Examining the Mediating Role of Empowerment in the Relationship Between LMX and Task

and Contextual Performance in Dutch Organizations

Robert van Gool

## 4130502

Utrecht University

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Supervisor: Jan Fekke Ybema

Second Reviewer: Meltem Ceri-Booms

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#### Summary

This study investigated the relationships between LMX and task and contextual performance and the mediating role of empowerment on these relationships by means of an online survey study. LMX relationships with performance outcomes are proposed, as LMX theory asserts that supervisors tend to provide more resources and support to subordinates in high-quality LMX relationships. A mediating effect of empowerment was expected because supervisors can influence the level of empowerment of subordinates. Dyads of 96 subordinates and their immediate supervisors were used to test the hypotheses. The model 3 of the 8 proposed mediation models were supported. Specifically, empowerment mediated the relationships between predictor subordinate-rated LMX and outcome variables subordinate-rated task and contextual performance and supervisor-rated contextual performance. Unexpectedly, empowerment had a negative indirect effect on supervisor-rated contextual performance. Furthermore and contrary to predictions, supervisor-rated LMX relationships with outcome variables were not mediated by empowerment. Rather, supervisor-rated LMX was a strong predictor of performance outcomes rated by the supervisor. A suggestion for future research would be to replicate the current study with a bigger sample size, consisting of more and bigger teams.

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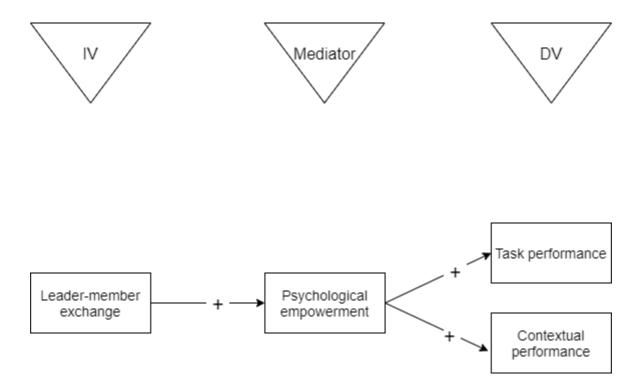
Behavior in the workplace is a highly relevant topic in research and practice. For organizations to be effective, the role of leaders and their interactions with subordinates are considered very important (Graen & Uhl-Bien, 1995). According to the Leader-Member Exchange (LMX) theory, working relations between the leader and followers may vary from low to high quality (Liden & Graen, 1980). The development and quality of LMX relationships depend on behaviors of leaders and members occurring through a role-making process (Graen 1976). LMX theory asserts that leaders build unique social exchange relationships with their followers. High-quality leader-member relationships are associated with enhanced levels of various follower outcomes, such as task performance (Gerstner & Day, 1997; Law, Wang, & Hui, 2010; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Wayne, Shore, & Liden, 1997; Liden, Wayne, & Sparrowe, 2000), contextual performance (Martin et al., 2016; Wayne et al. 1997; Zhong, Lam, & Chen, 2011), organizational commitment (Truckenbrodt, 2000), job satisfaction (Aryee & Chen, 2006; Harris et al., 2009), empowerment (Aryee & Chen, 2006; Harris et al., 2009), and lowered levels of turnover intentions (Harris et al., 2009).

The current study examines the relationship between LMX relationships and job performance by means of a supervisor-subordinate dyad study. To the knowledge of the researcher, the current study will be the first to examine measures of LMX relationships from both subordinate and supervisor perspectives. LMX quality displays effective relationships, which are influenced by both subordinate and supervisor. Therefore, examining the dyads of these relationships allows a comprehensive view regarding the LMX relationship between subordinates and their supervisors. The current study proposes that establishing high quality LMX relationships leads to higher subordinate job performance through higher

empowerment.

#### Figure 1

The mediation model of the relationship between leader-member exchange and task and contextual performance



### LMX and Job Performance

LMX theory differs from other leadership theories in that it focuses on the dyadic relationship between follower and leader (Graen & Uhl-Bien, 1995). It attempts to prescribe a way of effective leadership through the creation and maintenance of effective relationships between leader and follower (Graen & Uhl-Bien, 1995). The quality of these relationships can be different between subordinates who report to the same leader. In low-quality relationships, leaders and subordinates merely exchange the necessary resources they are formally required to exchange according to their contract and job roles (Breevaart, Bakker, Demerouti, & Van den Heuvel, 2015; Law et al., 2010). In contrast, "high-level social exchange relationships engender stronger feelings of personal obligation, gratitude, and trust than do predominately quid pro quo economic exchanges" (Law et al., 2010, p. 632). These characteristics strengthen relationships and are byproducts of the subordinate showing the degree of capability and willingness to live up to the leader's expectations (Breevaart et al., 2015). Followers who consistently put in extra work and show capability on the job often receive privileges in return, e.g. career development opportunities and special access to information (Law et al., 2010). Multiple studies (Graen, Liden, & Hoel, 1982; Scandura & Graen, 1984; Graen et al., 1986) were conducted with the aim of analyzing what would happen if leaders offered the opportunity to develop a high-quality relationship with all of their subordinates. Results from these studies showed that the performance of followers who chose to accept the offer by their leader to develop a high-quality LMX relationship improved greatly and overall unit performance was enhanced when the number of high-quality relationships increased (Graen & Uhl-Bien, 1995).

Job Demands-Resources (JD-R) theory explains how subordinates with more resources perform better because they are more engaged in their work (Bakker & Demerouti, 2014). Consequently, leaders in high-quality LMX relationships provide support and resources beyond expected (Dockery & Steiner, 1990). Therefore, it is expected that highquality LMX relationships advance the amount of member job resources, ultimately leading to better job performance. However, whether high-quality LMX relationships can be established is depends on the recognition and reward of good performance (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012).

Overall job performance can be conceptualized using the three-component model of Rotundo and Sackett (2002), consisting of task, citizenship and counterproductive performance. *Task performance* (or in-role performance) refers to "a group of behaviors involved in the completion of tasks... [and] includes behaviors that contribute to the production of a good or the provision of a service" (p. 67). The quality and quantity of work output and how well one performs the work duties are captured by this concept (Martin et al., 2016). Thus, task performance captures the duties that are prescribed about the job.

High LMX relationships engender stronger feelings of trust, mutual personal obligation, mutual respect and gratitude (Law et al., 2010). Consequently, leaders tend to provide followers of more support and resources (Dockery & Steiner, 1990) and privileges (Law et al., 2010). According to Bakker and Demerouti (2014), subordinates who enjoy more job resources are more likely to perform well, because they will be more engaged in their work. More engagement leads to higher performance. Therefore, followers are expected to perform better on the job and to be more engaged.

Hypothesis 1: LMX is positively related to task performance.

However, in high-quality LMX relationships, subordinates are expected not only to fulfill formal job requirements. From the model of Rotundo and Sackett (2002), the current study examines relationships with task performance and citizenship performance only. Citizenship performance is referred to as 'contextual performance'. *Contextual performance* refers to activities that promote the well-being of overall organizational effectiveness without concern to whether subordinates are rewarded or not (Law et al., 2010). Contextual performance is important for the effectiveness of work relationships (Law et al., 2010) and it is manifested in behaviors such as volunteering to perform activities that are not formally part of the job and helping others to get their job done (Borman & Motowidlo, 1997). Members are required to communicate effectively with others and perform activities that go beyond their job descriptions (Motowidlo & Borman, 1993) in order to function well in organizations and establish effective work relationships (Law et al., 2010). Contextual performance

encompasses both organizational citizenship behavior and other prosocial work behaviors and has been linked to LMX, as in LMX relationships subordinates are expected to not only fulfill formal job requirements (Law et al., 2010). Thus, a positive relationship between LMX and contextual performance is expected.

Hypothesis 2: LMX is positively related to contextual performance.

#### LMX and Empowerment

Thomas and Velthouse (1990) describe empowerment as a motivational construct, consisting of intrinsic task motivation. *Psychological empowerment* is "a motivational construct manifested in four cognitions: meaning, competence, self-determination and impact" (Spreitzer, 1995, p. 1444). These four cognitions together are believed to reflect an active orientation to a work role, meaning that the individual "wishes and feels able to shape his or her work role and context" (p. 1444). The cognitions are additively related to higher perceptions of psychological empowerment (Thomas & Velthouse, 1990).

Interpersonal work climates created by supervisors and managers influence empowerment, as they can enhance follower's feelings of self-worth and sense of selfdetermination (Deci, Connell, & Ryan, 1989). Similarly, Thomas and Velthouse and Spreitzer (as cited in Liden et al., 2000) describe that "higher levels of decision-making influence and responsibility provide meaning, feelings of self-efficacy, a sense of impact and perceptions of self-determination" (p. 409). According to Lawyer (1992), followers need information about an organization's mission and job performance. People need to be informed about the organization's mission and strategic direction in order to feel capable to take initiative (Kanter, 1983), to create a sense of meaning and purpose (Conger & Kanungo, 1988), and to ensure subordinates will be able to make decisions that are aligned with the organization's goals and mission (Lawyer, 1992). Information about performance increases a sense of competence and the belief that one is a valued part of the organization (Spreitzer, 1995).

As leaders are important sources for the distribution of information about the organization's mission, performance feedback, and resources, they can stimulate creation of empowering work climates. They are more likely to share more insight and information about the organization's mission and performance when LMX is high. Leaders also determine the degree of emotional support, decision-making, and task challenge they grant to each of their subordinates (Liden et al., 2000). Aryee and Chen's (2006) study found a positive relationship between LMX and empowerment. Thus, subordinates are expected to feel more empowered in high-quality LMX relationships.

Hypothesis 3: LMX is positively related to the empowerment dimensions.

#### **Empowerment and Job Performance**

Thomas and Velthouse (1990) argue that empowered individuals should perform better than less empowered individuals. Members who perceive their jobs as meaningful and feel that their work impacts others within (and outside of) their organization are more motivated to perform well (Liden et al., 2000). Further, presence of self-determination enables individuals to respond to unique situations, increasing feelings of empowerment (Greenberger, Strasser, Cummings, & Dunham, 1986). Finally, competence (i.e. self-efficacy) allows individuals to have a sense of self-worth and confidence to get the job done (Liden et al., 2000; Stajkovic & Luthans, 1998) and is an established causal predictor of performance (Bandura & Locke, 2003). Feelings of self-efficacy will enable members to feel they are competent and perform their work tasks. In previous research (Laschinger & Wong, 1999), a "combination of leader empowering behaviors and workplace empowerment resulted in decreased levels of job tension and increased work effectiveness" (Wong & Laschinger, 2013, p. 949). Thus, the current study proposes that empowerment is positively related to job performance (Locke, Frederick, Lee, & Bobko, 1984; Spreitzer, Kizilos, & Nason, 1997).

*Hypothesis 4*: empowerment is positively related to task performance.

Empowerment and contextual performance have also been linked in previous research (e.g. Seibert, Wang, & Courtright, 2011; Wat & Shaffer, 2005; Zhong et al., 2011). Kanter (1979) argues that organizational empowerment structures are connected to effective organizational behavior. Therefore, similar relationships between empowerment and individual task and contextual performance are expected.

*Hypothesis 5*: empowerment is positively related to contextual performance.

### The Mediating Role of Empowerment

Studies using Chinese samples (Wat & Shaffer, 2005; Zhong et al., 2011) have demonstrated that empowerment plays a mediating role in the relationship between LMX and performance. In a longitudinal study, Chen and Klimoski (2003) found that newcomers in organizations who developed high-quality LMX performed better. Individual empowerment mediated the relationship between LMX and individual performance partially. Hypotheses 1-5 in this study combined will form a mediation model. The psychological empowerment construct used in this study reflects feelings of meaning, capability, control, and impact regarding the work and work outcomes. It is assumed that the degree to which an individual experiences empowerment is influenced by the individuals with whom one works directly (Liden et al., 2000). The perception of empowerment can be enhanced by leaders who provide emotional support and help to perform tasks, delegate work, enhance follower decisionmaking, and enhance follower believes of competence. It is proposed that through these enhanced perceptions of empowerment leaders can actively influence empowerment, and consequently performance. The current study proposes positive relationships between LMX and task and contextual performance, mediated by empowerment.

Hypothesis 6: empowerment mediates the relationship between LMX and task performance.

*Hypothesis* 7: empowerment mediates the relationship between LMX and contextual performance.

#### Methods

#### **Participants and procedure**

The sample consisted of 149 subordinates starting the survey of the study. A total of 34 immediate supervisors of workgroups participated in the study. In the current study, multiple supervisors of two different organizations participated: 14 supervisors of organization 1 and 8 supervisors of organization 2. Participants of organization 1 had relatively low age (M = 3.11, SD = .64), the majority was female (66.7 percent) and employees had various nationalities (see Table 1). Participants from organization 2 had relatively high age (M = 4.54, SD = 1.21), the majority was male (72.7 percent) and all were Dutch. Participants outside of the 2 mentioned organizations were recruited via the social network of the researcher, worked in various organizations and were all Dutch. Examples were employees of a government, a bar, a University and a non-profit student organization. A total of 120 subordinates completed the survey. After dropping respondents who could not be matched to supervisors and for whom there were missing data, 96 dyads remained. Among

the subordinates, 36 were male (37.5 percent) and 60 were female (62.5 percent). Most of the subordinates were of Dutch nationality (65 percent). See Table 1 for all participant demographics.

# Table 1

#### Demographics Characteristics of subordinates

Variable	N	%	М	SD
Gender			1.63	.49
Male	36			
Female	60			
Age			3.55	1.24
15-24 year	16	16.7		
25-34 year	44	45.8		
35-44 year	14	14.6		
45-54 year	12	12.5		
55-64 year	9	9.4		
65-74 year	1	1		
Education				
VMBO	2			
HAVO	6			
VWO	1			
MBO	5			
HBO	23			
University Bachelor degree	25			
University Master degree	28			
PhD degree	3			
Other	3			
Months employed			53.70	89.84
Weekly hours in contact with supervisor			10.99	12.86
Nationality				
Netherlands	58	60.4		
Italy	10	10.4		
UK	4	4.2		
France	3	3.1		
Greece	3	3.1		
Spain	3	3.1		
Germany	2	2.1		
India	2	2.1		
USA	2	2.1		

#### *N* = 96.

*Note:* Argentina, Belgium, Brazil, Bulgaria, Colombia, Indonesia, Portugal, Romania and Russia were excluded from the shown nationality list. From these nationalities, 1 subordinate participated in the study.

Subordinates and supervisors were invited to fill out questionnaires using surveys

designed in Qualtrics. The researcher was not present while participants completed the

surveys, so the environment and conditions while answering the questions could not be controlled.

First, subordinates filled in a complete subordinate survey (Appendix A) including all constructs described in measures. By means of the first question about the consent form, wherein the research design is described, the subordinate was asked to give permission for an automatically send out email invitation to the supervisor for the shorter supervisor survey. By means of the last question, subordinates were asked to insert their supervisor's email address. Secondly, completing the survey triggered an automatic email to the supervisor inviting him/her to participate in the supervisor survey. In the supervisor survey (Appendix B), no demographic and control items were displayed. Only the LMX (with items adjusted and directed to leaders), task performance and contextual performance constructs were displayed, wherein the name of the subordinate was displayed in the questions to inform the supervisor about the subordinate in dispute. Finally, the supervisor completed the survey. Variables from both surveys were linked using the automatically generated response ID code of the subordinate survey. This ID code was sent along with the supervisor survey invitations, enabling the researcher to match the response data of both subordinate and supervisor surveys for the analyses. Groups of subordinates with the same supervisor were linked and coded by the supervisor email address.

### **Subordinate Measures**

All subordinate and supervisor measures were conducted with existing scales. To test the overall consistency of the measures, reliability analyses were conducted. All Cronbach alphas ( $\alpha$ ) were of a high level, indicating high internal consistency for all scales.

*LMX*. The LMX-7 measure (Graen & Uhl-Bien, 1995) was used to assess Leadermermber exchange ( $\alpha = .81$ ). According to Gerstner and Day (1997), the LMX-7 measure "has the soundest psychometric properties of all instruments" (p. 827). The only disadvantage is that the measurement is more reliably assessed from a subordinate's perspective than from a supervisor's perspective (Wat & Shaffer, 2005). In this study, the measurement reliability was acceptable to use for the analyses. The 7 LMX items were measured on a 5-point Likert scale. Item answer options were different for the items, 1 always being the lowest/least and 5 being the highest/most. The items were rated on a range varying from 'rarely', to, 'very often' and from 'extremely ineffective', to 'extremely effective'. For all used ranges from the items, see Appendix A. An example item is "How well does your supervisor understand your job problems and needs?". For LMX-7 items and items from other scales, see Appendix A and B.

*Psychological empowerment.* Spreitzer's (1995) 12-item empowerment scale was used to measure the empowerment of subordinates. The scale has 4 dimensions, each consisting of 3 items. Participants indicated the level of agreement for each of the items in this scale and all following scales on a 7-point Likert scale, ranging from 1 'very strongly disagree', to 7, 'very strongly agree'. Each set of 3 items was summed to calculate the score of the 4 empowerment dimensions: meaning ( $\alpha = .84$ ), impact ( $\alpha = .82$ ), competence ( $\alpha = .87$ ), and self-determination ( $\alpha = .83$ ). The overall scale has a reliability of  $\alpha = .88$ . An example item of the meaning dimension is "My job activities are personally meaningful to me.". An example item of the impact dimension is "My impact on what happens in my department is large.". An example item of the self-determination dimension is "I have significant autonomy in determining how I do my job.".

*Task performance*. The 9 items of the performance scale ( $\alpha = .92$ ) developed by Goodman and Svyantek (1999) were used. Participants indicated the level of agreement for each of the items in this scale and all following scales on a 7-point Likert scale, ranging from 1 'very strongly disagree', to 7, 'very strongly agree'. An example item is "I can manage more responsibility than typically assigned.".

*Contextual performance*. The contextual performance of subordinates was measured using of the 7-item interpersonal facilitation ( $\alpha = .83$ ) and the 8-item job dedication ( $\alpha = .86$ ) subscales of Van Scotter and Motowidlo (1996). The total scale of contextual performance ( $\alpha = .90$ ) consisted of 15 items. Participants indicated the level of agreement for each of the items in this scale and all following scales on a 7-point Likert scale, ranging from 1 'very strongly disagree', to 7, 'very strongly agree'. An example item of interpersonal facilitation is "I encourage others to overcome their differences and get along." and an example item of job dedication is "I ask for a challenging work assignment.".

*Control variables and other measures.* Other variables that were measured were gender, age, education, marital status, organizational tenure, team size, working hours, hours in contact with supervisor and perceived coworker support. Variables gender, age, months employed and hours in contact with supervisor were included in the analyses as they related strongly to predictor variables and the mediation variable (see Table 1). There was a statistical difference between males (M = -.18, SD = .64) and females (M = .12, SD = .63). Also, age and months employed may influence LMX relationships and empowerment scores as subordinates with higher age or months of employment have had more time to build effective work relationships or feel like they belong and make a difference. Hours in contact with supervisor is included as it is likely to influence establishing LMX relationships.

### **Supervisor Measures**

*LMX*. The LMX-7 scale (Graen & Uhl Bien, 1995) was used to assess supervisor-rated LMX ( $\alpha = .84$ ). Items were phrased differently than for subordinates and were directed to the supervisor. The name of the subordinate in dispute was displayed in all items. An example item is "How well does (name subordinate) understand your job problems and needs?".

*Task performance*. Supervisors were asked to rate task performance items for subordinates. Again, the performance scale of Goodman and Svyantek (1999) was used to

assess supervisor-rated subordinate task performance ( $\alpha = .96$ ) and the items were rephrased. An example item is "(name subordinate) achieves the objectives of his/her job.".

Contextual performance. Again, the 7-item interpersonal facilitation ( $\alpha = .91$ ) and the 8-item job dedication ( $\alpha = .92$ ) subscales of Van Scotter and Motowidlo (1996) were used to assess supervisor-rated subordinate contextual performance and the items were rephrased. The total scale of contextual performance ( $\alpha = .94$ ) consisted of 15 items.

#### Analyses

The hypotheses were tested using hierarchical multilevel regression analyses. Data were non-independent, meaning data used in the analyses is nested. Subordinates are nested within workgroups and sometimes with more than one team in the same organizations. The data from the subordinate and supervisor were linked by subordinate code and data was anonymized for further analysis. The original data was deleted to warrant confidentiality and anonymity. All variables were grand-mean centered for the analyses. Before conducting the multilevel regression analyses, assumptions of normality, multicollinearity, correlation, and residual normality, linearity, homogeneity, and homoscedasticity for each model were tested. No mayor deviations were found but some outliers. However, after investigating the outliers, it was decided to keep the data in the analyses, because there was no cause for concern.

#### Results

The intercorrelations of the current study variables can be found in Table 2. Subordinates had higher scores of LMX (M = 3.87, SD = .65) on average than supervisor (M = 3.81, SD = .70). Supervisors rated subordinate task performance slightly higher (M = 5.27, SD = 1.01) on average than subordinates (M = 5.21, SD = .73). Subordinates rated contextual performance (M = 5.31, SD = .63) slightly higher on average than supervisors (M = 5.13, SD = .84). The strength of the positive relationships of subordinate-rated LMX with dependent variables subordinate-rated task performance, r(96) = .22, p = .028, and subordinate-rated contextual performance, r(96) = .25, p = .014, was weak in comparison to the relationship between supervisor-rated LMX with supervisor-rated task performance, r(96) = .74, p < .001, and supervisor-rated contextual performance, r(96) = .77, p < .001. The subordinate- and supervisor-rated LMX variables correlate high, r(96) = .45, p < .001. Subordinate-rated LMX correlates highly with empowerment as well, r(96) = .43, p < .001. The relationships of subordinate-rated empowerment with other subordinate self-rated variables were stronger than with the supervisor-rated variables. Finally, a correlation between subordinate-rated and supervisor-rated task performance was found, r(96) = .22, p = .028. However, prominent is that no correlation between subordinate-rated and supervisor-rated contextual performance was found, r(96) = .02, p = .854.

Hypotheses testing was conducted using the Linear Mixed Models procedure in SPSS. With this procedure, controlling for nonindependence of participant data is possible. First, multilevel regression control variables gender, age, hours in contact with supervisor and months employed were entered into the model. Results generally supported the assumption of nonindependence in the data, as Hayes (2006) states that ICC's higher than .05 warrant this assumption. In step 2, the predictor LMX variables were entered. With including both

# LMX, EMPOWERMENT AND PERFORMANCE

# Table 2

# Descriptive Statistics, Reliability Coefficients and Correlations<sup>a</sup>

Variable	М	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender <sup>b</sup>	1.63	.49											
2. Age	3.55	1.24	16										
3. Months employed	53.7	89.84	13	.65**									
4. Hours in contact with supervisor	10.99	12.86	.23*	29**	25*								
5. Subordinate-rated LMX	3.97	.65	.23*	.12	.10	.33**	(.80)						
6. Supervisor-rated LMX	3.81	.70	.18	03	00	.11	.45**	(.85)					
7. Empowerment	5.21	.70	.01	.32**	.21*	04	.43**	.22*	(.89)				
8. Subordinate-rated task performance	5.21	.73	.01	.09	.09	.03	.22*	.19	.65**	(.91)			
9. Subordinate-rated contextual performance	5.31	.63	.13	.10	.09	.19	.25*	.13	.63**	.66**	(.90)		
10. Supervisor-rated task performance	5.27	1.01	.14	22*	12	.25	.41**	.74**	.14	.22*	.06	(.96)	
11. Supervisor-rated contextual performance	5.13	.84	.21*	21*	08	.27**	.44**	.77**	.02	01	.02	.83**	(.94)

 $^a$  N = 96. Internal consistency reliability coefficients (alphas) appear on the diagonal in bold.  $^b$  1 = male, 2 = female.  $^*$  p < .05  $^{**}$  p < .01

### Table 3

# Hierarchical Regression Analyses Dependent Variables Subordinate-rated Task Performance

	DV: Su	bordinate-rat Performance		DV: Supervisor-rated Task Performance		
Step and Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Step 1						
Gender	.02	07	03	01	12	12
Age	.04	.04	08	26*	17*	18*
Contact	.00	00	.00	.01	.01	.01
Months employed	.00	.00	.00	.00	.00	.00
Step 2						
Subordinate-rated LMX		.20	14		.15	.14
Supervisor-rated LMX		.16	.09		.98**	.98**
Step 3						
Êmpowerment			.75**			.03
-2 Restricted Log Likelihood	210.34	204.52	154.82	247.12	181.51	181.42

and Supervisor-rated Task Performance

Note: Standardized coefficients are provided.

subordinate- and supervisor-rated LMX in the model, controlling for the effects of the other rater was possible. To test Hypothesis 1, subordinate-rated task performance (ICC(1) = .00) was regressed on subordinate-rated LMX (b = .20, p = .144) and supervisor-rated LMX (b =.16, p = .178). The regressions on all dependent variables can be found in Table 3 and 4. The results regarding dependent variable subordinate-rated task performance should be interpreted carefully. A warning in the MIXED procedure output was displayed, indicating that the final Hessian matrix not positive definite. Therefore, validity of the results cannot be ascertained. The independent variables did not have an effect on subordinate-rated task performance. Supervisor-rated task performance (ICC(1) = .27) was regressed on subordinate-rated LMX (b = .15, p = .212) and supervisor-rated LMX (b = .98, p < .001). With results indicating only a significant relationship between supervisor-rated LMX and supervisor-rated task performance, some evidence was found supporting the hypothesis. Thus, Hypothesis 1 is partially supported. To test Hypothesis 2, which proposes that LMX is positively related to contextual performance, subordinate-rated contextual performance (ICC() = .04) was

*N* = 96.

<sup>\*\*</sup>*p* < .01.

<sup>\*</sup> p < .05.

regressed on subordinate-rated LMX (b = .18, p = .130) and supervisor-rated LMX (b = .14, p = .195). Supervisor-rated contextual performance ((ICC1) = .35) was regressed on subordinate-rated LMX (b = .12, p = .211) and supervisor-rated LMX (b = .77, p < .001). Thus, similar to Hypothesis 1, some support for Hypothesis 2 was found. Hypothesis 2 is partially supported.

To test Hypothesis 3, empowerment was regressed on subordinate- and supervisorrated LMX. Similar to the regression on subordinate task performance, the Hessian matrix cannot positive definite, which means validity of the results could not be ascertained. Regression results can be found in Table 5. Age had a substantial effect on empowerment in step 1 (b = .19, p = .013) and step 2 (b = .14, p = .041). A One-way ANOVA was conducted to further investigate the relationship of different age groups and empowerment. Age groups 5 and 6 (total range of age 45-64 years) had significantly greater scores of empowerment than age group 1 (15-24 years). A positive relationship between subordinate-rated LMX and empowerment ((ICC1) = .05) was found (b = .47, p < .001). No significant relationship between supervisor-rated LMX and empowerment was found, b = .07, p = .520. Hypothesis 3 is partially supported.

To test Hypothesis 4 and 5, subordinate- and supervisor-rated task and contextual performance were regressed on empowerment (see Table 3 and 4). A positive relationship between empowerment and dependent variable subordinate-rated task performance (b = .75, p < .001) was found. No relationship between empowerment and supervisor-rated task performance was found (b = .03, p = .750). Hypothesis 4 is partially supported. The relationship between empowerment and subordinate-rated contextual performance (b = .62, p < .001) was found. A significant negative relationship between empowerment and supervisor-rated task performance (b = .62, p < .001) was found. A significant negative relationship between empowerment and supervisor-rated contextual performance was found (b = ..17, p = ..043). Hypothesis 5 proposed a positive relationship. Therefore, Hypothesis 5 is partially supported as well.

## Table 4

### Hierarchical Regression Analyses Dependent Variables Subordinate-rated Contextual

Performance and	l Sup	pervisor-rated	Contextual	<i>Performance</i>
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	DV: Subo	ordinate-rated Performance		Performance			
Ston and Maniahlan	C 4 1						
Step and Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	
Step 1							
Gender	.15	.10	.13	.17	.04	.03	
Age	.07	.07	03	23**	16**	12*	
Contact	.01*	.01	.01**	.01*	.01	.01	
Months employed	.00	.00	.00	.00	.00	.00	
Step 2							
Subordinate-rated LMX		.18	13		.12	.20*	
Supervisor-rated LMX		.14	.07		.77**	.80**	
Step 3							
Êmpowerment			.62**			17*	
-2 Restricted Log Likelihood	174.86	169.65	120.81	197.13	132.77	128.76	

Note: Standardized coefficients are provided.

## Table 5

Hierarchical Regression Analyses Mediator Variable Empowerment

Step and Variables	Step 1	Step 2
Step 1		
Gender	.08	05
Age	.19*	.14*
Contact	.00	01
Months employed	.00	00
Step 2		
Subordinate-rated LMX		.47**
Supervisor-rated LMX		.07
-2 Restricted Log Likelihood	192.93	173.88

Note: Standardized coefficients are provided.

*N* = 96.

\*\*p < .01.

\* *p* < .05.

To test Hypothesis 6 and 7, which assert that empowerment acts as a mediator between the LMX and performance variables, unstandardized regression coefficients and asymptotic sampling variances of the *a* and *b* paths of the mediation model were calculated using the Mixed Model procedure, and in turn, used to calculate the 95% bootstrap confidence intervals (CI) of the multilevel mediation models using the Monte Carlo Method for Asserting Mediation, to determine if indirect effects were significant (Preacher & Selig, 2012). With

*N* = 96.

<sup>\*\*</sup>p < .01. \* p < .05.

p < .0.

four dependent variables and two independent variables used in the current study, eight possible mediation models were tested with 20,000 Monte Carlo repetitions. The results are showed in Table 6.

## Table 6

The Mediating Role of Empowerment on the Relationship Between Leader-member Exchange and Task and Contextual Performance

Dependent Variable	Empow erment ( <i>a</i> path)	Empowerment $\rightarrow$ DV ( <i>b</i> path)	$LMX \rightarrow DV (c')$ path)	Indirect ( <i>ab</i> ) path	95% CI	Independent Variable LMX <sup>a</sup>
Subordinate-rated task performance	.47*	.75*	14	.35*	[.17, .55]*	Subordinate (model 1)
	.07	.75*	.09	.01	[02, .04]	Supervisor (model 2)
Supervisor-rated task performance	.47*	.03	.14	.02	[04, .20]	Subordinate (model 3)
	.07	.03	.98*	.00	[02, .03]	Supervisor (model 4)
Subordinate-rated contextual performance	.47*	.62*	13	.29*	[.14, .46]*	Subordinate (model 5)
	.07	.62*	.07	.04	[09, .17]	Supervisor (model 6)
Supervisor-rated contextual performance	.47*	17*	.20*	08*	[17,00]*	Subordinate (model 7)
	.07	17*	.80*	01	[06, .02]	Supervisor (model 8)

Note: 95% confidence intervals are provided based on 20,000 replications.

*N* = 96.

<sup>a</sup> Distinction between subordinate- and supervisor-rated LMX.

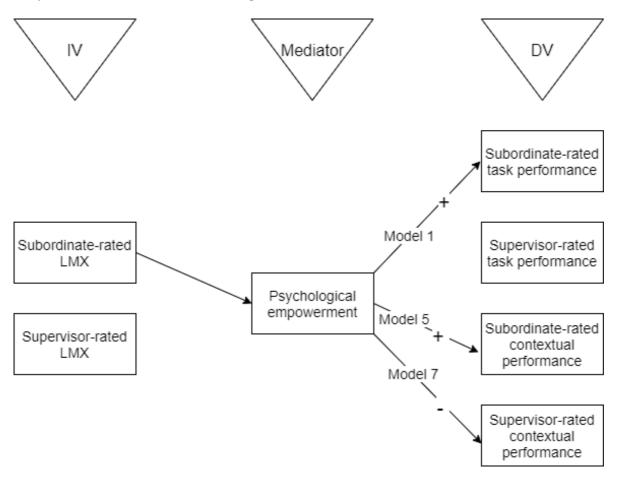
\* p < .05.

Model 1 shows a significant indirect effect, b = .35, with the 95% CI ranging from .17 to .55. In addition, the direct effect even becomes negative (b = -.14, p = .22). Therefore, Hypothesis 6 is partially supported, considering that only a significant relationship between subordinate-rated LMX and subordinate-rated task performance was found. Model 5 and 7 show significant indirect effects supporting Hypothesis 7, although model 7 shows a small sized negative indirect effect, b = -.08 and CI between -.17 and -.00 (just below zero). Model 5 shows a larger indirect effect, b = .29 and CI between .14 and .46, indicating a significant indirect effect between subordinate-rated LMX and subordinate-rated contextual performance. Therefore, Hypothesis 7 is partially supported as well. The effects of the *b* paths are stronger than the effects of the *a* paths.

In conclusion, a significant indirect effect was found between subordinate-rated LMX and subordinate-rated task performance. In addition, indirect effects between subordinate-rated LMX and subordinate- and supervisor-rated contextual performance were found. These effects were mediated by empowerment. See Figure 2 for the confirmed indirect paths.

### Figure 2

#### Confirmed mediation model indirect paths



Note: control variables were gender, age, hours in contact with supervisor and months employed.

#### Discussion

In the current study, relationships between subordinate and supervisor LMX, empowerment and job performance were investigated. The research found the expected positive relationships between supervisor-rated LMX and supervisor rated task and contextual performance (Hypothesis 1 and 2). However, no relationships between subordinate-rated LMX and performance were found. Therefore, only partial support for the relationship between LMX and task and contextual performance was found. The research did partially support the positive relationship between LMX and empowerment as well, because no support for the positive relationship between supervisor-rated LMX and empowerment was found (Hypothesis 3). The research found support for the expected positive relationship between empowerment and subordinate-rated performance. However, no relationship with supervisor-rated task performance seemed to exist. Thus, one of the expected relationships was found (Hypothesis 4). For the examined relationships between empowerment and contextual performance, some evidence was found as well (Hypothesis 5). A positive relationship between empowerment and subordinate-rated contextual performance was found. The relationship between empowerment and supervisor-rated contextual performance turned out to be negative. 3 indirect effects between LMX and task and contextual performance were found. Table 6 shows that a positive indirect effect of subordinate-rated LMX on subordinaterated task performance was found. However, most indirect effects were not found. Therefore, some evidence was found for the indirect relationship of LMX on task performance (Hypothesis 6). Regarding contextual performance, a positive indirect effect of subordinaterated LMX on subordinate-rated contextual performance was found. Also, a negative and very small indirect effect of subordinate-rated LMX on supervisor-rated contextual performance was found. Partial support for indirect effects of LMX on contextual performance were found as well (Hypothesis 7).

### **Theoretical implications**

The current study contributes to the LMX theory by examining the dyadic supervisorsubordinate relations and integrating both perspectives into mediation models. Although not all hypothesized models were confirmed, clear evidence for the mediating role of empowerment and indirect effects of LMX on performance was found.

The first finding of the current study is a confirmed relationship between LMX rated by the subordinate and empowerment, thereby consolidating findings of previous studies (Aryee & Chen, 2006; Liden et al., 2000). The found relationship indicates that subordinates who experience a high-quality exchange relationship with their supervisor also experience more empowerment. The exchange relationship that subordinates and supervisors create and maintain through a role-making process (Graen, 1976) are important in determining how empowered subordinates feel in the workplace.

The second important finding is the strong effect of empowerment on task and contextual performance. Specifically, the results demonstrate that empowerment affects subordinate self-rated performance more than supervisor-rated performance. Moreover, supervisor ratings of subordinate contextual performance were negatively affected by empowerment. Even with the negative effect of empowerment on outcome supervisor-rated contextual performance the supervisor-rated LMX is still a very strong predictor. This finding is in contrast with the proposed positive relationship between empowerment and performance outcomes. The results demonstrate a very strong relationship between supervisor-rated LMX and supervisor-rated performance outcomes, indicating that supervisors in high-quality LMX relationships rate subordinate performance higher than supervisor level, the empowerment their subordinates feel has no effect or has a negative effect on how the supervisor would rate subordinate performance.

Finally, the results showed multiple indirect effects. Empowerment mediated the positive relationship between subordinate-rated LMX and subordinate-rated task performance. This finding confirms previous research (Wat & Shaffer, 2005; Zhong et al., & Chen, 2011) that found that subordinates who experience high-quality relationships experience higher performance and that empowerment explains this relationship. A similar mediation model was found with subordinate-rated contextual performance. This finding seems sound, as LMX theory asserts that establishing high-quality LMX relationships is dependent on subordinates doing more than is formally required within the job (Law et al., 2010). As the current study examines dyadic relationships, both subordinates and supervisors assessed their LMX bond and subordinate task and contextual performance. In this way, many models could be assessed. Paradoxically, no mediated relationships between subordinate-rated LMX and supervisor-rated task performance was found.

A possible explanation for not finding support for all proposed mediation models is the relationship between subordinate and supervisor performance ratings. The relationship between subordinate- and supervisor rated task performance was weak and the relationship between subordinate- and supervisor rated contextual performance was nonexistent. As the performance measures of the different raters are weak or unrelated, low inter-rater agreement plays a big role in not finding the same results relationships between subordinate-rated LMX and performance rated by the different sources. Another probable explanation for not finding all models confirming a mediated relationship between subordinate-rated LMX and supervisor-rated performance outcomes is that supervisor-rated LMX simply overwhelms the effects of empowerment.

### **Practical implications**

Useful insights can be derived from the findings of the current study and can be translated into practice. First of all, the insight that higher subordinate LMX leads to higher

empowerment and higher performance is valuable knowledge. Leaders in organizations can influence performance levels of their staff by finding ways to encourage establishing highquality LMX relationships. Literature states that subordinates can positively influence LMX by putting in extra work, showing capability and live up to leader expectations (Breevaart et al., 2015). In turn, leaders will provide subordinates with more support, resources and privileges (Liden et al., 2000), enabling higher performance. So, the leader needs to be encourage subordinates to show capability and needs to offer the opportunity to develop highquality relationships (Graen, Scandura, & Graen, 1982; Scandura & Graen, 1984; Graen et al., 1986). Subordinates need to embrace leader attempts to develop such relationships and need to be aware of the benefits. Organizations need to translate these insights into concrete actions or management styles that can be carried out.

Another valuable finding that can be translated into practice is the strong relationship between empowerment and performance. Subordinates with higher levels of empowerment in the current research rated their own performance higher. Thus, organizations need to find ways to create an empowering work climate. Individual leaders can play an active role in stimulating empowerment and empowering work environments.

### Limitations and further research

Some limitations of the current study need to be addressed. First of all, the sample size was small with only 96 dyads. A small sample size threatens external validity, because it causes low statistical power, which "negatively affects the likelihood that a normally statistically significant finding actually reflects a true effect" (Button et al., 2013), as the results might be biased and cannot be generalized to the population. On the other hand, the sample consisted of work groups from various organizations in various fields of occupation. This is beneficial, as the results could be generalized to a heterogenous work population. However, in combination with small sample size it can become a problem. It is possible that

the selected participants had certain characteristics by coincidence. If this is the case, the sample does not reflect the population. Moreover, it is possible that effects of LMX and empowerment do not apply to all types of work and occupations. Maybe work relations are more defining in certain fields of occupation or the experience of empowerment is a more important predictor within certain jobs. Even more, the participants in the study were young on average. Age and empowerment were moderately related, with particular higher age groups (45- 54 years and 55-64 years) having experienced more empowerment than the lowest age group (15-24 years). Maybe older age groups experience more empowerment in general. If the sample would represent all age groups in the population equally, empowerment might play an even bigger role in explaining variance in performance measures. Altogether, the sample is not ideal and therefore the results cannot be generalized to the working population without a critical note.

The current study had the aim to investigate within and between group variance. Difficulty in finding useful connections to collect enough group data prevented the researcher from investigating if leaders who establish high-quality LMX relationships do this with multiple subordinates. Furthermore, it would be interesting to investigate if workgroup leaders with higher overall LMX would have higher performing subordinates. Investigating such matters can be achieved by replicating the current study with increased group size and an increased amount of workgroups. Another suggestion would be to use samples of multiple organizations operating in the same field of occupation, so that the research can control for organization characteristics that might explain why expected results were or were not found.

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# Appendix A

### Subordinate online survey

### 1. Introduction

### **Description of Study**

This is an invitation to a survey which I am conducting for my Master thesis. It would be greatly appreciated if you could find the time to fill it in allowing me to gather the data needed for my research. To participate in the study, you are asked to complete this 12 minute survey.

By participation in this survey, **you have the chance to win a €50 Bol.com prize**. If you wish to participate in the lottery, please fill in your email address at the next page.

Before you decide if you wish to take part, it is important for you to understand why the research is conducted and what it will involve. Please take time to read the following information carefully. You should participate in this study if the following applies to you:

- You and your supervisor are in contact at least once a week.
- You need your supervisor at least a little to perform your work activities.

#### Goal

If you participate, you agree to complete a survey regarding your work relationship, performance, and other workplace-related affairs. The goal of the research is to examine the relationship between work relationships, empowerment, and work performance.

#### Confidentiality

Please know that the data provided by you will be anonymized after the data collection. The data will be viewed and used by the researcher only on a group level and your results **WILL NEVER** be associated with your name. Your results **WILL NOT** be shared with either your supervisor or your organization.

#### **Participation**

Participation in this study is completely voluntary and you are free to stop participating at any point in time. You can withdraw yourself from the study at any time without penalty. There are no foreseeable risks involved in participating in this study.

#### The procedure:

- 1. You are asked to agree to participate in this study. If you agree, you will complete the survey. Before completing the survey, you are asked to fill in the work email address of your supervisor.
- 2. Your supervisor will be invited to participate in this study by email. He/she will receive a different questionnaire and rate the relationship between you and your performance.

## LMX, EMPOWERMENT AND PERFORMANCE

Again, your personal results **WILL NOT** be shared with either the company or your supervisor. The results will be analyzed on a group level. Your results and the results of your supervisor will be linked and your names will be replaced by codes for analysis.

If you have any questions or concerns about this study, please contact the researcher at r.j.vangool@students.uu.nl

Researcher: Robert Jan van Gool Supervisor: Jan Fekke Ybema

By choosing "I consent" you agree to participate in this study.

# 2. Form of consent

I have read and understood the study description. I understand that I am free to withdraw myself from the study at any given time, without penalty, and without further questions asked. "This study has been explained to me to my satisfaction and I agree to take part."

- o I consent
- o I do not consent

# 3. Questionnaires

## **Demographics**

Your name is asked only to inform your supervisor who of his/her colleagues asked him/her to fill in the short survey that will be sent out. Thus, he/she will not come to know your personal results.

If you do not feel comfortable filling out your real name you may fill out characteristics or a different name. Please inform your supervisor/manager about this when finishing this survey so that he/she knows who filled out the survey.

- 1. What is your name?
- 2. What is your gender?
  - o Male/Female
- 3. What is your age?
  - o 15-24
  - o 25-34
  - o 35-44
  - o 45-54
  - o 55-64

o 65-74

- 4. What is your nationality? (List of
- 5. What is your highest level of education?
  - o VMBO
  - o HAVO
  - o VWO
  - MBO (Intermediate Vocational Education)
  - HBO (University of Applied Sciences; Higher Vocational Education)
  - o University Bachelor degree
  - o University Master degree
  - o PhD degree
  - o None
  - o Other
- 6. What is your marital status?
  - o Single
  - o Married
  - o Divorced
  - $\circ$  Widowed
  - o Living with relationship partner
- 7. What is your employment contract?
  - $\circ$  Internship
  - o Definite period
  - o Indefinite period
  - $\circ$  Contractor
- 8. How many hours do you work weekly?
- 9. For how many months have you worked at your organization?
- 10. How many coworkers are in your team?
- 11. How many hours are you in contact with your supervisor weekly?

### LMX-7 scale (5 point Likert scale)

# Instructions

This questionnaire contains items that ask you to describe your relationship with either your leader or one of your subordinates. For each of the items, indicate the degree to which you think the item is true for you by circling one of the responses that appear below the item.

- Do you know where you stand with your supervisor (name supervisor) and do you usually know how satisfied your supervisor (name supervisor) is with what you do? Scoring: Rarely; Occasionally; Sometimes; Fairly often; Very often
- 2. How well does your supervisor (name supervisor) understand your job problems and needs?

Scoring: Not a bit; A little; A fair amount; Quite a bit; A great deal

- How well does your supervisor (name supervisor) recognize your potential? Scoring: Not at all; A little; Moderately; Mostly; Fully
- 4. Regardless of how much formal authority your supervisor (name supervisor) has built into his or her position, what are the chances that your supervisor (name supervisor) would use his or her power to help you solve problems in your work? Scoring: None; Small; Moderate; High; Very high
- 5. Again, regardless of the amount of formal authority your supervisor (name supervisor) has, what are the chances that he or she would "bail you out" at his or her expense? Scoring: None; Small; Moderate; High; Very high
- I have enough confidence in my supervisor (name supervisor) that I would defend and justify his or her decision if he or she were not present to do so.
   Scoring: Strongly disagree; Disagree; Neutral; Agree; Strongly agree
- 7. How would you characterize your working relationship with your supervisor (name supervisor)?

Scoring: Extremely ineffective; Worse than average; Average; Better than average; Extremely effective

**Psychological empowerment** (7-point Likert scale from 1, 'Very Strongly Disagree', to 7, 'Very Strongly Agree')

- 1. I am confident about my ability to do my job.
- 2. The work that I do is important to me.
- 3. I have significant autonomy in determining how I do my job.
- 4. My impact on what happens in my department is large.

- 5. My job activities are personally meaningful to me.
- 6. I have a great deal of control over what happens in my department.
- 7. I can decide on my own how to go about doing my own work.
- 8. I have considerable opportunity for independence and freedom in how I do my job.
- 9. I have mastered the skills necessary for my job.
- 10. The work I do is meaningful to me.
- 11. I have significant influence over what happens in my department.
- 12. I am self-assured about my capabilities to perform my work activities.

**Perceived coworker support** (5-point Likert scale from 1 'Strongly disagree', to 5, 'Strongly agree')

# Instructions

Please pay attention to differences between statements. Some statements may be perceived the same at first glance but in fact, they are slightly different. Please indicate the level that you agree/disagree with the following statements.

- 1. My coworkers really care about my well-being.
- 2. My coworkers are willing to extend themselves in order to help me perform my job the best I can.
- 3. Even if I did the best job possible, my coworkers would fail to notice. (reverse-scored)
- 4. My coworkers care about my general satisfaction at work.
- 5. My coworkers show very little concern for me. (reverse-scored)
- 6. My coworkers care about my opinions.

**Task performance** (7-point Likert scale from 1 'Very strongly disagree', to 7, 'Very strongly agree')

## Instructions

Please indicate the level that you agree/disagree with the following statements.

- 1. I achieve the objectives of your job.
- 2. I meet the criteria for performance.
- 3. I demonstrate expertise in all job-related tasks.

- 4. I fulfill all the requirements of the job.
- 5. I can manage more responsibility than typically assigned.
- 6. I appear suitable for a higher level role.
- 7. I am competent in all areas of the job, handle tasks with proficiency.
- 8. I perform well in the overall job by carrying out tasks as expected.
- 9. I plan and organize to achieve objectives of the job and meet deadlines.

**Contextual performance** (5-point Likert scale from 1 'Very strongly disagree', to 5, 'Very strongly agree')

# Interpersonal facilitation

# Instructions

Please indicate the level that you agree/disagree with the following statements.

- 1. I praise coworkers when they are successful.
- 2. I support or encourage a co-worker with a personal problem.
- 3. I talk to other workers before taking actions that might affect them.
- 4. I say things to make people feel good about themselves or the work group.
- 5. I encourage others to overcome their differences and get along.
- 6. I treat others fairly.
- 7. I help someone without being asked.

## Job dedication

## Instructions

Please indicate the level that you agree/disagree with the following statements.

- 1. I put in extra hours to get work done on time.
- 2. I pay close attention to important details.
- 3. I work harder than necessary.
- 4. I ask for a challenging work assignment.
- 5. I exercise personal discipline and self-control.
- 6. I take the initiative to solve a work problem.

- 7. I persist in overcoming obstacles to complete a task.
- 8. I tackle a difficult work assignment enthusiastically.

In the description of the study, you were asked to fill in the email address of your supervisor. Remember that your results WILL NOT be shared with your supervisor or other parties. Your supervisor will rate your relationship and performance without any knowledge about your results. Please carefully insert your supervisor's email work email address:

# Appendix B

### Supervisor online survey

### 1. Introduction

### **Description of Study**

This is an invitation to a short survey which I am conducting for my Master thesis. It would be greatly appreciated if you could find the time to fill it in allowing me to gather the data needed for my research. To participate in the study, you are asked to complete this 5 minute survey.

By participation in this survey, **you have the chance to win a €50 Bol.com prize!** You participate automatically. Email the researcher if you do not want to participate.

Before you decide if you wish to take part, it is important for you to understand why the research is conducted and what it will involve. Please take time to read the following information carefully.

Your colleague <u>(colleague name)</u> filled in a self-report survey. There are no foreseeable risks involved in participating in this study.

#### Goal

If you participate, you agree to complete a survey regarding your work relationship, performance, and other workplace-related affairs. The goal of the research is to examine if employees will be more likely to perform well depending on their work relationships.

#### Confidentiality

Please know that the data provided by you <u>will be anonymized</u> after the data collection. The data will be viewed and used by the researcher only on a group level and your results **WILL NEVER** be associated with your name in reporting. Your results **WILL NOT** be shared with either your supervisor or your organization.

#### **Participation**

Participation in this study is completely voluntary and you are free to stop participating at any point in time. You can withdraw yourself from the study at any time without penalty.

Your results and the results of your colleague will be matched and your data will be replaced by codes for analysis.

If you have any questions or concerns about this study, please contact the researcher at r.j.vangool@students.uu.nl

Researcher: Robert Jan van Gool Supervisor: Jan Fekke Ybema

#### LMX, EMPOWERMENT AND PERFORMANCE

By choosing "I consent" you agree to participate in this study.

#### 2. Form of Consent

I have read and understood the study description. I understand that I am free to withdraw myself from the study at any given time, without penalty, and without further questions asked. "This study has been explained to me to my satisfaction and I agree to take part."

- I consent
- o I do not consent

### 3. Questionnaires

### Instructions

Please describe the relationship with **your colleague** <u>(name subordinate)</u>. For each of the items, indicate the degree to which you think the item is true for your relationship by clicking the response that fits best.

- Do you know where you stand with (name subordinate) and do you usually know how satisfied your subordinate (name subordinate) is with what you do? Scoring: Rarely; Occasionally; Sometimes; Fairly often; Very often
- How well does (name subordinate) understand your job problems and needs?
   Scoring: Not a bit; A little; A fair amount; Quite a bit; A great deal
- How well does (name subordinate) recognize your potential? Scoring: Not at all; A little; Moderately; Mostly; Fully
- 4. Regardless of how much formal authority (name subordinate) has built into his or her position, what are the chances that your subordinate (name subordinate) would use his or her power to help you solve problems in your work? Scoring: None; Small; Moderate; High; Very high
- Again, regardless of the amount of formal authority (name subordinate) has, what are the chances that he or she would "bail you out" at his or her expense? Scoring: None; Small; Moderate; High; Very high
- I have enough confidence in (name subordinate) that I would defend and justify his or her decision if he or she were not present to do so.
   Scoring: Strongly disagree; Disagree; Neutral; Agree; Strongly agree
- How would you characterize your working relationship with (name subordinate)?
   Scoring: Extremely ineffective; Worse than average; Average; Better than average; Extremely effective

**Task performance** (7-point Likert scale from 1 'Very strongly disagree', to 7, 'Very strongly agree')

# Instructions

Please indicate the level that you agree/disagree with the following statements.

- 1. I achieve the objectives of your job.
- 2. I meet the criteria for performance.
- 3. I demonstrate expertise in all job-related tasks.
- 4. I fulfill all the requirements of the job.
- 5. I can manage more responsibility than typically assigned.
- 6. I appear suitable for a higher level role.
- 7. I am competent in all areas of the job, handle tasks with proficiency.
- 8. I perform well in the overall job by carrying out tasks as expected.
- 9. I plan and organize to achieve objectives of the job and meet deadlines.

**Contextual performance** (5-point Likert scale from 1 'Very strongly disagree', to 5, 'Very strongly agree')

# Interpersonal facilitation

## Instructions

Please indicate the level that you agree/disagree with the following statements.

- 1. (name subordinate) praises coworkers when they are successful.
- 2. (name subordinate) supports or encourage a co-worker with a personal problem.
- 3. (name subordinate) talks to other workers before taking actions that might affect them.
- 4. (name subordinate) says things to make people feel good about themselves or the work group.
- 5. (name subordinate) encourages others to overcome their differences and get along.
- 6. (name subordinate) treats others fairly.
- 7. I help someone without being asked.

#### Job dedication

# Instructions

Please indicate the level that you agree/disagree with the following statements.

- 9. (name subordinate) puts in extra hours to get work done on time.
- 10. (name subordinate) pays close attention to important details.
- 11. (name subordinate) works harder than necessary.
- 12. (name subordinate) asks for a challenging work assignment.
- 13. (name subordinate) exercises personal discipline and self-control.
- 14. (name subordinate) takes the initiative to solve a work problem.
- 15. (name subordinate) persists in overcoming obstacles to complete a task.
- 16. (name subordinate) tackles a difficult work assignment enthusiastically.