about how good interpersonal relationships can be realized

into good performance and provide an important managerial implication for supervisors to manage subordinates' performance. To utilize a good relationship maximally for fostering an employee's performance behaviors, a supervisor needs to make his/her support through the relationship specific enough so that they can be clearly perceived by the subordinate as related to one of the three linkages (i.e., identity-event, event-prescription, identity-prescription) of the accountability model. Otherwise, a good relationship would not lead a subordinate to experience a high level of perceived accountability, and no effect on the subordinate's performance would take place. This means that supervisors need to be careful in communicating what they think and expect on subordinates' job-dedicated behaviors and task performance. As Cumming and Anton (1990) suggested, subordinates' perceptions on their roles, work outcomes, work-related procedures, and rules can be quite different from those of a supervisor. Consequently, what managers think about the accountability level of their subordinates does not automatically induce better task performance, unless it is effectively and efficiently communicated to and acknowledged by the subordinates so that the subordinates feel accountable.

Since the primary purpose of the current study was to propose and test a model that addresses the alleged premise of the LMX literature on the LMX-performance relationship, the varying extent to which perceived accountability mediates the effect of LMX on each of the performance elements was beyond the scope of this paper. However, the path estimates shown in 〈Figure 3〉 seem to suggest some interesting research questions. While the path estimates from LMX to PATP (γ_{31} = .21) is similar to those of LMX- PAJD and LMX-PAIF (γ_{11} = .29; γ_{21} = .24), the estimate of PATP-TP is much smaller (β_{33} = .12) than those of PAJD-JD (β_{11} = .25) and PAIF-IF (β_{22} = .22). This hints at that even if an employee may feel accountable for all the performance behaviors to similar extent with a certain level of LMX quality, the level of task performance may be conditioned by other factors. When an employee could not achieve a certain level of task performance to the extent to which s/he feels accountable for, how would the employee behave? Would s/he try to compensate the unsatisfying task performance with more of contextual performance behaviors, or simply be frustrated? And, what factors would determine the reaction? Answers for these research questions may broaden our understanding on the nature of or intra-relationships among the performance elements and how those performance elements are negotiated throughout the development process of LMX.

REFERENCE

Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103,* 411-423.

Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51,* 1173-1182.

Bass, B. M. (1985). *Leadership and Performance beyond Expectations.* New York: Free Press.

Bauer, T. N. & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal, 39,* 1538-1567.

Blau, P. M. (1964). *Exchange and Power in Social Life.* New York: John Wiley & Sons.

Borman, W. C. (1991). Job behavior, performance, and effectiveness. In M.D.Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 271-326).

Borman, W. C., Hanson, M. A., Oppler, S. H., Pulakos, E. D., & White, L. A. (1993). Role of early supervisory experience in supervisor performance. *Journal of Applied Psychology, 78,* 1-26.

Borman, W. C. & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N.Schmitt & W. Borman (Eds.), *Personnel Selection in Organizations* (pp. 71-98). New York: NY: Jossey-Bass.

Borman, W. C., White, L. A., & Dorsey, D. W. (1995). Effects of ratee task performance and interpersonal factors on supervisor and peer performance ratings. *Journal of Applied Psychology, 80,* 168-177.

Borman, W. C., White, L. A., Pulakos, E. D., & Oppler, S. H. (1991). Models of supervisory job performance ratings. *Journal of Applied Psychology, 76,* 863-872.

Borman, W. C. & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance, 10,* 99-109.

Carnevale, P. J. D. (1985). Accountability and the dynamics of group presentation. In E.J.Lawler (Ed.), *Advances in Group Process* (pp. 227-248).

Cohen, J. & Cohen, P. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences.* (2nd ed.) Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Coleman, V. I. & Borman, W. C. (2000). Investigating the underlying structure of the citizenship performance domain. *Human Resource Management Review, 10,* 25-44.

Conway, J. M. (1999). Distinguishing contextual performance from task performance for managerial jobs. *Journal of Applied Psychology, 84,* 3-13.

Cornelius, E. T. & Hakel, M. D. (1978). *A Study to Develop an Improved Enlisted Performance Evaluation System for the U.S. Coast Guard.* Washington, D. C.: Department of Transportation, United States Coast Guard.

Costa, P. T. & McCrae, R. R. (1989). *The NEO-PI/NEO-FFI Manual Supplement.* Odessa,

FL: Psychological Assessment Resources.

Cummings, L. L. & Anton, R. J. (1990). The logical and appreciative dimensions of accountability. In S.Srivastva & D. Cooperrider (Eds.), *Appreciative Management and Leadership* (pp. 257-286). San Francisco, CA: Jossey-Bass.

Deluga, R. J. (1994). Supervisor trust building, leader - member exchange and organizational citizenship behavior. *Journal of Occupational and Organizational Psychology, 67,* 315-326.

Deluga, R. J. (1998). Leader-member exchange quality and effectiveness ratings: The role of subordinate-supervisor conscientiousness similarity. *Group & Organization Management, 23,* 189-216.

Dienesch, R. M. & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review, 11,* 618-634.

Dose, J. J. & Klimoski, R. J. (1995). Doing the right thing in the work place: Responsibility in the face of accountability. *Employee Responsibilities & Rights Journal, 8,* 35-56.

Erdogan, B., Sparrowe, R. T., Liden, R. C., & Dunegan, K. J. (2001). Implications of organizational exchanges for accountability theory. *Unpublished Manuscript.*

Feldman, D. A. (1986). A note on the statistical correction of halo error. *Journal of Applied Psychology, 71,* 173-176.

Ferris, G. R., Dulebohn, J. H., Frink, D. D., George-Falvy, J., Mitchell, T. R., & Matthews, L. M. (1997). Job and organizational chacteristics, accountability, and employee influence. *Journal of Managerial Issues, 9,* 162-175.

Fiske, S. T. & Taylor, S. E. (1991). *Social Cognition.* New York: McGraw-Hill.

Frink, D. D. (1994). *Accountability in Human Resource Systems: The Impression Management and Performance-directed Functions of Goal Setting in the Performance Evaluation Process.* University of Illinois at Urbana-Campaign.

Frink, D. D. & Ferris, G. R. (1998). Accountability, impression management, and goal setting in the performance evaluation process. *Human Relations, 51,* 1259-1283.

Frink, D. D. & Klimoski, R. J. (1998). Toward a theory of accountability in organizations and human resources management. *Research in Personnel and Human Resources Management, 16,* 1-51.

Gerstner, C. R. & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology, 82,* 827-844.

Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I.Mervielde, I. Deary, F. de Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe* (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25,* 161-177.

Graen, G. B. & Cashman, J. (1975). A role-making model of leadership in formal organizations: A developmental apprach.

In J.G.Hunt & L. L. Larson (Eds.), *Leadership Frontiers* (pp. 143-165). Kent, OH: Kent State University Press.

Graen, G. B. & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. In L.L.Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior* (pp. 175-208).

Graen, G. B. & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly, 6,* 219-247.

Harvey, R. J. (1991). Job analysis. In M.D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 71-163).

Harvey, R. J., Friedman, L., Hakel, M. D., & Cornelius, E. T. I. (1988). Dimensionality of the job elementary inventory, a simplified worker-oriented job analysis questionnaire. *Journal of Applied Psychology, 73,* 639-646.

Hunter, J. E. & Hirsh, H. R. (1987). Applications of meta-analysis. In C.L.Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 321-357).

Hunter, J. E. & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin, 96,* 72-98.

Jones, E. E. & Wortman, C. (1973). *Ingratiation: An Attributional Approach.* Morristown, NJ: General Learning Press.

Jreskog, K. G. & Srbom, D. (1996). *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language.* Chicago, IL: Scientific Software International.

Judd, C. M. & Kenny, D. A. (1981). Process Analysis: Estimating mediation in treatment evaluations. *Evaluation Review, 5,* 602-619.

Katz, D. (1964). Motivational basis of organizational behavior. *Behavioral Science, 9,* 131-146.

Klimoski, R. J. (1971). The effects of intragroup forces on intergroup conflict resolution. *Organizational Behavior and Human Performance, 8,* 363-383.

Klimoski, R. J. & Inks, L. (1990). Accountability forces in performance appraisal. *Organizational Behavior & Human Decision Processes, 45,* 194-208.

London, M. & Smither, J. W. (1995). Can multi-ource feedback change perceptions of goal accomplishment, self-evaluations, and performance-elated outcomes? Theory-ased applications and directions for research. *Personnel Psychology, 48,* 803-839.

London, M., Smither, J. W., & Adsit, D. J. (1997). Accountability: The Achilles' heel of multisource feedback. *Group & Organization Management, 22,* 162-185.

Malouff, J., Schutte, N., Bauer, M., Mantelli, D., Pierce, B., Cordova, G. et al. (1990). Development and evaluation of a measure of the tendency to be goal oriented. *Personality, 11,* 1191-1200.

McCormick, E. J. (1976). Job and task analysis. In M.D.Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (15 ed., pp. 651-696).

McCormick, E. J., Jeanneret, P. R., & Mecham, R. C. (1972). A study of job characteristics and job dimensions as based on the

Position Analysis Questionnaire (PAQ). *Journal of Applied Psychology, 56,* 347-368.

Motowidlo, S. J. & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology, 79,* 475-480.

Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance, 10,* 85-97.

Organ, D. W. & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology, 48,* 775-802.

Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology, 82,* 262-270.

Quinones, M., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology, 48,* 887-910.

Rigdon, E. E. (1994). Calculating degrees of freedom for a structural equation model. *Structural Equation Modeling, 1,* 274-278.

Roberts, K. H. & Glick, W. (1981). The job characteristics approach to task design: A critical review. *Journal of Applied Psychology, 66,* 193-217.

Scandura, T. A. (1999). Rethinking leader-member exchange: An organizational justice perspective. *Leadership Quarterly, 10,* 25-40.

Scandura, T. A. & Schriesheim, C. A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in leadership research. *Academy of Management Journal, 37,* 1588-1602.

Schlenker, B. R., Britt, T. W., Pennington, J., Murphy, R., & Doherty, K. (1994). The triangle model of responsibility. *Psychological Review, 101,* 632-652.

Schlenker, B. R. & Weigold, M. F. (1989). Self-dentification and accountability. In A. Giacalone & P. Rosenfeld (Eds.), *Impression Management in Organizations* (pp. 21-43).

Schmitt, N., Gooding, R. Z., Noe, R. A., & Kirsch, M. (1984). Meta-analyses of validity studies published between 1964 and 1982 and the investigation of study characteristics. *Personnel Psychology, 37,* 407-422.

Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management Journal, 41,* 298-318.

Schumacker, R. E. & Lomax, R. G. (1996). *A Biginner's Guide to Structural Equation Modeling.* NJ: Mahwah: Lawrence Erlbaum Associates, Publishers.

Sego, D. J., Ford, J. K., & Teachout, M. S. (1995). A multi-level investigation of the work experience-performance relationships: The importance of partitioning performance variance. *Presented at the Society of Industrial and Organizational Psychology Conference* (Orlando, FL.)

Seigel-Jacobs, K. & Yates, J. F. (1996). Effects of procedural and outcome accountability on judgment quality. *Organizational Behavior & Human Decision Processes, 65,* 1-17.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations:

Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology, 81,* 219-227.

Tetlock, P. & Boettger, R. (1989). Accountability: Social magnifier of the dilution effect. *Journal of Personality and Social Psychology, 57,* 388-398.

Tetlock, P. & Kim, J. I. (1987). Accountability and judgment processes in a personality prediction task. *Journal of Personality and Social Psychology, 52,* 700-709.

Tetlock, P. E. (1985a). Accountability: A social check on the fundamental attribution error. *Social Psychology Quarterly, 48,* 227-236.

Tetlock, P. E. (1985b). Accountability: The neglected social context of judgment and choice. *Research in Organizational Behavior, 7,* 297-332.

Tetlock, P. E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. In M.P.Zanna (Ed.), *Advances in Experimental Social Psychology* (pp. 331-377).

Tetlock, P. E., Skitka, L., & Boettger, R. (1989). Social and cognitive strategies for coping with accountability: Conformity, complexity, and bolstering. *Journal of Personality and Social Psychology, 57,* 632-640.

Van Scotter, J. R. (1994). *Evidence for the Usefulness of Task Performance, Job Dedication, and Interpersonal Facilitation as Components of Performance.* University of Florida.

Van Scotter, J. R. (2000). Relationships of task performance and contextual performance with turnover, job satisfaction, and affective commitment. *Human Resource Management Review, 10,* 79-95.

Van Scotter, J. R. & Motowidlo, S. J. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance. *Journal of Applied Psychology, 81,* 525-531.

Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000). Effects of task performance and contextual performance on systemic rewards. *Journal of Applied Psychology, 4,* 526-535.

Vecchio, R. P. (1982). A further test of leadership effects due to between -group variation and within-group variation. *Journal of Applied Psychology, 67,* 200-208.

Vecchio, R. P. & Gobdel, B. C. (1984). The vertical dyad linkage model of leadership: Problems and prospects. *Organizational Behavior & Human Performance, 34,* 5-20.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Wayne, S. J. & Ferris, G. (1990). Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology, 75,* 487-499.

Wayne, S. J. & Green, S. A. (1993). The effects of leader-member exchange on employee citizenship and impression management behavior. *Human Relations, 46,* 1431-1440.

Yarnold, P. R., Mueser, K. T., & Lyons, J. S. (1988). Type A behavior, accountability, and work rate in small groups. *Journal of Research in Personality, 22,* 353-360.

상호호혜적 관계 유지에 대한 의무감에 기반한 상사-부하간 관계의 질 (Leader-Member Exchange) 성과 간의 이론적 설명에 대한 실증 연구

김승용*

요약

상사-부하간의 관계의 질 (Leader-Member Exchange: LMX) 개념이 연구되기 시작 한 이래 제시된 이론적 모형에서는 상사-부하간 관계의 질이 부하직원의 성과에 긍정적인 영향을 미칠 것으로 예측 해 왔다. 이러한 예측의 주된 이론적인 설명은 상사와의 좋은 관계를 통하여 보다 많은 물리적/정신적/조직적인 지원을 받게 될 때, 부하는 상호호혜적인 관계를 유지하기 위해 이러한 특별한 지원에 걸맞는 반대급부를 상사에게 제공해야 한다는 의무감을 느끼게 되고, 이 의무감은 종국적으로 미래의 보다 나은 성과를 가져오게 하는 동기유발요인으로 작용한다는 것이다. 이러한 이론적 설명은 상당한 설득력을 가지고 지금까지의 개념적 모형 개발에서 별다른 검증없이 받아들여져 왔다. 그러나 유의하지 않은 LMX-성과의 관계를 보고하고 있는 실증연구 결과(e.g., Vecchio, 1982)들은 보다 엄격한 이론적 모형의 제시와 검증을 요구하고 있다. 따라서 본 연구는 상호호혜적 관계 유지를 위한 의무감을 부하직원이 성과와 관련해 느끼는 해명의무감을 통해 측정하고 이를 매개변수로 설정한 모형을 제시하였는 바, 409쌍의 상사-부하들로부터 수집된 자료의 계층적 회귀분석과 공변량구조분석 결과는 이 모형을 지지하는 것으로 나타났다. 이 결과는 상사-부하간 관계의 질이 어떻게 부하의 성과에 정 (+)의 영향을 미치는지에 대해 그동안 논리적으로만 제시되어 온 가설을 실증한 것으로써, 이 결과가 가지는 이론적 기여와 관리적 시사점, 연구의 한계, 그리고 향후의 연구 방향을 제시하였다.

주제어: 상사-부하간 질적 관계의 질, 맥락성과, 직무성과, 해명의무감

* 동국대학교 경영대학