The Effect of Team Social Exchange Perspective on Employee Job Satisfaction

Nikodemus Hans Setiado Wijaya*

STIE YKPN School of Business
*Corresponding author. Email: niko.wijaya@gmail.com

ABSTRACT

This study developed the relationship between team social exchange relationship (i.e., Leader-Member Exchange or LMX and Team-Member Exchange or TMX) and employee job satisfaction. This study evaluated the importance of LMX and TMX on job satisfaction. Furthermore, this study also examined the joint effect of LMX and TMX on job satisfaction. The results demonstrated that LMX, TMX, and the interaction of LMX and TMX were all positively related to job satisfaction. The level of job satisfaction was the strongest if LMX and TMX were both high, rather than if only LMX or LMX was high. The findings indicated that managers may devote more efforts in improving social exchange relationship between employees and their supervisors and teammates.

Keywords: Leader-Member Exchange (LMX), Team-Member Exchange (TMX), job satisfaction

1. INTRODUCTION

Job satisfaction referring to the attitude of employees toward various aspects of job is necessary to enhance their attitude, behavior, and performance [1, 2]. Previous work has suggested that the positive working relationships may develop employee job satisfaction [3]. Thus far, organizational behavior scholars have intensively discussed on social exchange developed between employees and their supervisors (labelled as Leader-Member Exchange or LMX) and their co-workers in work teams (labelled as Team-Member Exchange or TMX) [4-6]. For example, Graen, Novak, and Sommerkamp [7] found the importance of LMX in the development of employee job satisfaction. It is widely believed that those kinds of social exchange relationships may result in various desirable outcomes. Similar with this notion, this paper believes that LMX and TMX will contribute to employee job satisfaction. However, extant literature has not shown how those types of social exchange in teams may promote job satisfaction. Furthermore, it has been ignored the effect of TMX and the joint effect of LMX and TMX on job satisfaction. To address these research gaps, the current study intends to examine the effects of LMX, TMX, and the interaction of both on employee job satisfaction. The following figure shows the proposed framework of this study.

2. LMX, TMX, AND JOB SATISFACTION

Social exchange theory explains how a person obtains valued resources such as information, love, caring, help, and other supportive interpersonal interaction within the person and his/her counterpart within the social context that may develop his/her positive attitudes or behavior in the group [8, 9]. In a team, social exchange relationships comprise the relationship of an employee and his/her supervisor and the relationship of the employee with other team members. LMX can be defined as the quality of supervisor-subordinate relationship [10]. LMX characterizes a dyadic relationship in which members share mutual trust, respect, reciprocal influence, loyalty, liking, and sense of mutual obligation with their immediate leaders [5, 11]. A high quality of LMX relationship allows a team member to have opportunities to speak up, exchange information, and use more communication channels, because they acquire supervisor supports [11]. TMX, on the other hand, is the social exchange relationships of an employee with his/her team members in terms of the reciprocal contribution of ideas, feedback, and assistance [4, 12]. It has been suggested that the quality of TMX is an essential factor to allow members to interact with teammates sufficiently, encouraging them to express their ways of thinking [13]. Employees working in conducive social exchange relationship in teams are highly expected to develop their positive attitude about their overall job context [8]. For example, it was found that a high quality employee-supervisor relationship could increase the level of employee job satisfaction [7]. The effect of TMX on employee satisfaction has not been established by extant work. However a study suggested that a TMX quality may improve the employee social identification relating to employee attitude including job satisfaction [14]. According to the social exchange theory, therefore, team
social exchange relationships developed between employees and their supervisors and teammates may elicit their perception on trusting and supportive work environment, in turn, their job satisfaction [15]. Furthermore, when employees enjoy a high quality LMX and TMX (i.e., both are high), their positive attitude toward their job will be much more strengthened. In light of the above discussion, the following hypotheses were suggested:

H1: LMX is positively related to job satisfaction
H2: TMX is positively related to job satisfaction
H3: LMX and TMX are jointly and positively related to job satisfaction
H4: The joint effect of LMX and TMX on job satisfaction is more robust than the effect of each of LMX and TMX

3. RESEARCH METHODS

3.1 Study Participants

This study took the employees who were working at Adisutjipto International Airport which is located in Yogyakarta Special Region, Indonesia, as respondents. Most of them were working as customer service staffs in the airport ground. Several of them were working as employees of tenants located in the airport. The study questionnaire was translated in Indonesian, since they were assumed to be not very familiar with English. A total of 200 paper-based questionnaire were distributed and 172 gave responses, representing an 86% of response-rate. The rate was high, because the survey staff personally approached the related managers to support this survey. Fifty three percent (53%) of the participants were male. Most of them had acquired high school degree (45%). Finally, 60% of them were married.

3.2 Study Measurements

LMX was measured using the 7-item scale developed by Graen and Uhl-Bien [5]. A sample question is “How well does your leader recognize your potential?” that ranged from not-at-all (1) to fully (5) [see 5 for a further review]. The loadings were ranged from .52 to .73, thus valid (cut-off value was .50) [16]. KMO values between .80 and 1 represented the sampling adequacy for each factor in the model. The value of KMO was .75, thus acceptable. The Cronbach’s alpha for this scale was .80.

TMX was measured with the 10-item scale developed by Seers, Petty, and Cashman [4]. However, two items were removed (see details in the next part). A sample item is “How well do other members of your team understand your problems and needs?” This scale was measured on a 5-point Likert scale ranging from (1) to a very little extent to (5) to a very great extent. The first validity test for this scale was conducted and resulted that 2 items must be deleted (the loadings were less than .50). The second test with 8 items resulted the loadings that were ranged from .49 to .75 (note: one item with the loading of .49 was kept, since the loading was approaching the cut-off value of .50) and the KMO value was .74. The Cronbach’s alpha for this scale with 8 items was .79.

LMX*TMX was a theoretically discrete variable used in this study. This variable was the multiplied score of LMX and TMX scores.

Job satisfaction was measured with the 5-item scale of Brayfield-Rothe [17]. A sample item is “I find real enjoyment in my work” [see 18]. This scale was also measured on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The loadings were ranged from .60 to .79 and the KMO-value was .74. The Cronbach’s alpha for this scale was .75.

Lastly, level of management (1 = staff, 2 = supervisor, 3 = middle manager, 4 = top managers), organizational tenure (years), and team tenure (years) were used to control for all regression analyses examining the proposed hypotheses.

4. RESULTS

Table 1 shows the means, standard deviations, and correlations among the control and study variables.

| Variable | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 |
|----------|------|----|---|---|---|---|---|---|
| 1. Level of management | 1.27 | .57 |   |   |   |   |   |   |
| 2. Organizational tenure | 4.44 | 6.30 | .13 |   |   |   |   |   |
| 3. Team tenure | 3.20 | 4.64 | .08 | .78** |   |   |   |   |
| 4. TMX | 3.46 | .57 | .08 | .09 | .11 |   |   |   |
| 5. LMX | 3.72 | .50 | .14 | .21** | .20* | .49** |   |   |
| 6. TMX*LMX | 13.03 | 3.22 | .12 | .16* | .17* | .90** | .81** |   |
| 7. Job satisfaction | 3.58 | .65 | .02 | .10 | .12 | .45** | .43** | .51** |

Note. N = 172; * p < .05, ** p < .01 (two-tailed). Cronbach’s alphas are shown in the parentheses.
The proposed hypotheses were examined by employing the hierarchical method in SPSS. Table 2 demonstrates the results. First, the control variables were regressed on job satisfaction (see Model 1), and then the independent variable was added. Consistent with H₁ and H₂, LMX and TMX was positively related to job satisfaction (Model 2 and 3). Thus, H₁ and H₂ were supported. The joint effect of LMX and TMX on job satisfaction was significant (Model 4). Thus, H₃ was supported. The effect of LMX*TMX was stronger than that of LMX only (see Model 2 and 4). In addition, the effect of the joint variable was also stronger than that of TMX only (see Model 3 and 4). Another technique in order to examine the effect of LMX*TMX was the use of LMX and TMX as controls in regression analysis. The goal was to remove the effect of LMX or TMX at the same time to highlight the effect of the joint variable. After being controlled by LMX, the effect of the joint variable was robust and the effect of TMX at the same time was not significant (Model 5). Finally, after being controlled by TMX, the effect of the joint variable was again robust and the effect of TMX on job satisfaction was also not significant (Model 6). The results supported H₄.

Table 2. Hierarchical Regression Analysis: The Effects of LMX, TMX, and LMX*TMX on Job Satisfaction.

| Variable            | Model 1 | Model 2 (H1) | Model 3 (H2) | Model 4 (H3) | Model 5 (H4) | Model 6 (H4) |
|---------------------|---------|--------------|--------------|--------------|--------------|--------------|
| Level of Management | .01     | -.05         | -.01         | -.05         | -.05         | -.04         |
| Organizational Tenure | .01    | .02          | -.05         | -.01         | -.01         | -.01         |
| Team Tenure         | .11     | .06          | .08          | .05          | .05          | .05          |
| LMX                 | .45***  | .43***       | .50***       | .50**        | .46***       | .06          |
| TMX                 |         |              |              |              |              |              |
| LMX*TMX             | .67     | 11.32***     | 9.67***      | 14.53***     | 11.56***     | 11.63***     |
| F                   | .02     | .21          | .19          | .26          | .26          | .26          |
| R²                  | .00     | .19          | .17          | .24          | .24          | .24          |
| Adjusted R²         |         |              |              |              |              |              |

Note: N = 172; ** p < .01, *** p < .001

Figure 2 shows the interaction of LMX and TMX. It demonstrates that job satisfaction was in the lowest level if both LMX and TMX were low. The second place of job satisfaction was if LMX was low, but TMX was high. The third place was if LMX was high, but TMX was low. And the highest level of job satisfaction occurred if both LMX and TMX were high. This evidence supported the analysis results for H₄.

5. DISCUSSION

The current work focused on the impact of both social exchange existing in teams (i.e., LMX and TMX). All proposed hypotheses were supported (see Table 3). LMX and TMX are necessary elements for improving the job satisfaction of employees. This findings are consistent with extant literature on social exchange theory [15]. The joint effect of LMX and TMX may act together to enhance job satisfaction. It is indicated that the joint effect of both is the strongest situation to develop job satisfaction. It suggests that if employees acquire high quality of exchange relationship types, their job satisfaction will be more effectively developed. This study contributes to the theory and practice. This study offers an evidence on the ability of LMX and TMX to improve employee job satisfaction. Furthermore, this study demonstrates how they can act together to elicit a stronger job satisfaction. To the practice, this work may encourage managers to continue developing the types of exchange relationship within their teams. The development of employee job satisfaction may improve other positive attitudes and behaviors [1, 2, 19].

Table 3. Summary of Hypotheses Testing Results

| Hypothesis Statement                                                     | Result   |
|-------------------------------------------------------------------------|----------|
| H₁: LMX is positively related to job satisfaction                       | Supported|
| H₂: TMX is positively related to job satisfaction                        | Supported|
| H₃: LMX and TMX are jointly and positively related to job satisfaction   | Supported|
| H₄: The joint effect of LMX and TMX on job satisfaction is more robust than the effect of each of LMX and TMX | Supported|
The current work has some limitations. First, the data set was cross-sectional which may result a common method variance. Future research should consider more sophisticated methods in data collection, for example the use of multiple rates or times [e.g., 20]. Second, the scale used for job satisfaction was the general scale, in which this might not highly match their specific job context. Future research may use the scales that can assess the specific aspects of jobs. Some team member profiles such as team tenure, team gender composition, the (dis)similarity of supervisor-member gender may moderate the relationship between team social exchange relationships (LMX and TMX) and job satisfaction. The investigations may add on the current evidences of the relationship.

6. CONCLUSION

This work proposes the effects of LMX, TMX, and the joint effect of the two variables. The findings suggest that both LMX and TMX are positively related to job satisfaction. The joint effect of LMX and TMX is positively related to job satisfaction. Also, the relationship is suggested to be stronger than that of each of LMX and TMX. Managers should continue to develop social exchange relationships within their teams in order to develop stronger job satisfaction.

REFERENCES

[1] Judge, T.A., et al., The job satisfaction—job performance relationship: A qualitative and quantitative review. Psychological Bulletin, 2001. 127(3): p. 376-407.

[2] Whitman, D.S., D.L. Van Rooy, and C. Viswesvaran, Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. Personnel Psychology, 2010. 63(1): p. 41-81.

[3] Scarpello, V. and J.P. Campbell, Job satisfaction: Are all the parts there? Personnel Psychology, 1983. 36(3): p. 577-600.

[4] Seers, A., M.M. Petty, and J.F. Cashman, Team-member exchange under team and traditional management: A naturally occurring quasi-experiment. Group & Organization Management, 1995. 20(1): p. 18-38.

[5] Graen, G.B. and M. Uhl-Bien, Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. The leadership quarterly, 1995. 6(2): p. 219-247.

[6] Naidoo, L., et al., A longitudinal examination of the effects of LMX, ability, and differentiation on team performance. Journal of Business & Psychology, 2011. 26(3): p. 347-357.

[7] Graen, G., M.A. Novak, and P. Sommerkamp, The effects of leader—member exchange and job design on productivity and satisfaction: Testing a dual attachment model. Organizational Behavior and Human Performance, 1982. 30(1): p. 109-131.

[8] Flynn, F.J., Identity orientation and forms of social exchange in organizations. Academy of Management Review, 2005. 30(4): p. 737-750.

[9] Blau, P.M., Exchange and power in social life. 1964, New York: Wiley.

[10] Dansereau Jr, F., G. Graen, and W.J. Haga, A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. Organizational Behavior and Human Performance, 1975. 13(1): p. 46-78.

[11] Botero, I.C. and L. Van Dyne, Employee voice behavior: Interactive effects of LMX and power distance in the United States and Colombia. Management Communication Quarterly, 2009. 23(1): p. 84-104.

[12] Seers, A., Team-member exchange quality: A new construct for role-making research. Organizational Behavior and Human Decision Processes, 1989. 43(1): p. 118-135.

[13] Liao, H., D. Liu, and R. Loi, Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. Academy of Management Journal, 2010. 53(5): p. 1090-1109.

[14] Liu, Y., R. Loi, and L.W. Lam, Linking organizational identification and employee performance in teams: The moderating role of team-member exchange. International Journal of Human Resource Management, 2011. 22(15): p. 3187-3201.

[15] Cropanzano, R. and M.S. Mitchell, Social exchange theory: An interdisciplinary review. Journal of Management, 2005. 31(6): p. 874-900.

[16] Hair, J.F., Jr., et al., Multivariate Data Analysis: A Global Perspective. Seventh Edition ed. 2010, New Jersey: Prentice Hall.

[17] Brayfield, A.H. and H.F. Rothe, An index of job satisfaction. Journal of Applied Psychology, 1951. 35(5): p. 307-311.
[18] Judge, T.A., J.E. Bono, and E.A. Locke, *Personality and job satisfaction: The mediating role of job characteristics*. Journal of Applied Psychology, 2000. 85(2): p. 237-249.

[19] Williams, L.J. and S.E. Anderson, *Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors*. Journal of Management, 1991. 17(3): p. 601.

[20] Shih, H.-A. and N.H.S. Wijaya, *Team-member exchange, voice behavior, and creative work involvement*. International Journal of Manpower, 2017. 38(3): p. 417-431.