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between leader-member exchange and intent to
turnover**



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An examination of the curvilinear relationship between leader–member exchange and intent to turnover

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Summary

Based on the theoretical identification of three different motivational forces for voluntary turnover—*affective, calculative, and alternative*—we hypothesize that the relationship between supervisor–subordinate relationship quality (i.e., leader–member exchange) and turnover intentions is best represented as curvilinear as opposed to linear. We test this hypothesis in two organizational samples consisting of 402 employees from a water management district and 183 employees from a distribution services organization. We found support for the hypothesis in both samples. We offer directions for future research. Copyright © 2005 John Wiley & Sons, Ltd.

Introduction

Perhaps because of the high costs and deleterious effects associated with it, dysfunctional employee turnover has been of perennial interest to organizations and researchers alike (Darmon, 1990; Hom & Griffeth, 1995). Unfortunately, results based on actual turnover research may come too late to help remedy the factors that produce dysfunctional turnover. Additionally, individuals with high turnover intentions often have organizationally undesirable attitudes that infect other employees with whom they interact, all of which stands in the way of optimal work output (Griffeth, Hom, & Gaertner, 2000; Hom & Griffeth, 1995). These reasons led us to focus on intentions to turnover rather than actual turnover.

Previous research has shown the general negative impact of a variety of organizational variables (e.g., compensation, leadership, and co-workers) on intentions to turnover (Griffeth et al., 2000). Of particular interest to us is leader–member exchange (LMX), which refers to the quality of the relationship shared by supervisors and subordinates (Graen & Scandura, 1987). In fact, a negative linear relationship between LMX quality and turnover intentions has been documented in the literature (e.g., Vecchio & Gobel, 1984; Wilhelm, Herd, & Steiner, 1993). A recent meta-analysis of the LMX

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literature yielded a negative correlation of -0.28 between LMX and turnover intentions (Gerstner & Day, 1997).

The documented negative relationship between LMX and turnover intentions implies utility in supervisor efforts to develop the highest-quality LMX relationships with high-performing and high-potential subordinates, as doing so is likely to decrease turnover intentions. However, based on the motivational forces for turnover and turnover intentions offered by Maertz and Griffeth (2004), we suggest that the relationship between LMX and intentions to turnover may be best represented as curvilinear. Specifically, subordinates in low-quality relationships will be 'pushed' out of the organization, whereas individuals in high-quality relationships will receive opportunities and/or have aspirations that result in their being attracted to other organizations (being 'pulled' out), ultimately leading to increased turnover intentions.

Examining the possibility of a curvilinear relationship between LMX and intent to turnover is an important contribution to the LMX literature, as the vast majority of previous research has theorized and empirically supported only positive outcomes from high-quality LMX relationships (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997). Illustrating the possibility of potential drawbacks to high-quality exchanges may provide new insight into LMX relationships. Additionally, if the relationship is indeed curvilinear and turnover intentions do increase at a certain point of LMX relationship quality, supervisors may be engaging in actions (i.e., increasing visibility and sharing social networks) that work against them, akin to the 'folly of rewarding A while hoping for B' (Kerr, 1975). Producing results that may help supervisors recognize and understand the potential reasons for their subordinates thinking about leaving their organizations may allow them to take corrective actions. Thus, the purpose of the present study was to examine the nature of the relationship between LMX and intent to turnover to determine if the best representation is linear or curvilinear.

Leader–Member Exchange

The quality of the relationship between supervisors and subordinates has often been studied via LMX theory. With its roots in role theory (e.g., Kahn et al., 1964) and social exchange theory (Blau, 1964; Homans, 1958), the LMX model suggests that supervisors largely determine the various work roles for subordinates. In general, the more important organizational roles are filled by individuals supervisors like and view as strong performers, whereas lesser roles are assigned to those less liked or who are viewed as less capable. Subordinates selected for the more important roles establish close, high-quality LMX relationships with their supervisors characterized by trust and emotional support (Dienesch & Liden, 1986).

Several advantages including formal and informal rewards, favor doing, ample access to supervisors, and increased communication stem from these high-quality relationships (e.g., Dienesch & Liden, 1986). In contrast, subordinates in low-quality exchanges have relationships with their supervisors that reflect low levels of trust and emotional support and few, if any, benefits outside the employment contract (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986).

Leader–member exchange and turnover intentions

Research on turnover/turnover intentions has been one of the most studied topics in management research (Griffeth et al., 2000; Hom & Kinicki, 2001). In a recent study, Maertz and Griffeth

(2004) reviewed the extant turnover research. They synthesized the many avenues into eight different motivational forces related to turnover. The purpose of their article was to provide researchers with further guidance and to show the convergence, divergence, overlaps, and complements between the various content and process theories of turnover.

Of the eight motivational forces identified by Maertz and Griffeth (2004) (i.e., affective, calculative, contractual, behavioral, alternative, normative, moral/ethical, and constituent), three are relevant to our study. Specifically, we believe that affective, calculative, and alternative motivational forces are especially useful when examining the relationship between LMX quality and turnover intentions. Affective forces are the positive or negative emotional responses, directed at the organization, that cause comfort or discomfort. Calculative forces refer to an individual's calculation of the probability of attaining valued goals in the future through continued membership, with a favorable calculation motivating staying, and an unfavorable calculation motivating quitting. Finally, alternative forces refer to an individual's belief about obtaining alternative jobs or roles, with the attractiveness and certainty of these alternatives playing an important role in the decision to quit. As these three motivational forces all deal with the core components of the LMX and turnover processes, we call upon them to explicate how subordinates in low, middle, and high LMX relationships may think about quitting.

Low-quality LMX relationships

Researchers have proposed and found a negative relationship between LMX quality and turnover intentions (e.g., Ferris, 1985; Gerstner & Day, 1997; Graen, Liden, & Hoel, 1982; Vecchio & Gobdel, 1984; Wilhelm et al., 1993). This is likely the result of the higher levels of trust, emotional support, and related benefits that subordinates in high-quality relationships receive compared to their lower-quality LMX counterparts (Dansereau et al., 1975; Dienesch & Liden, 1986). Researchers have shown, and maybe assumed, that this relationship is linear, thus leading to the thought that as relationship qualities become higher and higher, turnover intentions become lower and lower.

Applying this argument to Maertz and Griffeth's (2004) forces, we suggest that the lack of trust, communication, and other benefits for subordinates in low-quality relationships lead to negative feelings or affective responses toward their supervisors. These supervisors are the same individuals who are often chosen as exemplars of their organizations, as their organizations do not have a face per se (Schneider, 1987), thus resulting in low-quality LMX subordinates having negative affective responses toward their organizations. As these relationships are not desired, these subordinates want to take actions to avoid the discomfort or displeasure of working in these situations. This would describe an affective force for entertaining quitting, as subordinates develop negative affective responses and, in efforts to improve these situations, a likely option is to think about working for a new organization (i.e., higher levels of turnover intentions).

Additionally, calculative forces (Maertz & Campion, 2004; Maertz & Griffeth, 2004) may be working to increase turnover intentions for low-quality LMX subordinates. Calculative forces involve cognitive evaluations of future prospects for membership in the organization. Individuals in low-quality LMX relationships will look to the future and realize that prospects look grim, due to the lack of advantages and benefits they are receiving (and will likely continue to receive) from their supervisors (Liden, Wayne, & Stilwell, 1993). When these individuals desire better situations, be it in terms of emotional support, trust, communication, or social network connections, they consider options for how they can attain these benefits. Again, since their calculation about future prospects in their organization does not look positive, they will begin to entertain thoughts of leaving so as to achieve their valued future goals. As a result, subordinates in low-quality relationships are essentially being 'pushed' out of the organization, as they begin thinking about new employment opportunities to lower feelings of discomfort (an affective force) and/or to better future prospects for their careers (a calculative force).

Middle-quality LMX relationships

Consistent with the negative relationship that has been found, subordinates in mid-level LMX relationships are likely to experience lower levels of turnover intentions than those in low-quality LMX relationships. Employees in mid-level LMX relationships do not have the negative affective feelings expected of subordinates in lower-quality relationships. Additionally, mid-level LMX subordinates are less likely to make a calculation that their future prospects are being thwarted in their current organizations. Thus, there is less of a motivational 'force' to think about quitting.

Further, these subordinates realize that they are receiving better and more rewards and benefits than their low-quality counterparts, but less than their high-quality colleagues. However, mid-level LMX subordinates recognize that they do not have to work as hard as the high-quality LMX subordinates. Essentially, they receive rewards and benefits (inducements) that are equal to their efforts (i.e., contributions; March & Simon, 1958). As a result, subordinates in moderate-level LMX relationships establish a state of equilibrium, which thwarts thoughts of leaving the workplace due to affective responses or calculations of future prospects in the organization.

High-quality LMX relationships

The relationships of employees in lower- and middle-quality LMX exchanges are in line with the negative linear relationship described in prior research. However, what has not been specifically examined is whether this linear relationship exists for subordinates in high-quality relationships. Based on theory, we present a few possible reasons why we believe that the relationship may no longer be linear for high-quality LMX subordinates but is instead curvilinear.

As previously mentioned, subordinates in high-quality LMX relationships receive numerous benefits and advantages, such as access to their managers' social networks (Sparrowe & Liden, 1997) and higher performance ratings (Gerstner & Day, 1997). As a result, high-quality LMX subordinates are likely to be more visible and have greater perceived or actual ease of movement. Returning to Maertz and Griffeth's (2004) turnover forces, alternative forces are likely to be present for members in high-quality LMX relationships. According to Maertz and Griffeth, 'alternative forces involve an employee's beliefs about their ability to obtain a valued alternative to working at the current organization' (2004, p. 672). When an employee perceives other job opportunities, that individual may be psychologically 'pulled' away from their current organization (Bretz, Boudreau, & Judge, 1994).

In terms of the LMX relationship, high-quality LMX subordinates are the individuals most likely to be 'pulled' away for a few reasons. Drawing first on the turnover motivation related to alternative forces, subordinates in high-quality relationships may receive job opportunities that are better or more desirable than the current situation. Further, this can happen even if employees like their current organization (as high-quality LMX subordinates often do), as long as they believe that the alternatives will provide a better situation (e.g., Steel, 2002).

Subordinates in high-quality LMX relationships may also be subject to calculative forces. Specifically, there is a motivation to stay in an organization when an individual calculates that he/she can achieve valued goals by staying (Lee & Mitchell, 1994), but a calculation that important goals are unlikely to be met in the current job in the future creates a motivation to quit (e.g., Mobley, Griffeth, Hand, & Meglino, 1979). This future orientation is important, as an individual may be satisfied with the current situation in an organization but be worried or feel that the future will not be what is desired.

Applying these calculative forces to subordinates in high-quality LMX relationships, these individuals are often the subordinates who work the hardest and have proven to their supervisors that they are high performers (Liden et al., 1997). As a result, supervisors give these subordinates the best roles, opportunities for internal career advancement, and access to their social networks (Graen & Uhl-Bien, 1995). However, in organizations there often comes a time where there is nothing left to offer and/or where the only chance for advancement is if a 'higher-up' leaves, which may not be in the foreseeable

future. This situation leaves high-aspiring subordinates in a dilemma, as they may perceive that their future prospects for career goals are likely to be stifled if they remain in their current organizations. In this case, the calculative forces would result in high-quality LMX subordinates being motivated to leave their organizations (i.e., experience higher levels of turnover intentions).

Similar to the alternative forces acting to 'pull' high-quality subordinates to other job opportunities, a calculative force would have the same effect as an individual in a high-quality relationship could be pulled to other organizations due to concerns about attaining valued goals in the future. Both of these forces could work to increase turnover intentions for members in high-quality LMX relationships and result in a curvilinear relationship.

In summary, we acknowledge that, in general, the relationship between LMX quality and intent to turnover is negative. However, there are a number of possible reasons why this may not always be the case. In particular, we theorize that the negative relationship between LMX quality and turnover intentions is due to subordinates in lesser-quality relationships being 'pushed' out of the organization. We argue that the pushing phenomenon will only hold to a certain point, as managers will not engage in behaviors that push higher-quality LMX subordinates out the door. Instead, subordinates in higher-quality LMX relationships will experience increased levels of turnover intentions because they are pulled away from the organization (either by other job opportunities or more positive future calculations outside the organization). Thus, at this point, subordinates in high-quality relationships will have intentions to turnover that are higher than those for middle-quality relationships, though not as high as those for subordinates in low-quality LMX relationships. Consequently, the relationship between LMX and individual turnover intentions may not be linear, but in fact may be curvilinear. Thus, we propose the following prediction:

Hypothesis: A U-shape characterizes the relationship between leader-member exchange quality and intent to turnover. Intent to turnover is high when LMX quality is low. However, intent to turnover decreases when LMX quality is moderate to moderately high and increases when LMX quality is at extremely high levels.

Organizational Context

Sample 1

Organizational Factors

The responses from sample 1 were generated from full-time employees who worked for a water management district in the year 2000. The mission of the district is to manage water resources to ensure their continued availability while maximizing environmental and economic benefits. The district is dedicated to the preservation and management of an area of the state's water resources including both ground and surface water supplies. Some of the duties involved in achieving this mission include issuing permits for water use and activities to ensure no adverse impact to the water or adjacent lands, purchasing land to preserve or restore wetlands and water resources, conducting research to determine the quantity and quality of water resources, mapping water resources, and conducting education and outreach programs for the public.

The district's policies for operation are set by a Governing Board who meet monthly. The nine members of the board are appointed by the Governor of the state to serve a 4-year term. The state senate must confirm all appointments to the board. Members of the board receive no compensation for serving.

An Executive Director is responsible for administering the policies set by the board on a daily basis. The Executive Director is assisted in his/her efforts by Deputy Directors, internal and external ombudsmen, General Counsel, and an Assistant Executive Director.

Because the district manages water resources in 18 counties, employees are scattered across the state. Effective communication between and among the district management and their employees is critical for the district to succeed.

Worker–job factors

The jobs in the district vary greatly in terms of required skills and education. For instance, the district employs environmental research scientists with advanced degrees as well as hourly workers who may not even have completed high school, who perform supporting roles. Many employees work in the field at least one day each week, some every day.

External environment

While the mission of the district remains constant, the board serves at the pleasure of the Governor. Thus, when the political affiliation of the Governor changes, the composition of the board does too. Policies and initiatives put in place may change abruptly after a change in Governor. Further, the environmental view of the Governor also plays a role in who is appointed to the board and how much support the district receives in their role to preserve and protect the wetlands.

Sample 2

Organizational factors

The responses from sample 2 were generated from full-time employees who worked in a distribution services organization within the financial services industry in the year 2000. The mission of the organization is to provide on-time delivery of accurately packaged cash. Anecdotal evidence from line managers suggests that turnover in this organization has typically been low.

Worker–job factors

Employees work in highly secure vaults, which require multiple security checks upon entry and exit. Employees work in close physical proximity to their co-workers and supervisors and therefore are in contact with them most of the day. There are no windows in the vaults, and employees have to contend with some cash dust in the air.

External environment

The financial services industry has seen considerable turmoil over the last decade because of mergers and acquisitions. Accordingly, these employees experience some job insecurity because acquisitions or mergers brought about by efforts to reach economies of scale could lead to job lay-offs. Otherwise, the communities in which the vaults are located have experienced population growth, and work volume has increased as a result.

Method

Samples and procedures

Data from two samples were used to test our hypothesis. Data collection procedures, which are described below, were similar in both samples. The one exception is that intent to turnover in

sample 2 was collected from the participants' immediate supervisor rather than the respondents themselves. Extant research supports the appropriateness of using manager evaluations of an employee's intent to turnover (Shore, Barksdale, & Shore, 1995). The cognitive processes used by managers to develop assessments of an employee's turnover intentions were outlined by Feldman (1981, 1986). Essentially, managers observe employee behavior and develop expectations based on these observations. For instance, individuals with strong intentions to turnover give off signals such as coming in late and leaving early that indicate to others their withdrawal from the organization. Managers who witness these and other withdrawal behaviors should be cognizant of and able to rate the level of an employee's intent to turnover.

The site for the first sample was a water management district in the southern United States. A survey was conducted at the request of the company's top management, who were interested in determining employees' feelings about the organization. Employees were notified of the opportunity to participate in the study via a company-wide memo distributed a week prior to the distribution of the survey. For the survey collection, one of the authors went on site during regular working hours and distributed the surveys to groups of up to 50 respondents over a period of 3 days. Participants handed their completed surveys to the researcher as they exited the room.

Sample 1 consisted of 402 employees (response rate of 60 per cent) of which 232 were male and 170 were females. The sample was primarily Caucasian (83 per cent). The ages of the respondents ranged from 22 to 76, with a mean age of 40.13 years. Due to concerns about respondent anonymity, tenure was measured categorically in groups for every 3 years (i.e., 0–2 years, 3–5 years, 6–9 years, and so on). Respondents indicated that their organizational tenures ranged from 0 years to over 18 years, with the largest majority of subjects reporting their tenure being between 6 and 9 years.

The site for the second sample was a distribution services organization. All 310 employees were invited to participate. Each employee was assigned to a group and told to report to a training room according to a pre-set schedule. When they arrived at the training room employees were informed about the purpose of the research, were provided an opportunity to ask questions, and then were allowed to discontinue their involvement in the project if they so desired. Employees also were informed that their supervisors would rate them, but that no one in the organization would see the results, as the ratings were only for research purposes. Of the 310 employees, 254 (82 per cent) volunteered to participate and completed the survey.

At the same time data were collected from the employees, the 19 first-line supervisors were asked to provide intent to turnover ratings for each of their subordinates. Of the 19 supervisors, 16 (84 per cent) supervisors returned ratings for their subordinates. Matching supervisor ratings with the survey data from subordinates provided complete data for 183 (59 per cent) employees. Of these 183, 140 (77 per cent) were female, 43 (23 per cent) were male, and 116 (63 per cent) were minorities.

Measures

LMX

Participants completed the 7-item LMX scale (Scandura, Graen, & Novak, 1986; sample 1 $\alpha = 0.90$; sample 2 $\alpha = 0.88$) to measure their perceptions of the quality of their relationships with their supervisors. The Gerstner and Day (1997) meta-analysis concluded that this 7-item measure contained the soundest psychometric properties of all the LMX instruments. A sample item from this scale is 'My supervisor would be personally inclined to use his or her power to help me solve problems in my work.' In sample 1, subjects responded to a 5-point scale (1 = strongly disagree to 5 = strongly agree) and in sample 2 subjects responded to a 7-point scale (1 = strongly disagree to 7 = strongly agree).

Intent to turnover

In sample 1, intent to turnover was measured with three items ($\alpha = 0.85$) from Cammann, Fichman, Jenkins, and Klesh's (1979) scale measuring turnover intentions. Subjects responded on a 5-point scale (1 = strongly disagree to 5 = strongly agree) and a sample item from this scale is 'I will probably look for a new job in the near future.' In sample 2, intent to turnover was measured with a one-item measure specially developed for this study. The item read 'How often has the employee indicated an intention to quit his or her job?' The supervisors responded to this question on a 6-point scale (1 = never to 6 = constantly).

Control variables

Job satisfaction was used as a control variable as theory and empirical research point to its important influence on LMX and turnover intentions (Gerstner & Day, 1997; Hom & Griffeth, 1995; Hom & Kinicki, 2001; Liden et al., 1997). Further, given that the job satisfaction–intent to turnover relationship is one of the best documented in the management literature, the effects of this relationship should be controlled (Hom & Griffeth, 1995). In sample 1, job satisfaction was measured with three items (e.g., 'All in all, I am satisfied with my job;' $\alpha = 0.73$) from Cammann et al.'s (1979) Organizational Assessment Questionnaire. Participants responded on a 5-point scale (1 = strongly disagree to 5 = strongly agree). In sample 2, job satisfaction was measured with four items (e.g., 'To what extent are you satisfied with your job overall?' $\alpha = 0.73$). Subjects responded on a 5-point scale with anchors of 1 = not at all to 5 = to a great extent. Gender and tenure were controlled, as they have each been identified as individual variables that have significant impacts on LMX relationships as well as turnover intentions (e.g., Griffeth et al., 2000; Hom & Griffeth, 1995). In both samples, males were coded as 1, and females were coded as 2.

Analyses

We conducted hierarchical regression analyses to assess the form and magnitude of the relationship between LMX and turnover intentions. In the first step, the control variables of job satisfaction, gender, and tenure were entered. We entered the linear LMX term on the second step, the curvilinear LMX term on the third step, and the cubed LMX term on the fourth step.

If linearity is the best representation of the LMX–intent to turnover relationship, LMX alone should explain a significant amount of the variance. However, if the inclusion of the squared LMX term explains a significant amount of variance beyond that attributed to the linear term, a curvilinear form (either U shape or inverted U shape) best represents the relationship. Finally, if the cubed LMX term explains a significant amount of variance beyond that accounted for by the linear and squared terms, the relationship would have two bends in the curve (an S shape).

Results

Means, standard deviations, and intercorrelations are provided in Table 1(a) for sample 1 and Table 1(b) for sample 2. As predicted, leader–member exchange and intent to turnover were negatively and significantly related in both samples. Additionally, gender, tenure, and job satisfaction were significantly and negatively related to intent to turnover in sample 1, and job satisfaction was significantly and negatively related to supervisor-rated intent to turnover in sample 2. In both samples, individuals who were higher in job satisfaction had lower levels of turnover intentions. Women and those with

Table 1(a). Sample 1 means, standard deviations, and intercorrelations^a

	Mean	SD	1	2	3	4	5
1. Tenure	2.88	1.38	—				
2. Gender	1.43	0.49	-0.08	—			
3. Job satisfaction	3.76	0.78	0.12*	0.02	—		
4. Leader-member exchange	3.44	0.98	0.03	-0.04	0.42**	—	
5. Self-rated intent to turnover	2.50	1.51	-0.18**	-0.10*	-0.62**	-0.39**	—

^a*n* = 402.**p* < 0.05; ***p* < 0.01.Table 1(b). Sample 2 means, standard deviations, and intercorrelations^a

	Mean	SD	1	2	3	4	5
1. Tenure	3.80	4.38	—				
2. Gender	1.78	0.41	0.08	—			
3. Job satisfaction	3.43	0.78	-0.07	0.11	—		
4. Leader-member exchange	5.18	1.41	0.01	0.07	0.55**	—	
5. Supervisor-rated intent to turnover	2.27	2.05	-0.04	0.03	-0.21**	-0.25**	—

^a*n* = 183.***p* < 0.01.

shorter tenure had higher intentions to turnover than their respective counterparts in sample 1. Overall, these results provide further support for the inclusion of these control variables in this study.

Results from the hierarchical regression analyses for both samples are shown in Table 2. In step 1, gender, tenure, and job satisfaction were negatively and significantly related to self-rated intentions to turnover in sample 1, and job satisfaction was negatively related to supervisor-rated turnover intentions in sample 2. In step 2, the linear LMX term in both samples was significantly and negatively related to intent to turnover. The linear LMX term explained an additional 2.2 per cent of the variance beyond that explained by the control variables in step 1 in sample 1 and an additional 1.8 per cent of the variance in sample 2.

In step 3, we entered the squared LMX term and found that this term was positively and significantly related to turnover intentions in both samples. In sample 1, the squared LMX term explained an additional 1.1 per cent of the variance beyond that explained by the first two steps. In sample 2, it explained an additional 1.9 per cent of the variance. These results provided support for our hypothesis in both samples. Although small in magnitude, the percentages of variance explained are in line with organizational research investigating relationships other than linear, direct effects (Champoux & Peters, 1987; Evans, 1985), including previous regression analyses of turnover intentions (e.g., George & Jones, 1996; Hochwarter, Perrewé, Ferris, & Guercio, 1999). Additionally, the LMX linear terms in step 2 explained 2.2 per cent and 1.8 per cent respectively, thus providing evidence that the squared terms explained half as much variance in sample 1 and slightly more variance in sample 2. Finally, the addition of the cubed LMX term at step 4 was not significant, indicating only one bend in the curve.

The curvilinear relationships between leader-member exchange and intent to turnover are illustrated in Figure 1 for sample 1 and Figure 2 for sample 2. We created the figures using the regression coefficients and plotting the values for turnover intentions for the different levels of LMX (Buchholtz & Ribbens, 1994). As can be seen from these figures, intent to turnover began to increase when LMX quality was at high levels.

Table 2. Hierarchical regression analysis of linear and non-linear leader-member exchange terms predicting turnover intentions

	Self-rated intent to turnover ^a			Supervisor-rated intent to turnover ^b		
	<i>B</i>	Adj. <i>R</i> ²	ΔR^2	<i>B</i>	Adj. <i>R</i> ²	ΔR^2
<i>Step 1</i>						
Tenure	-0.09**			-0.03		
Gender	-0.24*			0.32		
Job satisfaction	-0.82**	0.40	0.40**	-0.38*	0.036	0.04
Sample 1: $F(3, 398) = 91.3**$						
Sample 2: $F(3, 179) = 3.24*$						
<i>Step 2</i>						
Leader-member exchange	-0.94**	0.43	0.02**	-1.4*	0.05	0.02*
Sample 1: $F(4, 397) = 75.1**$						
Sample 2: $F(4, 178) = 3.59**$						
<i>Step 3</i>						
Leader-member exchange ²	0.12**	0.43	0.01**	0.12*	0.07	0.02*
Sample 1: $F(5, 396) = 63.0**$						
Sample 2: $F(5, 177) = 3.85**$						
<i>Step 4</i>						
Leader-member exchange ³	0.04	0.44	0.00	0.00	0.07	-0.01
Sample 1: $F(6, 395) = 52.8**$						
Sample 2: $F(6, 176) = 3.19**$						

Note: Unstandardized betas are provided from the third step, except for the leader-member exchange³ beta.

^a $n = 402$; ^b $n = 183$.

* $p < 0.05$; ** $p < 0.01$.

Discussion

The results from both samples illustrate that the relationship between LMX quality and intent to turnover is not necessarily linear but may be curvilinear. In both samples, the majority of the participants experienced negative relationships between LMX quality and turnover intentions. However, for those respondents who rated their LMX relationships to be of the highest quality, the relationship between LMX quality and turnover intentions was positive.

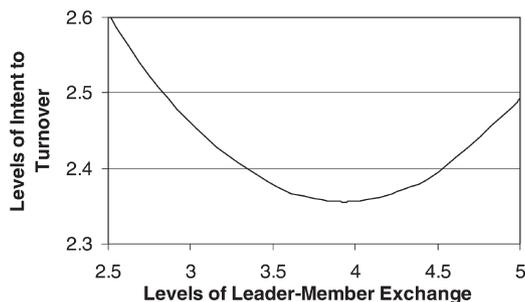


Figure 1. Graph of the curvilinear relationship between leader-member exchange and intent to turnover from sample 1

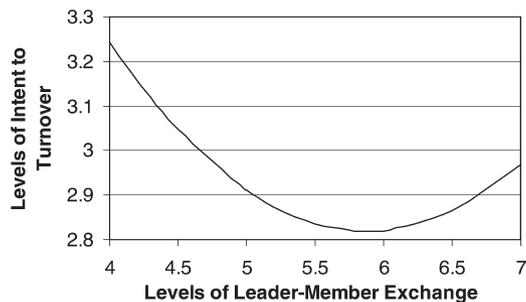


Figure 2. Graph of the curvilinear relationship between leader-member exchange and intent to turnover from sample 2

In predicting the curvilinear relationship between LMX quality and intentions to turnover, we argued earlier that high levels of turnover intentions from subordinates in low-quality relationships occur because they will be 'pushed' out of the organization by the unsatisfying relationships they share with their bosses. These affective forces that act to push out subordinates in low-quality exchanges are in line with the extant research on the LMX quality-intent to turnover relationship. Additionally, and as expected, the figures for both samples were similar and graphically showed that the highest levels of turnover intentions occurred for those individuals with the lowest-quality LMX relationships.

On the other hand, and going against the negative linear relationship that previous studies have found, the results from this study provided preliminary evidence that there can be negative consequences for individuals in high-quality LMX relationships. We predicted that individuals in high-quality relationships would be 'pulled' away from the organization as they are best positioned to receive attractive opportunities and/or have career aspirations that produce turnover intentions. In practice, the advantages that supervisors provide to their high-quality LMX subordinates, which include higher performance ratings, increased attention, and sharing of their social networks, may be leading to outside job opportunities and/or aspirations to move to higher levels.

If a subordinate in a high-quality exchange thinks that either other job opportunities are more attractive—an alternative force—or that they are more likely to achieve valued future goals at a different organization—a calculative force—they are likely to begin entertaining thoughts of leaving the organization. This situation is worsened by the fact that supervisors are often instructed, incentivized, and evaluated based on how well they mentor and train their subordinates, especially their best employees who have the highest potential for promotion and advancement. In this process, supervisors often share their networks, introduce their subordinates to business contacts, and encourage them to think about and pursue options for internal advancement, all of which are considered good supervisory behaviors. However, these situations may actually be a case of 'the folly of rewarding A (improving relationship qualities) while hoping for B' (decreased levels of turnover intentions and other desired outcomes).

This finding is important as it may be the first study to investigate the potential that managers may be unknowingly contributing to high-quality LMX subordinates wanting to leave their organizations. Indeed, previous studies have almost exclusively shown the positive outcomes resulting from high-quality LMX relationships (e.g., Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Schriesheim, Castro, & Cogliser, 1999). However, the idea that negative consequences may result provides a different look at the relationship and may lead future researchers to examine other potentially adverse outcomes resulting from high-quality LMX relationships.

Our results raise two interesting questions. First, why would managers be concerned with turnover intentions as opposed to just actual turnover? Our answer begins with the argument that individuals with high turnover intentions are looking for new job opportunities: thus the strong relationship with

actual turnover (Hom & Griffeth, 1995). Moreover, if managers know what factors lead to higher intentions to turnover, they can take corrective actions. Although actual turnover is an important variable to examine, it is often too late as the employees have already left the organization. Therefore, managers need to know which high-quality employees are the most likely to turnover and be prepared to talk to them about their situations. Supervisors may need to offer them inducements (e.g., better roles, more money, or a promotion) so that they are not pulled away from the organization.

A second question is: Why would a supervisor not do something to decrease turnover intentions of high-quality LMX subordinates? First and foremost is because they may be unaware. Even subordinates in high-quality LMX relationships may not be completely open with their supervisors when discussing their thoughts of leaving the organization. Thus, if supervisors are unaware of the alternative or calculative forces that are motivating thoughts of quitting, they are unable to do anything about them. Second, in some organizations, there is little that a supervisor can do in terms of better inducements in the organization. In such cases, managers do not have extra money, better roles, or promotions to offer their subordinates. Thus, when they become aware of the motivational forces that are increasing turnover intentions in their high-quality LMX subordinates, they may feel helpless in terms of bettering the opportunities or future prospects. Finally, supervisors often want the best for their high-quality LMX subordinates, and one barometer of success may be getting other job opportunities or thinking about the future and leaving the organization. In essence, some supervisors view their roles as mentors and part of that mentoring may mean helping your subordinate achieve what is best for them, which may not necessarily be what's best for the manager or the organization.

Obviously, our answers to these questions are more speculative than definitive. Although our study did provide evidence of the curvilinear relationship between LMX relationship quality and turnover intentions, it was not designed to answer the question of why. Instead, our goal was to determine the most accurate representation of the relationship between these two variables. Now that the results from this study have shown that the relationship may best be viewed as curvilinear, the next step for future researchers is to determine why subordinates in high-quality LMX relationships have higher turnover intentions, and we discuss this issue in greater length in the 'Directions for future research' section.

Strengths and limitations of the present study

We offer three strengths of the present study. First, we found a constructive replication (Lykken, 1984) of a curvilinear relationship, which is rare in organizational research (MacCallum & Mar, 1995). The results in samples 1 and 2 were very similar. Indeed, optimal points in the curves in Figures 1 and 2 occurred at almost identical levels of LMX relationship quality above the mean. In Figure 1, the optimal point occurred at 3.93 on a 5-point scale, which was 0.497 standard deviations above the mean, and in Figure 2 the optimal point occurred at 5.88 on a 7-point scale, which was 0.496 standard deviations above the mean.

Second, we found support for our hypothesis while controlling for tenure, gender, and job satisfaction, which provided a more conservative estimate of the relationship between turnover intentions and LMX quality. By controlling for these variables, we were able to eliminate some potentially spurious relationships and plausible alternative explanations for the findings in this study. Third, we used different measures of job satisfaction and gathered data on turnover intentions from different sources, which helped to eliminate common method variance in sample 2 (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The use of different sources and measures provided evidence that our findings were not solely a function of one particular scale or same-source variance.

Despite the noted strengths, there are limitations that need to be acknowledged to properly interpret the results of this study. First, the correlational evidence found in this study does not necessarily

confirm the causality proposed. Although the direction of the relationship between LMX and intent to turnover might seem clear, it is possible that the relationship is bidirectional. Subordinates who have higher or lower levels of turnover intentions might actually influence the quality of the relationships they have with their supervisors. Additional data will be needed to test this assumption and to explore the longitudinal effects of LMX on intent to turnover to determine if and when individuals who indicate high turnover intentions actually turnover.

Second, this study examined intent to turnover rather than actual turnover. Although intent to turnover has been found to be the best predictor of actual turnover (e.g., Griffeth et al., 2000), it might be interesting to investigate actual turnover. However, of the few previous studies that have investigated actual turnover (Graen et al., 1982; Vecchio, 1985), our correlations are similar in direction and strength. Further, we contend that intent to turnover was a more appropriate measure than actual turnover. Subordinates in high-quality LMX relationships are more likely to entertain thoughts of leaving as opposed to actually leaving, as simply thinking about leaving does not jeopardize all of the benefits they receive from being in a high-quality LMX relationship. Third, the measure of supervisor-rated intent to turnover was measured with only a single item. Although this item appeared to tap into the desired construct, produced extremely similar results to the multi-item scale in sample 1, and research has shown single-item measures can be acceptable (Wanous, Reichers, & Hudy, 1997), caution should be applied when interpreting any results of analyses based on one-item measures.

Fourth, all of the data in sample 1 are self-report data. Even with a curvilinear prediction, this does bring into play the possibility of common method bias (Podsakoff et al., 2003). However, common method bias has been shown to have less of an impact in relationships that are not direct or main effects such as interactions, non-linear, or configurations of variables (e.g., Wall, Jackson, Mullarkey, & Parker, 1996). Fifth, and finally, we used member reports of LMX relationship quality. Although this is the most common approach, numerous research efforts have shown that the correlations for leader and member LMX agreement are not very strong (Gerstner & Day, 1997; Schriesheim et al., 1999). Our results may have differed had the leaders provided LMX ratings. We encourage future researchers to measure LMX from both the supervisor and subordinate perspectives.

Directions for future research

We offer six additional potential areas for future research. First is additional replication. While the current study used two separate and distinct samples, the majority of the respondents worked in white-collar positions. Replicating these results with data from workers in service, manufacturing, and military organizations would help determine the extent to which our findings generalize. Second, it might be helpful to incorporate a variety of measures of intentions to turnover. In the present study, we used both self- and supervisor ratings of turnover intentions, but studies using peer or subordinate and supervisor-matched ratings would likely provide additional insight. Third, we encourage future researchers to investigate the optimal point, between 0.496 and 0.497 standard deviations of the mean in this study, at which LMX relationship quality no longer results in lower levels of turnover intentions.

A fourth additional area for future research relates to the measurement of LMX. We measured the construct with the 7-item unidimensional scale developed by Scandura et al. (1986). However, researchers have conceptually noted the multidimensionality of this construct (Dienesch & Liden, 1986), and Liden and Maslyn (1998) recently proposed a 12-item multidimensional scale intended to tap the dimensions of affect, loyalty, contribution, and professional respect. Since being proposed, Maslyn and Uhl-Bien (2001) investigated and empirically validated this 12-item scale on measures of self or other effort, but there is a need to investigate the different dimensions of relationship quality on organizational outcomes including turnover intentions.

Fifth, we invite future researchers to expand investigations to include theoretically derived non-linear effects. Though finding a linear relationship does not prohibit more complex relationships (MacCallum & Mar, 1995), few research efforts predict or test for non-linear effects. Based on the results found in this study, it seems likely that the quality of LMX relationship may exhibit non-linear relationships with other individual outcome variables including organizational commitment, job strains, and job performance.

Finally, there is a need for future researchers to extend the results we found in this study. We used Maertz and Griffeth's (2004) motivational forces as a theoretical foundation, but our study is only the first step. The purpose of our study was to determine whether the LMX–turnover intentions relationship is best characterized as linear or curvilinear. Our results provided preliminary evidence that the relationship is best viewed as curvilinear, but there is a need for future studies to assess the specific reasons why those in high-quality LMX relationships might consider leaving the organization. This could be accomplished quantitatively, qualitatively, or by mixing the methods. In particular, we believe qualitative interviews would be especially useful, as they would allow high-quality LMX subordinates to provide rich information and greater specification as to the reasons (i.e., affective, calculative, alternative, or other motives) for their higher turnover intentions. Additionally, such efforts may identify not only why workers in high-quality LMX relationships consider leaving, but also other previously uninvestigated negative consequences of high-quality LMX relationships.

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