

THE ROLE BETWEEN LEADER-MEMBER EXCHANGE AND INFORMATION DISTINCTION: A LEADERSHIP STYLE PERSPECTIVE

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Received August 2018; accepted November 2018

ABSTRACT. *Different types of leadership style are critical in member exchange and information distinction. Past theories of leadership tended to focus on leaders' development and rarely mentioned effect of types of leadership style on job performance. In practice, leaders' leadership is highly associated with current and future leaders' fulfillment of the highest level of skills, knowledge and growth of competence. This study aims to explore the relationship among leadership style, leader-member exchange (LMX), information distinction and job performance since in multinational companies, these are the issues of practical and personal experience. This study adopts the modified model of LEAD-Other and probes into the relationship between information distinction and leader-member exchange. It distributes questionnaires to 1200 Taiwanese, American and Chinese employees in one Taiwanese multinational enterprise and retrieves 949 samples. After SEM analysis, it shows that leader-member exchange of assigned leadership style significantly influences job performance. It validates some propositions in the relationship model between leader-member exchange and organizational performance and completes the research on leader-member exchange and information distinction.*

Keywords: Leadership style, Leader-member exchange, Information distinction, Job performance

1. **Introduction.** Leadership style has been the research topic concerned in the study of organizational management. Although leadership style is considerably associated with leaders, it is the common term to describe the successful organization. In the era with the changeable labor force, leaders should flexibly realize tasks by different behaviors in order to demonstrate leadership. Leadership has been regarded with supportive and leading characteristics. It enhances employees' creativity through communication and tolerance. It accomplishes tasks by emphasizing explanation and instruction. Leadership means that leaders with followers can influence others and fulfill leadership potential by adopting effective action [1]. In order to encourage employees to realize themselves and

use information distinction, leaders should practice adaptive leadership style. Nevertheless, past research rarely mentioned the effects of different types of leadership style on organizational performance. In addition, different types of leadership style play critical roles between employee exchange and information distinction.

More importantly, when leaders can fulfill high degree of skills, knowledge and competence, organizations will reveal more significant performance outcome. However, leadership style, LMX and information distinction in organizations mostly refer to the relationship among leaders' behavior, organizational members and information use. Hence, this study aims to explore the relationship among leadership style, leader-member exchange (LMX) and information distinction in organizations and job performance.

2. Literature Review.

2.1. Leadership styles. Leadership style means organizational leaders' attitude and their behavior. Past study on leadership has validated different types of leadership style adopted by leaders in organizational management. Value to study leadership style is the effective reflection of leadership activity in reality and interpretation of leadership difference.

After Bass and Stogdill's [2] classification of leadership style, from the earliest transformational and transactional leadership, scholars have proposed different leadership styles, including ideology leadership, authentic leadership, real leadership, moral leadership, spiritual leadership, distributed leadership, general public leadership, to current servant leadership [3].

There are various methods of classification, such as gender, leader-member relationship, leaders' measures and implementation scope. With different classification standards, the study of leadership style becomes more diverse and complete. Past theory of leadership style mostly focused on leaders' development. However, the corresponding variables were job satisfaction and job motivation. Few of them mentioned effects of types of leadership style on organizational performance. In practice, leaders' development is highly associated with current and future leaders' fulfillment of the highest level of skill, knowledge and growth of competence. Thus, it becomes the gap of research.

2.2. Leader-member exchange. Leader-member exchange (LMX) means leaders establish a special relationship with few subordinates who become the close members of leaders. They are trusted and more cared by leaders. They might be privileged. Other subordinates become outsiders. Leaders spend less time on them and they have fewer opportunities to be awarded. LMX is formed upon formal authority system.

LMX theory is constructed according to VDL model proposed by Dansereau et al. [4]. It is established upon character creation process and Social Exchange Theory by mainly concerning about relationship between leaders/managers and subordinates. In the model, an organizational objective is the realization of all work characters in organizations. Besides, the roles of members in work groups are determined by an interpersonal exchange between leaders and members [5]. According to the perspective of Barbuto and Hayden [6], LMX theory tests exchange quality between leaders and each subordinate. An advantage of LMX is shown by the effect of role development on the relationship [7].

In organizations, leaders/managers are the representatives. In practice, they can influence organizational rewards or enhance members' decision to construct subordinates' expectation and satisfaction with [8]. Based on the above, LMX validates intensity of the vertical relationship between managers and subordinates.

In one organization, the said vertical relationship is developed differently according to use of management. When exchange quality is positive, subordinates are distributed in the group. Unqualified subordinates are distributed out of the group. Generally speaking, the high-quality exchange shows that leaders consider subordinates as reliable and loyal

ones. Subordinates obtain more concern and return. Low-quality exchange means that leaders do not regard subordinates as reliable ones and they rarely interact with, support and reward these subordinates [9]. Therefore, different types of leadership style play the critical role in the leader-member exchange.

2.3. Information distinction. Swift and Huang [10] demonstrated that organizational information includes technical and business information which tends to be exchanged formally and informally. Yukl and Mahsud [11] argued that leaders and subordinates rely on communication of information related to work tasks since appropriate information exchange can effectively enhance members' adaptability. Besides, when subordinates recognize and possess information about organizational development, they might show higher job satisfaction. Nevertheless, leaders with different leadership styles might result in information distinction of members in and out of the group and they indirectly influence their job performance. It is one research variable worthy of further study.

3. Research Methods. A quantitative, non-experimental, explanatory and exploratory mailed survey research design was used with MNEs in order to explain the relationships tested in the hypothesized model. This hypothesized model proposed relationships between employee characteristics, organizational characteristics of employee subsidiaries or headquarters, employee perceptions of the leadership style, leader-member exchange, information distinction, and performance of employee subsidiaries or headquarters.

This research used a mailed survey format, which was directed to the entire target population of the company employee. The survey was translated into Traditional Chinese, Simple Chinese, and English. The survey was mailed from the headquarters in Taiwan. Each participant responded to the five-part survey. Part 1 was the Employee Profile. Part 2 included Organizational Characteristics which were developed by the researcher. Leadership Style (style, style range, and style adaptability) was measured in Part 3 – using the Leadership Effectiveness and Adaptability Description (LEAD-Other), developed by Hersey and Blanchard [12] in 1974 and adapted by the researcher. Leader-member exchange was measured in Part 4 by the LMX Scale developed by Graen [13] in 1976. Information distinction and job performance were measured in Part 5 and by a seven-point semantic differential scale, developed by the researcher. The research hypotheses are as follows. 1) There is a significant explanatory relationship between leadership style (style, style range, and style adaptability) and quality of the leader-member exchange. 2) There is a significant explanatory relationship among employee's perception of the leadership style of executives (style, style range, and style adaptability), the quality of the leader-member exchange, information distinction, and job performance of employee' headquarters or subsidiaries in Taiwanese multinational enterprises.

4. Results. One thousand and two hundred employees of MNEs with its headquarters in Taiwan were invited to participate in the research, 500 from Taiwan, 600 from China, and 100 from the United States. 949 responses were received. The response rate was 79.08%. 420 (44.3%) were male, and 529 (55.7%) respondents were female. The largest age group of participants was 31 to 40 (40.5%) and the smallest age group was 60 above (2.1%). The majority of participants had a high school graduate (44.6%), and the second most frequent educational level was one to three years college (33.6%). There are 63.4% of participants work in manufacturing industry, 36.6% had already worked 1 to 3 years. 368 participants were from Taiwan, 497 from China, and 84 from the United States.

4.1. Exploratory factor analysis and internal consistency reliability analysis. For the 12 leadership situations, using the LEAD-Other, respondents selected the choice that best described the probable behavior of their leaders for the same situation. Determining the preferred leadership style for each of the 12 situations, the LEAD-Other

sheet for style adaptability showed the preferred style for each situation. Each response to the 12 situations was associated with one of four preferred leadership styles: Telling (situations 1, 5, 9), Selling (situations 2, 6, 10), Participating (situations 3, 7, 11), or Delegating (situations 4, 8, and 12).

To develop a valid and reliable adaptability score based on the LEAD-Other for use in answering research questions and in regression analysis, a number of different analyses were conducted. Table 1 presents the corrected item-total correlations for the 6-item leadership style adaptability score of the modified LEAD-Other.

TABLE 1. Corrected item-total correlations for the 6-item leadership style adaptability score of the modified LEAD-other scale

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Adaptability 8 Delegating, Participating, Selling, Telling	.038	.060
Adaptability 12 Delegating, Participating, Selling, Telling	.038	.061
Adaptability 1 Telling, Selling, Participating, Delegating	-.076	.165
Adaptability 2 Selling, Participating, Telling, Delegating	.021	.080
Adaptability 3 Participating, Selling, Delegating, Telling	.144	-.056
Adaptability 6 Selling, Telling, Participating, Delegating	.026	.073

In this research, eigenvalues indicated one factor, and the variance explained was 62.314%. The factor loadings in the exploratory factor analysis ranged from 0.724 to 0.840, and the standardized loadings were greater than the suggested minimum of 0.4 [14].

LMX resulted in a Cronbach's alpha of 0.894 for leader-member exchange. Table 2 would present item-total correlations and alpha if the item deleted from the scale. With satisfactory factor and reliability analysis, the LMX was used to answer research questions and in the regression models tested for the hypotheses.

TABLE 2. Corrected item-total correlations for leader-member exchange scale

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
LMX01	.653	.884
LMX02	.741	.874
LMX03	.758	.872
LMX04	.645	.885
LMX05	.633	.890
LMX06	.739	.874
LMX07	.737	.875

Information distinction resulted in a Cronbach's alpha of 0.937. Table 3 would present item-total correlations and alpha if the item deleted from the scale. With satisfactory factor and reliability analysis, the information distinction was used to answer research questions and in the regression models tested for the hypotheses.

4.2. Research Hypothesis 1. There is a significant explanatory relationship between leadership style of supervisor (style frequency, and style adaptability) and leader-member exchange in Taiwanese multinational enterprises. As shown in Table 4, each of the five different models had significant F values, testing for the significance of R^2 , which is the significance of the regression model as a whole. With each entry of a variable into the model, the R^2 increased continuously, and the adjusted R^2 also did. Model 5 (F

TABLE 3. Corrected item-total correlations for information distinction

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ID02	.683	.935
ID03	.711	.933
ID04	.761	.930
ID05	.813	.927
ID06	.781	.929
ID07	.809	.928
ID08	.776	.929
ID09	.810	.928
ID10	.732	.932

TABLE 4. Regression of leadership style and leader-member exchange

Model					t	Sig.	F (p)	R ²	Adjusted R ²
		B	SE	Beta					
1	(Constant)	4.689	.131		35.701	.000	8.407 (.004)	.009	.008
	Telling	.158	.054	.094	2.900	.004			
2	(Constant)	4.873	.166		29.357	.000	5.841 (.003)	.012	.010
	Telling	.156	.054	.093	2.872	.004			
	Selling	-.084	.046	-.058	-1.804	.072			
3	(Constant)	4.852	.181		26.791	.000	3.919 (.009)	.012	.009
	Telling	.154	.055	.092	2.810	.005			
	Selling	-.087	.047	-.060	-1.825	.068			
	Participating	.015	.050	.010	.294	.769			
4	(Constant)	4.738	.202		23.417	.000	3.336 (.010)	.014	.010
	Telling	.144	.055	.086	2.602	.009			
	Selling	-.092	.048	-.064	-1.928	.054			
	Participating	.009	.050	.006	.172	.863			
	Delegating	.068	.054	.042	1.257	.209			
5	(Constant)	4.146	.244		17.018	.000	6.378 (.000)	.033	.028
	Telling	.168	.055	.100	3.053	.002			
	Selling	-.076	.047	-.053	-1.602	.109			
	Participating	-.017	.050	-.011	-.334	.738			
	Delegating	.093	.054	.057	1.724	.085			
	Style Adaptability	.317	.074	.140	4.278	.000			

a. Dependent variable: leader-member exchange

= 6.378, p = .000), with five explanatory variables including four leadership style and leadership adaptability produced the highest R² (.033). Model 5 was selected as the best explanatory model of leadership style and leader-member exchange: To analyze the individual predictors in Model 5, the t-statistic, which was the ratio of the regression coefficient to its standard error (B/SE), was significant for leadership adaptability (t = 4.278, p = .000). In terms of the relative importance of the predictor variables in explaining leader-member exchange in Model 5, the order of importance according to the standardized Beta coefficients (β) were: Telling ($\beta = .100$), Selling ($\beta = .076$, inversely related), Participating ($\beta = .017$, inversely related), Delegating ($\beta = .093$), and Style Adaptability ($\beta = .317$).

According to these findings, Hypothesis 1 was supported (F = 5.378, p = .000): employee's perception of the leadership style of supervisors (style frequency, and style adaptability) was significant explanatory variables of the quality of the leader-member exchange

in multinational Taiwanese enterprises, explaining a range of 2.8% to 3.3% of the variation in leader-member exchange. The best explanatory model found was:

Leader-Member Exchange = 4.146 (constant) + .168 (Leadership Style Frequency of Telling) - .076 (Leadership Style Frequency of Selling) - .017 (Leadership Style Frequency of Participating) + .093 (Leadership Style Frequency of Delegating) + .317 (Leadership Adaptability) + e.

4.3. Research Hypothesis 2. There is a significant explanatory relationship among employee's perception of the leadership style of supervisors (style frequency and style adaptability), the quality of the leader-member exchange, information distinction, and job performance of supervisors' headquarters or subsidiaries in multinational Taiwanese enterprises. As shown in Table 5, each of the five different models had significant F values, testing for the significance of R^2 , which is the significance of the regression model as a whole. With each entry of a variable into the model, the R^2 increased continuously, and the adjusted R^2 also did. Model 3 ($F = 43.354$, $p = .000$), with seven explanatory variables including four leadership style and leadership adaptability produced the highest R^2 (.244). Model 3 was selected as the best explanatory model of leadership style, leader-member exchange, information distinction, and job performance: To analyze the individual predictors in Model 3, the t-statistic, which was the ratio of the regression coefficient to its standard error (B/SE), was significant for Leader-Member Exchange ($t = 12.019$, $p = .000$). In terms of the relative importance of the predictor variables in

TABLE 5. Regression of leadership style, leader-member exchange, information distinction, and job performance

Model				t	Sig.	F (p)	R^2	Adjusted R^2	
	B	SE	Beta						
1	(Constant)	5.058	.181		27.980	.000	4.016 (.001)	.021	.016
	Telling	.026	.041	.021	.632	.528			
	Selling	-.045	.035	-.043	-1.287	.198			
	Participating	.050	.037	.045	1.342	.180			
	Delegating	.054	.040	.045	1.345	.179			
	Style Adaptability	.205	.055	.122	3.724	.000			
2	(Constant)	3.655	.184		19.861	.000	45.459 (.000)	.225	.220
	Telling	-.031	.037	-.025	-.850	.396			
	Selling	-.020	.031	-.018	-.624	.533			
	Participating	.056	.033	.050	1.678	.094			
	Delegating	.022	.036	.019	.626	.532			
	Style Adaptability	.098	.049	.058	1.972	.049			
3	Leader-Member Exchange	.338	.022	.459	15.730	.000	43.354 (.000)	.244	.238
	(Constant)	3.223	.202		15.955	.000			
	Telling	-.037	.036	-.030	-1.036	.301			
	Selling	-.013	.031	-.012	-.415	.678			
	Participating	.058	.033	.052	1.759	.079			
	Delegating	.024	.035	.020	.692	.489			
	Style Adaptability	.115	.049	.069	2.355	.019			
Leader-Member Exchange	.286	.024	.388	12.019	.000				
Information Distinction	.119	.024	.156	4.904	.000				

a. Dependent variable: job performance

explaining job performance in Model 3, the order of importance according to the standardized Beta coefficients (β) where: Telling ($\beta = .030$, inversely related), Selling ($\beta = .012$, inversely related), Participating ($\beta = .052$), Delegating ($\beta = .020$), Style Adaptability ($\beta = .069$), Leader-Member Exchange ($\beta = .388$), and Information Distinction ($\beta = .156$).

According to these findings, Hypothesis 2 was supported ($F = 43.354$, $p = .000$): employee's perception of the leadership style of supervisors (style adaptability), leader-member exchange, and information distinction was significant explanatory variables of the job performance in multinational Taiwanese enterprises, explaining a range of 2.38% to 2.44% of the variation in job performance. The best explanatory model found was:

$$\text{Job Performance} = 3.223 (\text{constant}) - .037 (\text{Leadership Style Frequency of Telling}) - .013 (\text{Leadership Style Frequency of Selling}) + .058 (\text{Leadership Style Frequency of Participating}) + .024 (\text{Leadership Style Frequency of Delegating}) + .115 (\text{Leadership Adaptability}) + .286 (\text{Leader-Member Exchange}) + .119 (\text{Information Distinction}) + e.$$

5. Conclusion. According to employee characteristics (gender, age, education, industry, working year, and working place), this research compared leadership style, leader-member exchange, and job performance in multinational Taiwanese enterprises.

This research used a modification model of LEAD-Other, so employee's perception of the leadership style was partially significant positive explanatory variables of leader-member exchange in multinational Taiwanese enterprises.

Employee's perception of the leadership style of executives, the quality of the leader-member exchange, and information distinction were partially significant positive explanatory variables of job performance. The results showed that only the Delegating Leadership Style (inverse) had the significant influence on job performance. This study disconfirmed propositions in Yu and Liang's [15] new model of the relationships between leader-member exchange (LMX) and organizational performance.

This research was one of the more comprehensive studies about relationships among leadership style, leader-member exchange, informational distinction, and job performance in Taiwanese MNEs. The non-experimental design is weaker than an experimental design of this research's limitation; construct validity and reliability of the LEAD-Other were not established, and thus, this is a study weakness to internal validity. A future study may allow the different departments' employees to evaluate their supervisors, and let executives know how the supervisors lead their subordinates.

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